Walt Disney World Co.

RECEIVED
JUN 17 1998
BUREAU OF
AIR REGULATION

June 12, 1998

Mr. Clair Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Construction Permit Application
Walt Disney World Co. - Character Heads Spray Booth #2
and Cirque du Soleil Spray Booth

Dear Mr. Fancy:

Enclosed are three copies of the air construction permit application and three ELSA submission diskettes for the above referenced emissions unit. The fourth copy has been sent to Mr. Len Kozlov at the Central District office to facilitate the review of the application.

This application is for two new proposed paint spray booths that will be installed at the Walt Disney World Resort Complex. One booth will be installed at the North Service Area Central Shops building in the Character Heads department and will become a part of the Central Shops Building emissions unit. The second booth is to be installed at a new attraction, Cirque du Soleil in the Downtown Disney area, approximately five miles away from the first new booth. The total increase in potential emissions from these two booths is 6.4 tons of VOC per year. Therefore, this application is for a minor modification to a Title V facility, and no processing fee is included.

If you have any questions or need any further information, please call me at 407-827-2748.

Sincerely,

Rich Bumar

Rich Bumar
Environmental Control Representative
Environmental Control Department

Enclosure

cc: Bob Beaver (w/o enclosure)
Bruce Mitchell (w/o enclosure)
Lee Schmudde (w/o enclosure)

Walt Disney World Co.

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cc: Bob Beaver (w/o enclosure)
Bruce Mitchell (w/o enclosure)
Lee Schmudde (w/o enclosure)

August 17, 1998

Mr. Lee Schmudde
Vice President, Legal
Walt Disney World Co.
P.O. Box 10,000
Lake Buena Vista, Florida 32830-1000

Re: Walt Disney World Resort
Conditional Exemption for Paint Spray Booths (2)
North Service Area Central Shops Building: Character Heads Paint Spray Booth #2 (NSA-17)
Cirque du Soleil Building: Paint Spray Booth (CDS-1)

Dear Mr. Schmudde:

The Department has evaluated the submittal regarding the above referenced proposed new emission activities, in which one (NSA-17) will be co-located with other existing support and maintenance activities located within the North Service Area Central Shops Building (NSACSB) that have volatile organic compounds/hazardous air pollutant (VOC/HAP) emissions and the other one (CDS-1) being located at a new attraction in the Downtown Disney area (formerly known as Pleasure Island/Disney Village Marketplace).

The NSA-17 operations will be for new fabrication and, as needed, touch-up requirements; also, the operations will be intermittent or batch type (potential/estimated gallons per year usage of paints and solvents are 2050). The net increase of potential VOC emissions from the new booth is 4.8 tons per year (TPY) and raises the total aggregate VOC emissions from the NSACSB to 31.0 TPY.

The CDS-1 operations will be used to finish props for the circus-style shows. The props are mainly wood panels and small wood, plastic and metal items. The operations will be intermittent or batch type (potential/estimated gallons per year usage of paints and solvents are 595). The net increase of potential VOC emissions from the new booth is 1.6 TPY.

The existing facility is a "major source of air pollution" or "Title V Source" for criteria pollutants and HAP emissions pursuant to Rule 62-210.200, Florida Administrative Code (F.A.C.)., Definitions, and received its initial Title V operation permit on December 31, 1997, and became effective on January 1, 1998. Since the proposed contemporaneous VOC emissions increase is much less than the significant emissions rate of 40 TPY contained in Table 212.400-2, F.A.C., the proposal is not subject to PSD new source review pursuant to Rule 62-212.400(5), F.A.C.; also, for PSD review consideration pursuant to Rule 62-212.400(6)(b), F.A.C., it is determined that the proposal is not considered as part of a phase project. Finally, there are no specific emission limiting standards pursuant to Rule 62-204.800 and Chapter 62-296, F.A.C.

Based on the above findings, the Department is granting a conditional exemption from the air permitting requirements of the Florida Department of Environmental Protection for the subject four urethane adhesive lay-up workstations. The exemption is based on the premise that any air pollutants emitted from the workstations will not be in significant quantities to contribute to air pollution problems in the state pursuant to Rule 62-4.040(1)(b), F.A.C.

The conditions of this exemption are:

1. The total material usage of the four urethane adhesive lay-up workstations is 4000 gallons per calendar year.
2. The owner or operator(s) will account for the materials used using a materials balance scheme, which employs the following:
    a. a beginning inventory of materials in stock (on or about 1/1/yr);
    b. adding any materials received during the year;
    c. subtracting any materials recycled during the year; and,
    d. subtracting any ending inventory of materials in stock (on or about 12/31/yr), with the net result assumed to have been used and emitted.
3. Any records kept will be retained for a five year period and made available for Department inspection upon request.
4. The operation of this activity shall not cause or contribute to an objectionable odor.

5. If the conditions on which this exemption are based change, the operator shall notify the Department's Bureau of Air Regulation of the changes and request the exemption be amended.

6. Upon the next opening of the facility's Title V operation permit, which is scheduled for early summer of this year, these four workstations will be identified/designated as "unregulated" emissions units/activities and placed in Appendix U-1, Unregulated Emissions Units/Activities, for future inventory purposes on an every 5-year basis, starting in year 2000.

The conditional exemption will take effect 21 days from the clerking date unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, Florida Statutes (F.S.). Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions must be filed within 21 (twenty-one) days of receipt of the notice of permit exemption. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the permitting authority's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the permitting authority's action or proposed action;

(d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of the facts that the petitioner contends warrant reversal or modification of the permitting authority's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the permitting authority's action or proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the permitting authority to take with respect to the action or proposed action addressed in this notice of permit exemption.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of permit exemption. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of permit exemption.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner;

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;

(c) Each rule or portion of a rule from which a variance or waiver is requested;

(d) The citation to the statute underlying (implemented by) the rule identified in (c) above;

(e) The type of action requested;

(f) The specific facts that would justify a variance or waiver for the petitioner;

(g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Any party to this order (permit exemption) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Howard L. Rhodes, Director
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(850)488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT EXEMPTION and all copies were sent by certified mail before the close of business on _____ to the person(s) listed:

Mr. Lee Schmudde, Vice President, Legal, Walt Disney World Co.

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this NOTICE OF PERMIT EXEMPTION were sent by U.S. mail on the same date to the person(s) listed, unless otherwise noted:

Mr. Len Kozlov, CED (Interoffice mail)
Mr. Bob Beaver, P.E., Walt Disney World Co.
Mr. Richard Bumar, Contact, Walt Disney World Co.
Mr. Scott Sheplak, BAR (hand delivered)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), F.S., with the designated agency Clerk, receipt of which is hereby acknowledged.

_____ _____
(Clerk) (Date)

HLR/CHF/bm

Enclosure

v:\bruce\permits\0950111x\psbx2.ltr

0950111-015-AO

RECEIVED
JUN 17 1998
BUREAU OF
AIR REGULATION

AIR CONSTRUCTION PERMIT APPLICATION

WALT DISNEY WORLD CO.

TWO PAINT SPRAY BOOTHS:

CHARACTER HEADS SPRAY BOOTH #2

CIRQUE DU SOLEIL SPRAY BOOTH

JUNE 12, 1998

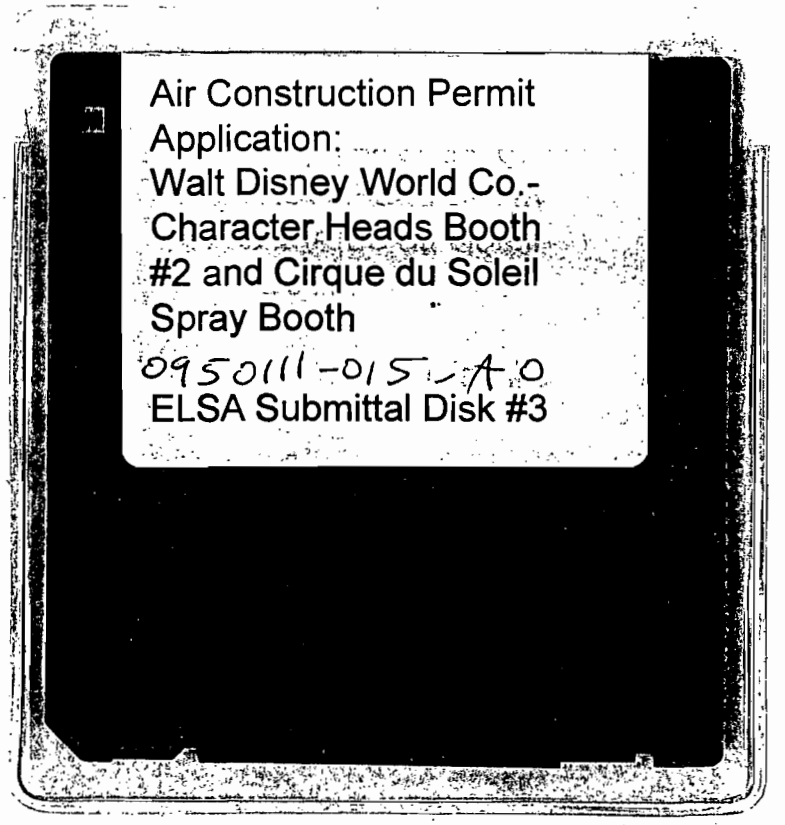


TABLE OF CONTENTS

Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Walt Disney World Co.	
2. Site Name : Walt Disney World Resort	
3. Facility Identification Number : 0950111	[ ] Unknown
4. Facility Location : This site is located at the Walt Disney World Resort complex. Street Address or Other Locator : P.O. Box 10,000 City : Lake Buena Vista County : Orange	Zip Code : 32830-1000
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Lee Schmudde
Title : Vice President, Legal

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Walt Disney World Co.
Street Address : P.O. Box 10,000
City : Lake Buena Vista
State : FL Zip Code : 32830-1000

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (407)828-3701 Fax : (407)828-3239

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*

Signature

6-12-98
Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
No Id	Character Heads- paint spray booth #2	AC1F
No Id	Cirque du Soleil Spray Booth	AC1F

Purpose of Application and Category

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

[ ] Renewal air operation permit under Fule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

[**X**] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any :

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one :

[ ] Attached - Amount : _____ [X] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :

Two spray booths are proposed to be installed at the Walt Disney World Resort Complex (WDW). One is at "Cirque du Soleil" a new attraction at "Downtown Disney" (formerly known as Pleasure Island/Disney Village Marketplace). This spray booth will be use to finish props for the circus-style shows. The props are mainly wood panels and small wood, plastic, and metal items. The booth will increase the potential emissions of VOCs for the Walt Disney World Resort Complex by a total of 1.6 tpy.

The second new spray booth is to be installed in the Character Heads department of the Walt Disney World Co. Shops Services building. The booth will become another emissions point within the North Service Area Central Shops Building (NSACSB) emissions unit and will increase the overall emissions of VOCs for the Walt Disney World Resort Complex by a total of 4.8 tpy. The existing aggregate VOC emissions limit for the NSACSB emissions unit is 26.2 tons VOC per 12 months. With the addition of this operation, the aggregate limit would increase to 31.0 tons VOC per 12 months.

2. Projected or Actual Date of Commencement of Construction : 01-Sep-1998

3. Projected Date of Completion of Construction : 01-Nov-1998

Professional Engineer Certification

1. Professional Engineer Name : Bob Beaver
   Registration Number : 32528

2. Professional Engineer Mailing Address :

   Organization/Firm : Walt Disney World Co.
   Street Address : P.O. Box 10,000
   City : Lake Buena Vista State : FL Zip Code : 32830-1000

3. Professional Engineer Telephone Numbers :
   Telephone : (407)828-1584 Fax : (407)934-7297

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [✓] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature _____ Date 6/4/98

ROBERT DAVID BEAVER CERTIFICATE 32528 STATE OF FLORIDA REGISTERED ENGINEER

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Richard Bumar, E.I.
Title : Environmental Ctrl. Represenatative

2. Application Contact Mailing Address :

Organization/Firm : Walt Disney World Co.
Street Address : P.O. Box 10,000
City : Lake Buena Vista
State : FL Zip Code : 32830-1000

3. Application Contact Telephone Numbers :

Telephone : (407)827-2748 Fax : (407)827-2774

Application Comment

This application is being submitted to allow the construction of two new paint spray booths at the Walt Disney World Resort complex.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : East (km) : North (km) :			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 28 21 31 Longitude (DD/MM/SS) : 81 34 36			
3. Governmental Facility Code : 0	4. Facility Status Code : C	5. Facility Major Group SIC Code : 79	6. Facility SIC(s) :
7. Facility Comment : Facility SIC is 79-96			

Facility Contact

1. Name and Title of Facility Contact : Armando Rodriguez Director of Environmental Affairs
2. Facility Contact Mailing Address : Organization/Firm : Walt Disney World Co. Street Address : P.O. Box 10,000 City : Lake Buena Vista State : FL Zip Code : 32830-1000
3. Facility Contact Telephone Numbers : Telephone : (407)827-2730 Fax : (407)827-2774

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	N
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	

B. FACILITY REGULATIONS

Rule Applicability Analysis

B. FACILITY REGULATIONS

List of Applicable Regulations

Title V core list

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification

D. FACILITY POLLUTANT DETAIL INFORMATION

Pollutant _____

Effective : 3-21-96

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	Attachment A
2. Facility Plot Plan :	Attachment B
3. Process Flow Diagram(s) :	Attachment C
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	NA
6. Supplemental Information for Construction Permit Application :	NA

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :	NA
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Identification of Additional Applicable Requirements :	NA
12. Compliance Assurance Monitoring Plan :	NA
13. Risk Management Plan Verification :	NA
14. Compliance Report and Plan :	NA
15. Compliance Certification (Hard-copy Required) :	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

Character Heads- paint spray booth #2

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 1

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Character Heads- paint spray booth #2		
2. Emissions Unit Identification Number : [X] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 79
6. Emissions Unit Comment : This operation will become an emissions point within the North Service Area Central Shops Building (NSACSB) emissions unit.		

Emissions Unit Information Section 1

Character Heads- paint spray booth #2

Emissions Unit Control Equipment 1

1. Description : Please refer to Attachment D for design drawings and specifications.
2. Control Device or Method Code : 58

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

Emissions Unit Details

1. Initial Startup Date :	01-Sep-1998
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : JBI	Model Number : IDB-208-S
4. Generator Nameplate Rating :	MW
5. Incinerator Information :	
Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	2050	gallons/year
4. Maximum Production Rate :		gallons/year
5. Operating Capacity Comment : Maximum process or throughput rate is based on facility production schedule. Please refer to Attachment E for product MSDSs.		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

Rule Applicability Analysis

This emissions unit is subject to the general pollutant emissions limiting standards for VOC, objectionable odors, particulates, and visible emissions.

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

List of Applicable Regulations

62-296.320, F.A.C.: General Pollutant Emission Limiting Standard

Title V core list

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Character Heads- paint spray booth #2

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram : NSA-17		
2. Emission Point Type Code : 1		
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Single stack with weather caps on the south side of the top of the NSA Central Shops building.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : No other emissions units share this emission point.		
5. Discharge Type Code :	W	
6. Stack Height :	35	feet
7. Exit Diameter :	3.5	feet
8. Exit Temperature :	85	°F
9. Actual Volumetric Flow Rate :	20000	acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :	20000	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Please refer to Attachment E for unit specifications.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Character Heads- paint spray booth #2

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Surface coating operations in a paint spray booth.	
2. Source Classification Code (SCC) : 4-02-001-01	
3. SCC Units : Gallons Used	
4. Maximum Hourly Rate : 10.00	5. Maximum Annual Rate : 2,050.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Maximum usage rate is based process knowledge: the operation can not exceed 10 gallons per hour of material usage. The 2050 gallons per year rate is the maximum amount of paint and solvents that is expected to be applied.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - VOC			EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **VOC**
2. Total Percent Efficiency of Control : 0.00 %
3. Potential Emissions : 27.90 lb/hour 4.80 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : materials balance
7. Emissions Method Code : 3
8. Calculations of Emissions : Please refer to Attachment F for emissions calculations.
9. Pollutant Potential/Estimated Emissions Comment : Emission Factor of 4.64 lb VOC/gallon is the average VOC content by weight for this process, and includes paint materials, thinners, catalysts, and solvents.

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	31.00		tons VOC/12 mo.
4. Equivalent Allowable Emissions :	lb/hour	31.00	tons/year
5. Method of Compliance : Materials balance and usage recordkeeping			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions are equal to the potential emissions.			

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :
2. Basis for Allowable Opacity :
3. Requested Allowable Opacity : Normal Conditions : % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :
5. Visible Emissions Comment : Only general VE standards are applicable.

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Character Heads- paint spray booth #2

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : No continuous monitoring system is required.	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 1

Character Heads- paint spray booth #2

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Character Heads- paint spray booth #2

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment C
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment D
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Attachment E
9. Other Information Required by Rule or Statue :	Attachment F

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :	
13. Compliance Assurance Monitoring Plan :	
14. Acid Rain Application (Hard-copy Required) :	
NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2

Cirque du Soleil Spray Booth

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 2

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Cirque du Soleil Spray Booth		
2. Emissions Unit Identification Number : [X] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 79
6. Emissions Unit Comment : This operation will become an emissions point at the Cirque du Soleil attraction.		

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Emissions Unit Control Equipment 1

1. Description : Please refer to Attachment G for design drawings and specifications.
2. Control Device or Method Code : 58

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Emissions Unit Details

1. Initial Startup Date :	01-Nov-1998
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Proclean	Model Number : PCL-886
4. Generator Nameplate Rating :	MW
5. Incinerator Information :	
Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	595	gallons/year
4. Maximum Production Rate :		gallons/year
5. Operating Capacity Comment : Maximum process or throughput rate is based on facility production schedule. Please refer to Attachment E for product MSDSs.		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Rule Applicability Analysis

This emissions unit is subject to the general pollutant emissions limiting standards for VOC, objectionable odors, particulates, and visible emissions.

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

List of Applicable Regulations

62-296.320, F.A.C.: General Pollutant Emission Limiting Standard

Title V core list

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 2

Cirque du Soleil Spray Booth

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram : CDS-1		
2. Emission Point Type Code : 1		
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Single stack with weather caps on top of the Cirque du Soleil building.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : No other emissions units share this emission point.		
5. Discharge Type Code :	W	
6. Stack Height :	100	feet
7. Exit Diameter :	2.0	feet
8. Exit Temperature :	85	°F
9. Actual Volumetric Flow Rate :	9127	acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :	9127	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Please refer to Attachment G for unit specifications.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

Cirque du Soleil Spray Booth

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Surface coating operations in a paint spray booth.	
2. Source Classification Code (SCC) : 4-02-001-01	
3. SCC Units : Gallons Used	
4. Maximum Hourly Rate : 10.00	5. Maximum Annual Rate : 595.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Maximum usage rate is based process knowledge: the operation can not exceed 10 gallons per hour of material usage. The 595 gallons per year rate is the maximum amount of paint and solvents that is expected to be applied.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - VOC			EL

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **VOC**
2. Total Percent Efficiency of Control : 0.00 %
3. Potential Emissions : 26.30 lb/hour 1.60 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : materials balance
7. Emissions Method Code : 3
8. Calculations of Emissions : Please refer to Attachment F for emissions calculations.
9. Pollutant Potential/Estimated Emissions Comment : Emission Factor of 5.35 lb VOC/gallon is the average VOC content by weight for this process, and includes paint materials, thinners, catalysts, and solvents.

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	1.60		tons VOC/12 mo.
4. Equivalent Allowable Emissions :	lb/hour	1.60	tons/year
5. Method of Compliance : Materials balance and usage recordkeeping			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions are equal to the potential emissions.			

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	1.60		tons/12 mo
4. Equivalent Allowable Emissions :	lb/hour	1.60	tons/year
5. Method of Compliance : Materials balance			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :			

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :
2. Basis for Allowable Opacity :
3. Requested Allowable Opacity : Normal Conditions : % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :
5. Visible Emissions Comment : Only general VE standards are applicable.

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Cirque du Soleil Spray Booth

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : No continuous monitoring system is required.	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 2

Cirque du Soleil Spray Booth

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[X] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 : C	NO2 : C

4. Baseline Emissions :

PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year

5. PSD Comment :

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 2

Cirque du Soleil Spray Booth

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment C
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment G
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Attachment G
9. Other Information Required by Rule or Statue :	Attachment F

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

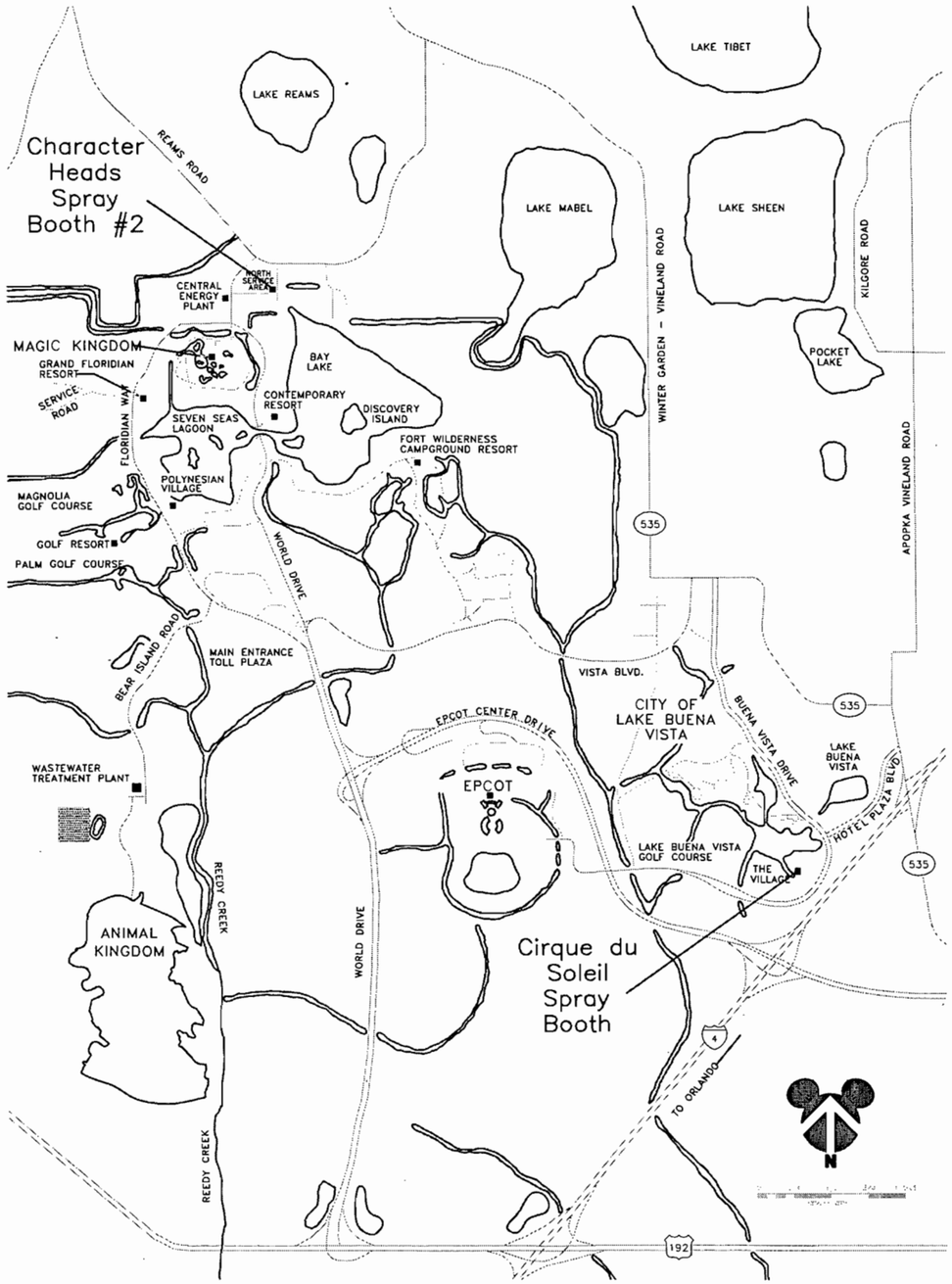
12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

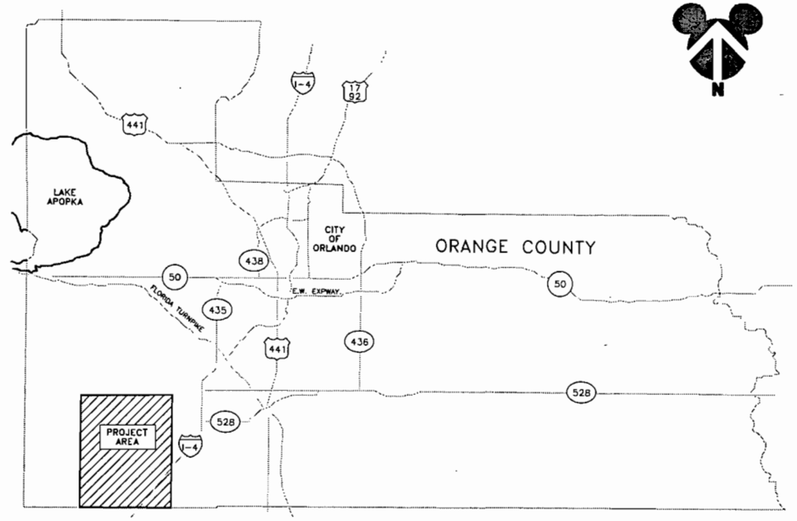
NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

ATTACHMENT A

AREA MAP SHOWING FACILITY LOCATION



SITE LOCATION MAP



VICINITY MAP

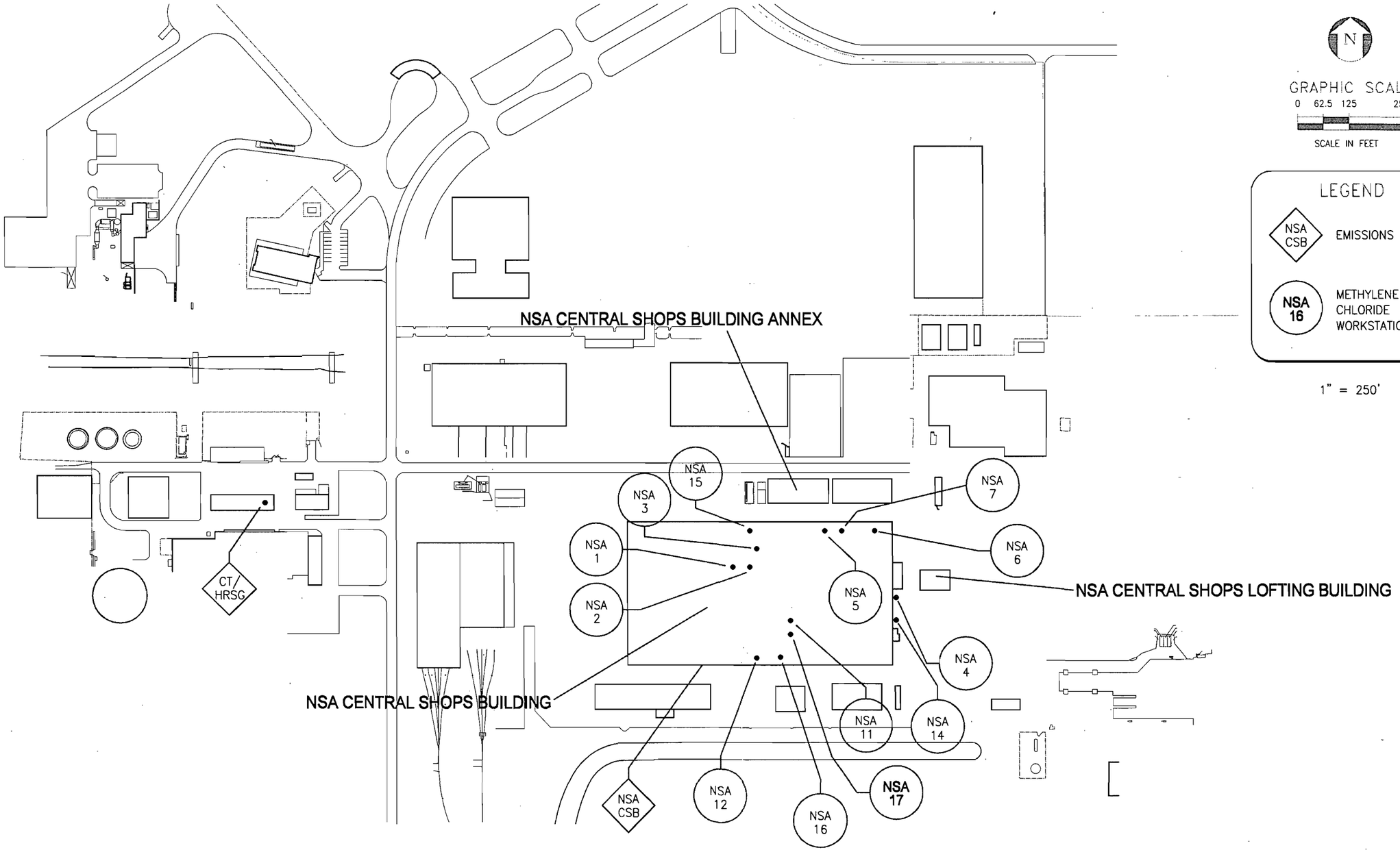
LOCATION MAP

ATTACHMENT A
AREA MAP SHOWING FACILITY LOCATIONS
2 PAINT SPRAY BOOTHS

Walt Disney World®

ATTACHMENT B

FACILITY PLOT PLAN



N

GRAPHIC SCALE

0 62.5 125 250

SCALE IN FEET

LEGEND

NSA CSB — EMISSIONS UNIT

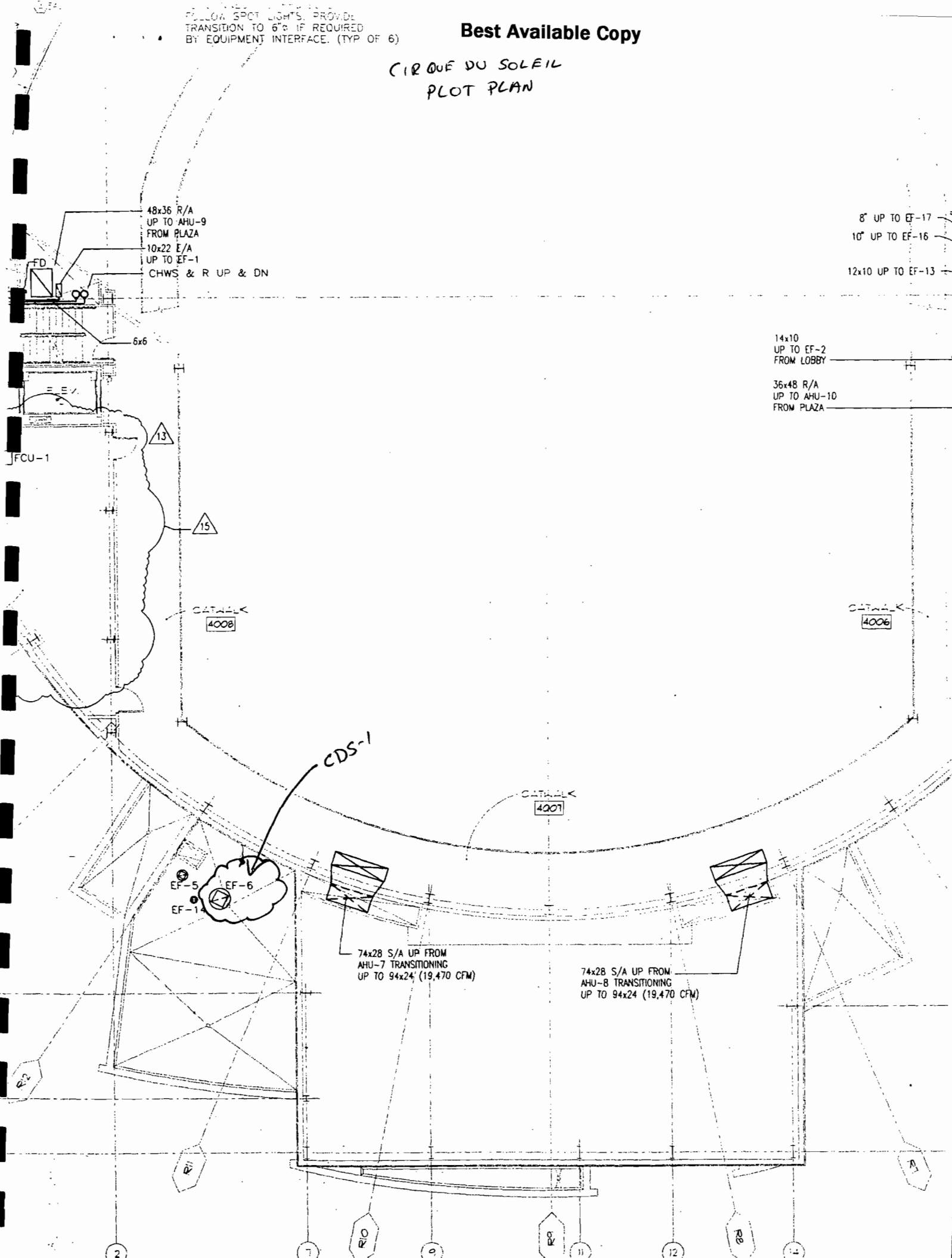
NSA 16 — METHYLENE CHLORIDE WORKSTATIONS

1" = 250'

ATTACHMENT B
FACILITY PLOT PLAN
NORTH SERVICE AREA CENTRAL SHOPS BUILDING (NSACSB)- CHARACTER HEADS SPRAY BOOTH #2 (NSA17)

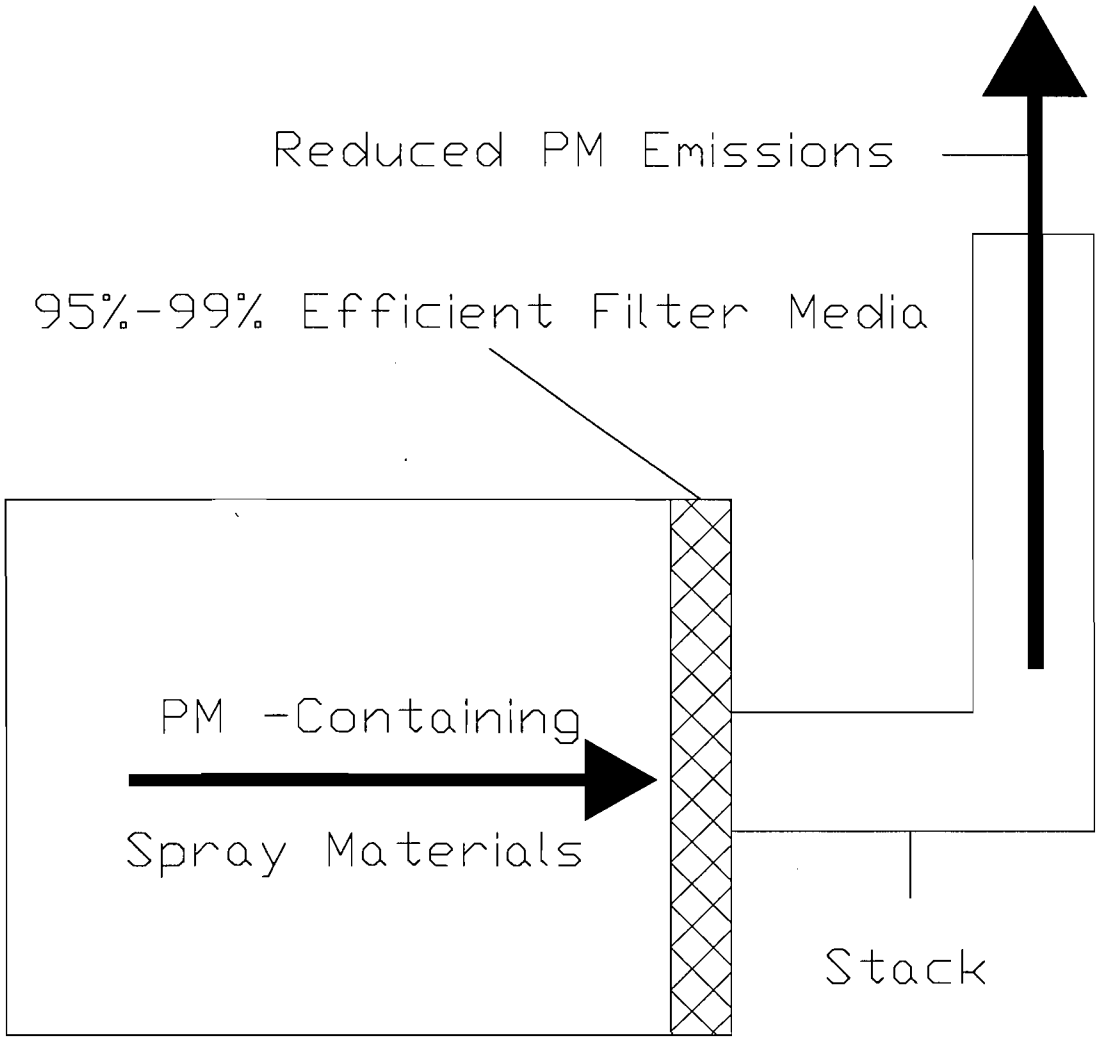
Walt Disney World®

CIRQUE DU SOLEIL
PLOT PLAN



ATTACHMENT C

PROCESS FLOW DIAGRAM

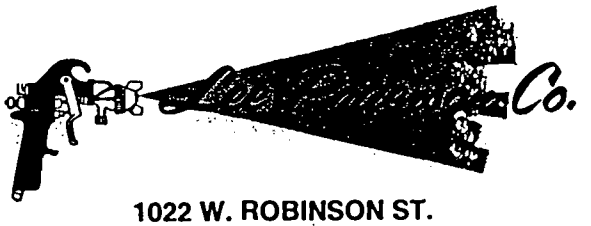


ATTACHMENT C
PROCESS FLOW DIAGRAM
CIRQUE DU SOLEIL AND CHARACTER HEADS
SPRAY BOOTHS

Walt Disney World Co.

ATTACHMENT D

CHARACTER HEADS SPRAY BOOTH #2 SPECIFICATIONS



1022 W. ROBINSON ST.
ORLANDO, FLORIDA 32805
(407) 422-4567

PRICE QUOTATION

QUOTATION NO. 3085

March 27, 1998

Walt Disney World Company
Post Office 10,000
Lake Buena Vista, Florida 32830-1000

ATTN: Larry Jones, Manager/Building Trades

Phone: (407) 824-7695
Fax: (407) 824-7375

REFERENCE: Character Head Department/Spray Booth

Dear Larry,

It is my pleasure to submit the following quotation for your consideration.

SPECIAL, FLOOR STYLE, DRY FILTER
INDUSTRIAL PAINT SPRAY BOOTH
J.B.I. Model #IDB-208-S

Booth Working Dimensions: 20'Wide x 8'High x 7'Deep
Approx. Booth Overall Dimensions: 20'4"Wide x 8'10"High x 11'2"Deep

Construction: 18 gauge galvanized steel sheet. Panels are pre-punched, companion flanged for easy assembly.

Note: This equipment is designed expressly for the removal of particulate matter only. Reduction of "volatile organic compounds" requires either coating reformulation or optional, additional equipment.

Booth includes:

1 ea.	42" Heavy duty exhaust unit(20,000 CFM @ 1/4" s.p.) = 125 FPM
1 ea.	5 h.p. 208/230/460 volts, 3 phase, 60 hz TEFC motor with variable pitch drive sheave
4 ea.	48" 4-tube fluorescent fixtures, less bulbs, 110 volts, vapor proof
1 ea.	Manometer (draft gauge)
1 ea.	Industrial style exhaust chamber
3 ea.	18 gauge, sheet steel, separation walls with channels
1 set	Exhaust filters and 1 set grids
1 lot	Necessary assembly hardware and installation drawings

Your cost F.O.B. Osseo, Wisconsin - $9,370.00

Note: Approximate weight 3,400 lbs., Class 85, Shipped KDF from Zip Code 54758

OPTION:

To assemble spray booth and Manufacture and install all related duct work (Please see attached responsibility sheet for explanation of installation duties)

Your Cost - $7,195.00

NOTE: J.B.I. spray booths are designed and constructed to conform with OSHA and NFPA regulations. Quoted equipment design concept must be discussed by customer with all governing agencies before purchase.

Prices do not include: freight, electrical controls, wiring, air piping, fire protection, taxes or permits.

Terms: Net 30 days, A.R.O.

Please allow 4-6 weeks for delivery upon receipt of purchase order and approval drawings (if necessary).

This quote is good for 120 days.

Thank you for this opportunity to quote your equipment needs. If I can be of any further assistance, please feel free to contact me at any time.

Sincerely,

LEE PATTERSON COMPANY

MICHAEL D. SHIPLEY
Sales Engineer

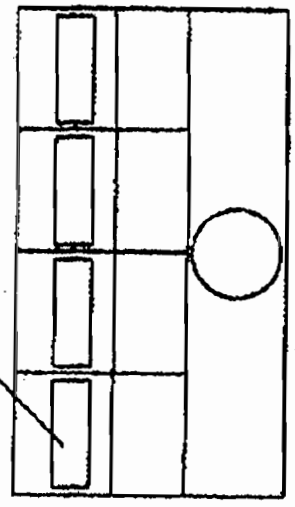
RESPONSIBILITIES SHEET

SPRAY BOOTH ASSEMBLY

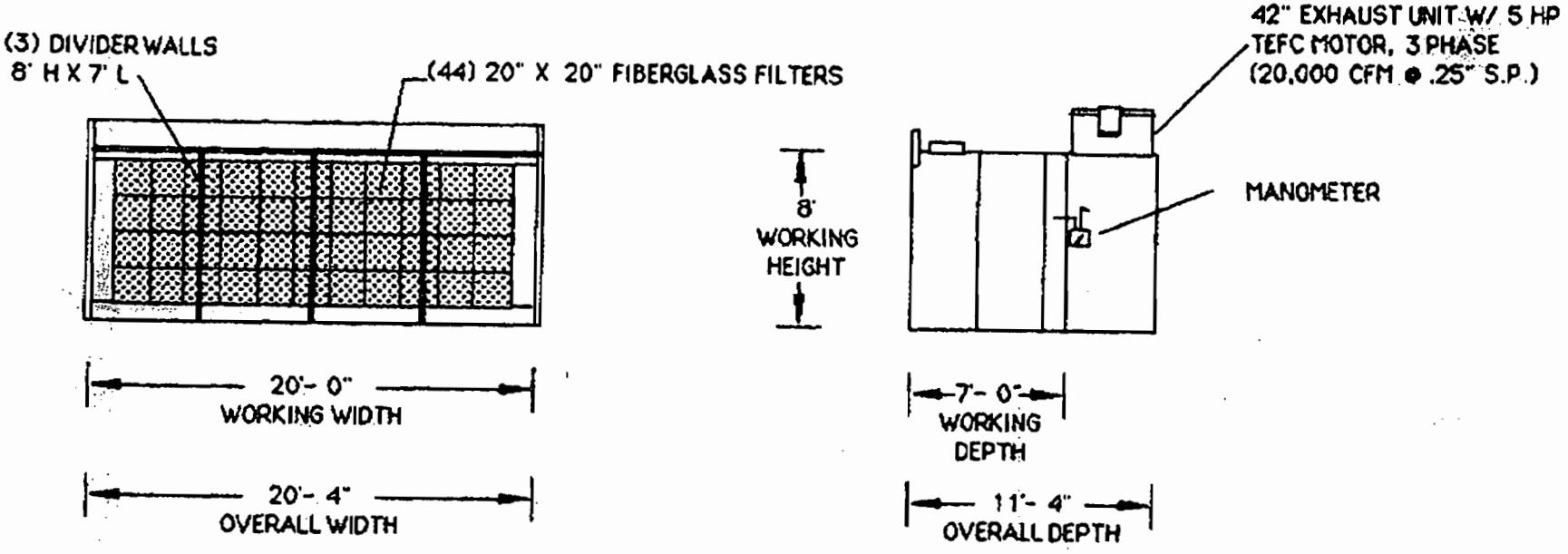
We will uncrate and inventory spray booth, assemble entire booth, fasten to floor, caulk and clean up construction debris. We will supply and install all necessary duct work to place discharge point a code required six feet above roof line, then flash and seal to roof curb. All work will be performed Monday through Friday, 8:00AM - 5:00PM. Includes all necessary duct work, roof curb, and automatic roof ventilator.

CUSTOMERS RESPONSIBILITIES

Receive, unload and store crates 50' of erection site. Provide a clean level slab for erection and provide container for disposal of debris. We are not responsible for any permits or engineered drawing required. We will provide submittal data and installation drawings to others for permit application. Fire suppression, electrical connections and air piping to be provided by others. We will provide roof curb as stated above, but others responsible for cutting opening through roof and attaching our curb to surface. We will then flash and seal to roof curb.



PLAN VIEW



FRONT VIEW

SIDE VIEW

IDB-208

CONCEPT

1 2

ATTACHMENT E

MATERIAL SAFETY DATA SHEETS

UP0716/UP0717

U-POL PRODUCTS

MATERIAL SAFETY DATA SHEET

COMMERCIAL PRODUCT NAME: **UPOL FIBRAL**

PREPARATION: **POLYESTER REPAIR PASTE CONTAINING STYRENE**

SANDERS AND ASSOCIATES INC.,
6 GLENEAGLES DRIVE,
R.D.3 LEBANON
NJ08833
U.S.A.

EMERGENCY TELEPHONE NO:- **1-800-340-7824**

FAX NO:- **908-236-8863**

COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	LEVEL	SYMBOL	RISK
STYRENE	100-42-5	11 - 25%	Xn - Harmful.	R10 R20 R36/38

HAZARDS IDENTIFICATION

INHALATION: May cause drowsiness and irritation of respiratory tract.

SKIN: May cause irritation on prolonged contact, redness.

EYES: Irritation and soreness.

INGESTION: Sore throat, stomachache, nausea.

UP0716/UP0717

1. To avoid dust and get the best use from our products we suggest either of the following work methods:-

   (a) Take off excess bodyfiller with a sander incorporating a dust extractor and finish the job using wet and dry paper.

   (b) Take off excess bodyfiller with a body file, and then finish the job with wet and dry paper.

   If the above mentioned methods are not used, airborne dust will be produced whilst rubbing down in the traditional way. Therefore, it is advisable that the rubbing down be carried out by personnel properly protected, i.e., wearing dust masks in an area separate from the main working area and, most important, properly ventilated - preferably by dust extractors.

2. Whilst none of our products contain any form of asbestos, any dusts emitted from sanding filler pastes can be classified as "Nuisance" dusts which, to the best of our knowledge have a long history of little adverse effects to human health when exposures are kept under reasonable control.

3. Please note, for repairs using glassfibre filled materials it should be unnecessary to sand them, if applied according to instructions. However, if sanding is deemed to be necessary, then we recommend the wearing of a suitable dust mask, particularly where mechanical means are used.

4. Mineral filler (which is a constituent of most body fillers), "in excessive quantities", is considered a moderate risk and, therefore, it is advisable to provide proper working methods/machinery to minimise the risk.

   Reference should be made to the following official publications:-

   EH40, EH42, EH44, C.O.S.H.H. Regulations, Environmental Protection Act, Toxicity Review Styrene.

ISSUE NUMBER: 0002 **ISSUE DATE: 28/06/95**

* Changes from previous issue

UP0716/UP0717

TRANSPORT INFORMATION *	PAINT RELATED MATERIAL	OR	POLYESTER RESIN KIT
SHIPPING NAME:			
UNITED NATION NO:	UN 1263		UN 3269
CLASS NO:	3.3.		3.3.
HARMONISED SYSTEMS NO:	321410 10 0.		321410 10 0.
PACKING GROUP:	III.		III.

Complies with The Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations.

For current International Maritime Dangerous Goods Declaration, please contact our Export Department Telephone No: 44-(0)181-445-0372.

REGULATORY INFORMATION

CONTAINS:	Styrene.	
SYMBOL:	Xn	Harmful.
RISK PHRASES:	R10	Flammable.
	R20	Harmful by inhalation.
	R36/38	Irritating to eyes and skin.
SAFETY PHRASES:	S2	Keep out of reach of children.
	S3	Keep in a cool place.
	S46	If swallowed seek medical advice immediately and show this container or label.
	S51	Use only in well ventilated areas.

FURTHER INFORMATION

The main hazard likely to be encountered during finishing operations is the production of dust clouds. Dust from any source in the right concentrations must be regarded as a potential danger to health. It is, therefore, of paramount importance that dust clouds are kept to an absolute minimum.

Our filler pastes have been specially formulated to be rubbed down wet. When using this method the surface will air dry in less than 30 seconds. Many experts consider that this will result in a better finish and obviate the dust problem.

UP0716/UP0717

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Putty like consistency.
ODOUR:	Slightly pungent, characteristic of Styrene.
DENSITY:	1.15 - 1.85.
FLASH POINT:	32°C (Styrene).
AUTOFLAMMABILITY TEMPERATURE :	490°C (Styrene).
EXPLOSIVE LIMITS:	Lower 1.1%. Upper 6.1% (Styrene).
VOLATILE CONTENT:	11 - 25%.
SOLUBILITY:	Insoluble in water.
VISCOSITY:	Approx. 500,000 - 1,000,000 centipoise.

STABILITY AND REACTIVITY

Can polymerise (solidify) if subjected to elevated temperatures over a period of time, exposed to UV/sunlight, or by the addition of free radical initiators e.g., organic peroxide. Heat increase may be sufficient to raise the temperature above the product flash point. Thermal decomposition can give rise to acrid fumes. Polymerisation in a closed container can give rise to pressure which may rupture the vessel.

TOXICOLOGICAL INFORMATION

For Styrene, the following values have been reported:-

An oral LD50 in rats of 5g/Kg.
LC50 in rats ranging between 2770 - 6000ppm.

Styrene odour is detectable at 25ppm. At 200-400ppm there is a transient irritant effect on nasal passages. At 400-1000ppm increasing systematic effects such as dizziness, nausea and headache at 800ppm and over becomes intolerable to mucous membranes. At 10000ppm and over may cause death in less than one hour.

There is no evidence that Styrene is carcinogenic in humans.

ECOLOGICAL INFORMATION

Marine pollutant and non biodegradeable.

Filler pastes are viscous compositions which lose solvents by evaporation or polymerisation, leaving a relatively inert residue which will not degrade significantly.

DISPOSAL CONSIDERATIONS

The uncured material and any contaminated container should be disposed of in accordance with the Environmental Protection Act.

UP0716/UP0717

FIRST AID MEASURES

INHALATION:	Move affected person to the fresh air without delay. If drowsiness persists seek medical attention.
SKIN CONTACT:	Wash affected area with warm soapy water. Do not use solvents.
EYE CONTACT:	Irrigate with copious quantities of water and seek medical attention immediately.
INGESTION:	Do not induce vomiting, drink plenty of water and seek medical attention.

FIRE FIGHTING MEASURES

Fight fires with CO_2, dry powder, or chemical foam. Do not use water jets. Burning material emits toxic fumes and smoke, so avoid inhaling [illegible] products.

ACCIDENTAL RELEASE MEASURES

The product does not readily flow. Any spillage should be wiped or scraped away. Keep product away from drains. Avoid sources of ignition. Dispose of in accordance with the requirements of the Environmental Protection Act.

HANDLING AND STORAGE

HANDLING:	Keep away from heat. Keep away from sources of ignition. Avoid contact with skin and eyes. Use only in well ventilated areas.
STORAGE:	Store below 25°C in a dry well ventilated space in original closed containers.

EXPOSURE CONTROLS/PERSONAL PROTECTION

A good standard of personal and industrial hygiene should be maintained at all times. Persons who suffer from skin complaints or other allergic effects should not work with the product.

OEL (UK)	**Component**	**8 HR TWA**	**10 mins STEL**
	Styrene	100 ppm	250 ppm

EYE PROTECTION:	Not necessary.
PROTECTIVE CLOTHING:	Recommended.
RESPIRATORY PROTECTION:	Dust particle mask approved to FFP1SD-EN149 (when sanding cured product).
SKIN PROTECTION:	Barrier cream recommended.

UP0701/UP0702/UP0703/UP0704

U-POL
PRODUCTS

MATERIAL SAFETY DATA SHEET

COMMERCIAL PRODUCT NAME: UPOL TOPSTOP

PREPARATION: POLYESTER REPAIR PASTE CONTAINING STYRENE

SANDERS AND ASSOCIATES INC.,
[illegible] DRIVE,
[illegible] BANON

EMERGENCY TELEPHONE NO.- 1-800-340-7824

FAX NO.- 908-236-8863

COMPOSITION/INFORMATION ON INGREDIENTS

[illegible]	CAS NO.	LEVEL	SYMBOL	RISK
[illegible]	100-[illegible]	11 - 25%	Xn - Harmful	R10 R2[illegible] R3[illegible]

[illegible] IDENTIFICATION

INHALATION:	May cause drowsiness and irritation of respiratory tract.
SKIN:	May cause irritation on prolonged contact, redness.
EYES:	Irritation and soreness.
INGESTION:	Sore throat, stomachache, nausea.

U-POL, 1 TOTTERIDGE LANE, [illegible] LONDON N20 0EY [illegible]
T 44 (0)181 446 0372 F. 44 (0)181 446 7367 E: SALES@UPOL.COM W: WWW.U-POL.COM
DIRECTORS: B. DAVID, C. DAVID, N. DAVID, R. FLETCHER, J. C. JULIEN, N. MORTON, N. LUCY. W. DAVID & SONS LTD. REGISTERED IN ENGLAND 404910

UP0701/UP0702/UP0703/UP0704

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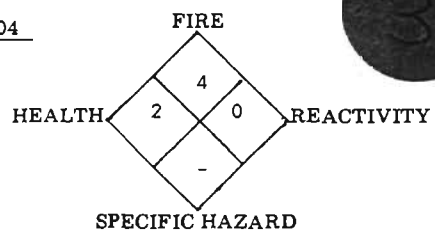
ISSUE NUMBER: 0102 ISSUE DATE: 28/06/95
* Changes from previous issue

R.M. NUMBER 50006001

MATERIAL SAFETY DATA SHEET

NFPA DESIGNATION 704



HAZARD RATING

4=Extreme
3=High
2=Moderate
1=Slight
0=Insignificant

CROWN

INDUSTRIAL PRODUCTS CO., INC.

HEBRON, IL. 60034 PHONE 815/648-2424

EMERGENCY NIGHT NUMBER 815-338-2141

I IDENTIFICATION

CHEMICAL NAME
Mixture

FORMULATION NUMBER
159,044AY

TRADE NAME & PRODUCT NUMBER
Blue Toolmaker's Ink #6001, 16001

DOT IDENTIFICATION NUMBER
UN-1954

SYNONYMS
NA

II PRODUCT AND COMPONENT DATA

COMPONENT(S) CHEMICAL NAME	CAS REGISTRY NO.	%(APPROX.)	ACGIH-TLV TWA (ppm)	ACGIH-TLV STEL	OSHA PEL (ppm)	Listed as a Carcinogen in NTP, IARC or OSHA1910(Z)
Methyl Ethyl Ketone	78-93-3	51-70	200	300	200	No
Toluene	108-88-3	1-10	100	150	200	No
Trichlorotrifluoroethane	76-13-1	1-10	1000	-	1000	No
Propylene Glycol Methyl Ether Acetate	108-65-6	1-10	Not Established			No
Liquified Petroleum Gas, Sweetened	68476-86-8	11-30	900	-	900	No

III PHYSICAL DATA

APPEARANCE AND ODOR
Blue/Ketone Odor

SPECIFIC GRAVITY
< 1

BOILING POINT
NA

VAPOR DENSITY IN AIR
> 1

VAPOR PRESSURE
Aerosol 45-50 psig

% VOLATILE BY VOLUME
79.5%

EVAPORATION RATE
(Ether = 1) < 1

SOLUBILITY IN WATER
Neg.

IV REACTIVITY DATA

STABILITY
Stable

CONDITIONS TO AVOID
Open flames or electrical arcs.

INCOMPATIBILITY (materials to avoid)

Avoid alkaline materials and mineral acids.

HAZARDOUS DECOMPOSITION PRODUCTS

Burning can produce carbon monoxide and/or carbon dioxide.

HAZARDOUS POLYMERIZATION

Will not occur.

V FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS IN AIR	LEL	UEL
Aerosol Container <20°F T.C.C.		1.8	9.5

EXTINGUISHING AGENTS

Carbon Dioxide, dry chemical, foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Treat as cylinders of compressed gas.
Firefighters should use a self-contained positive pressure breathing apparatus.

VI TOXICITY AND FIRST AID

EXPOSURE LIMITS:

See Section II for exposure limits of each individual component.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Not established.

ACUTE TOXICITY:

INHALATION: High vapor concentrations may result in dizziness, headaches, or unconsciousness.

INGESTION: Not likely.

EYE CONTACT: May cause irritation. Possible corneal injury.

SKIN CONTACT: Prolonged contact will cause defatting of the skin leading to irritation and dermatitis.

SKIN ABSORPTION: Not likely to be absorbed in toxic amounts.

FIRST AID CALL A PHYSICIAN

EYES: Flush with water for 15 minutes or until irritation subsides.

SKIN: Remove all contaminated clothing. Wash skin with soap and water.

INHALATION: Remove from exposure immediately. If breathing is stopped or irregular, begin artificial respiration and administer oxygen.

INGESTION: Do NOT induce vomiting. Drink plenty of water.

ONIC TOXICITY

CARCINOGENICITY: None

TERATOGENICITY: Not established

MUTAGENICITY: Not established

TARGET ORGAN AFFECTED: Prolonged exposure above the OSHA permissible exposure limits may result in kidney and liver damage.

VII PERSONAL PROTECTION AND CONTROLS

RESPIRATORY PROTECTION

Respiratory protection program should be in accordance with 29 CFR 1910.134.

VENTILATION

Local exhaust is adequate.

SKIN PROTECTION

Gloves: Polyethylene or Neoprene.

EYE PROTECTION

Safety glasses are recommended.

HYGIENE

Wash skin with soap and water.

OTHER CONTROL MEASURES

Protective clothing and equipment: See 29 CFR 1910.133 & 132.

VIII STORAGE AND HANDLING PRECAUTIONS

AEROSOL CONTAINER: Do NOT store in direct sunlight, near open flames, or at tempertures exceeding 120°F. Do NOT smoke while spraying. Use only as directed. Intentional misuse by deliberately concentrating vapors and inhaling contents can be harmful or fatal.

IX SPILL LEAK AND DISPOSAL PRACTICES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Ventilate area. Remove all sources of ignition. Clean up with inert materials and dispose of in accordance with all Local, State and Federal regulations.

WASTE DISPOSAL METHOD

AEROSOL CONTAINER: Do NOT puncture or incinerate. Empty containers may be disposed of through normal channels. Full or partially filled containers are considered HAZARDOUS WASTE.

X TRANSPORTATION

DOT HAZARD CLASSIFICATION

ORM-D

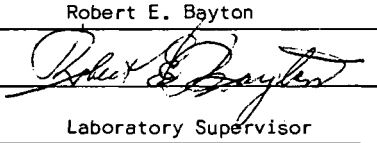
PLACARD REQUIRED

None

LABEL REQUIRED

ORM-D

NAME(print) Robert E. Bayton

SIGNATURE 

TITLE Laboratory Supervisor

DATE OF LAST REVISION July 25, 1988

This formulation is subject to change without notice. In case of accident, please use the phone number provided.

A HAZARDOUS INGREDIENT IS ONE WHICH MEETS ONE OR MORE OF THE FOLLOWING CRITERIA:

1. It is listed in the annual registry of toxic effects of chemical substances, or is known to be toxic within the parameters of that registry, and is present at a level of 1% or greater of the composition, except that chemicals identified as carcinogens under 29 CFR 1910.1200 (d) (4) shall be listed if the concentrations are 0.1% or greater.

2. It has an OSHA established ***PEL , or Ceiling Concentration (C) or an American Conference of Governmental Industrial Hygienist's (ACGIH) TLV or, C, and by the nature of the product or its known use, is likely to become airborne.
   ***Permissible Exposure Limits

3. It contributes to one or more of the following hazards to the product: A - Flashpoint below 200° F. (CC), or subject to spontaneous heating or decomposition; B - Causes skin burns (DOT); C - Strong oxidizing agent (DOT); D - Subject to hazardous polymerization.

Each hazardous ingredient should be listed by chemical, generic or proprietary name, its level in the product should be expressed as 1% or less, 1-10%, 11-30%, 31-50%, 51-70%, or greater than 70%, or by other means if such information is proprietary. Recommended ACGIH or registry of toxic effects of chemical substances TLV or C values are only listed with appropriate notation, where OSHA values are not available.

MATERIAL SAFETY DATA SHEET

15

Revision date: 6/21/88

Gelcoat MSDS: Type II

I. PRODUCT IDENTIFICATION

Product manufacturer.....: American Colors, Inc.
Address.....: P.O. Box 397, Sandusky, OH 44870
Emergency telephone No. .....: (419) 625-2173
Product code.....: Applies to *2-,*3-,*4-,66-,*7-,88-, AU-, vinyl ester (VE-), corrosion resistant (CR-), and fire retardant (FR-) MSDS TYPE II gelcoats.
Chemical family.....: Synthetic organic resin
Chemical name.....: Unsaturated polyester in styrene monomer
D.O.T. shipping name.....: Resin solution
D.O.T. hazard class.....: Flammable liquid
UN/NA number.....: UN 1866

II. HAZARDOUS INGREDIENTS

PRODUCT CONTAINS LEAD CHROMATE AND/OR CADMIUM PIGMENTS - SUSPECT CARCINOGENS AS REQUIRED BY OSHA

	ACGIH TLV	OSHA PEL	CAS NUMBER
Styrene	50ppm TWA8, 100ppm STEL	100ppm TWA8, 200PPM ceiling, 600ppm peak	100-42-5
Unsaturated polyester	not established	not established	none
Lead chromate	0.05 mg/m3 TWA8 (as Cr)	0.05 mg/m3 TWA8 (as Pb)	1344-37-2 (yell 12656-85-8 (ora
Cadmium mercury sulfide	0.05 mg/m3 TWA8 (as Cd) 0.1 mg/m3 TWA8 (as Hg)	0.2 mg/m3 TWA8 (as Cd) 0.1 mg/m3 TWA8 (as Hg)	1345-09-1

PRODUCT CONTAINS 30-40% STYRENE MONOMER

For Hazard Communication purposes under OSHA STANDARD 29 CFR 1910.1200 styrene monomer is listed as a possible carcinogen based upon an evaluation by IARC. Neither the current epidemiology data from workers exposed to styrene monomer nor the current data from long term animal toxicology studies provides an adequate basis to conclude that styrene monomer is carcinogenic. Testing of styrene by the National Toxicology Program is in progress but results are not yet available.

III. PHYSICAL DATA

Appearance.....: colored liquid
Odor.....: styrene smell
Specific gravity.....: 1.1-1.3
Bulk density.....: 9-11 lb./gallon
Vapor pressure.....: 4.5 mm Hg @ 20 C (styrene)
Percent volatile.....: 30-40%
vaporation rate.....: slower than ether (ether=1), (styrene(1)
Boiling point.....: 295 F
Solubility in water.....: slight
Ph.....: acidic
VOC.....: N/A

IV. FIRE AND EXPLOSION HAZARD DATA

Flash point.....: 87 F (tag closed cup-styrene)
Lower expolsive limit.....: 1.1% volume % in air
Upper expolsive limit.....: 6.1% volume % in air
Extinguishing media: foam, carbon dioxide or dry chemical-NFPA Class B
Special firefighting procedures: Wear complete fire service protective equipment, including full face OSHA/NIOSH approved self-contained breathing apparatus. Use water to cool fire-exposed containers. Large fires: fire fighting best done at a safe distance.
Unusual hazards: Vapors are heavier than air and may travel along the ground and be ignited by a source far from the handling point.
Styrene may polymerize at elevated temperature of fires.
If polymerization occurs, explosive rupturing may occur.

V. HEALTH HAZARD DATA

Threshold limit value (TLV)-not applicable for mixtures, 100ppm for styrene

ACUTE:

* eye contact: Liquid styrene and its vapor can be extremely irritating. Direct contact may produce corneal damage.
* skin contact: Repeated and/or prolonged contact can cause irritation (possibly severe).
* inhalation: High concentration of vapors can cause irritation of respiratory tract including nose and throat, headaches, dizziness, nausea, weakness, collapse, coma and death. Liver and kidney damage have been reported at high doses in animal studies.
* oral ingestion: Can cause gastrointestonal irritation, nausea, stomach upset and may be fatal.
* absorption: May produce damage to internal organs.

CHRONIC: Studies have been perfomed which may indicate a possible mutagenic or carcinogenic potential for styrene via inhalation. However, the data are judged to be scientifically inadequate and do not establish such mutagenic or carcinogenic potential for styrene. This position is in agreement with statements in the NIOSH criteria for a recommended standard on styrene.

Emergency first aid:

* eye contact: Flush eye with large amounts of water for 15 minutes. Seek medical aid.
* skin contact: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, seek medical aid. Wash contaminated clothing before reuse.
* inhalation: Remove from exposure. If breathing has stopped or is difficult, administer oxygen/artifical respiration if needed. Seek medical aid.
* ingestion: DO NOT INDUCE VOMITING. Immediately seek medical aid.

Note to Physician: There is no specific antidote for effects from overexposure. Treatment of overexposure should be directed at the control of the symptoms and the clinical condition.

VI. REACTIVITY DATA

Stability.....: Stable, but avoid long periods of exposure to excess heat, oxidizing agents, free radical catalysts and peroxide.
Polymerization...: May occur if exposed to heat, peroxides, oxidizing agents or free radical catalysts.
Incompatability..: Oxidizing agents, acids, caustic, metallic halides (salts).
Hazardous decomposition products: Smoke, carbon dioxide, and carbon monoxide.

VII. SPILL OR LEAK PROCEDURES

* Steps to take if material is released:
  Remove all sources of ignition such as flame, hot surfaces, sparks, static.
  Ventilate the area. Absorb with an inert material.
* Disposal procedure:
  Dispose of in accordance with local, state and federal regulations.
  Liquid polyester resin waste having a flash point less than 140 F is a hazardous waste under RCRA having the characteristic if ignitability - D001. This waste released into the environment in excess of 100 pounds must be reported to the National Response Center (1 800-424-8802). Polyester waste that is not a liquid as defined at 40 CFR Part 261.21 (a) (2) is not a RCRA hazardous waste.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory: If the TLV of the product is exceeded (100ppm styrene), use OSHA/NIOSH approved units as per current 29 CFR1910.134 and manufacturers' INSTRUCTIONS and WARNINGS. If within OSHA protection factor, air purifying OV/filter units OK.
Ventilation: Use sufficient mechanical (general or local exhaust) ventilation to maintain exposure below the TLV and below the flammable vapor concentrations.
Eye: Chemical splash goggles or glasses with side shield recommended, as necessary to comply with 29 CFR 1910.133.
Protective gloves: neoprene or nitrile rubber.
Other protective equipment: if needed, rubber apron, boots.

IX. SPECIAL PRECAUTION

* Handling and storage:
  Store in a closed properly labeled container in a cool ventilated area (below 30 C). Keep away from heat, sparks, flames, peroxides, contamination. Avoid prolonged or repeated breathing of vapors, mists or fumes. Avoid prolonged or repeated contact with eyes or skin. Handle and use in accordance with OSHA 29 CFR 1910.106/local codes.
* Other precautions:
  Ground metal containers to avoid static charge, mix in proper ratio with MEKP.

X. MSDS SUMMARY

MSDS GENERAL WARNING: Flammable. Vapor is an eye and respiratory irritant. Liquid is an eye and skin irritant. Avoid breathing vapors. Avoid skin and eye contact. Can produce dermititis on prolonged or repeated contact. Harmful if swallowed or aspirated into the lungs.
UN NUMBER: UN 1866
DOT Hazard Class: Flammable Liquid
DOT Emergency Response Guide #26
OSHA PHYSICAL HAZARD LIST

PYROPHORIC	no	OXIDIZER	no
EXPLOSIVE	no	PEROXIDE	no
FLAMMABLE	yes	COMPRESSED GAS	no
COMBUSTIBLE	Not Applicaable		

RCRA Waste Number: D-001
Reportable Quantity (Per EPA): 100 lbs.

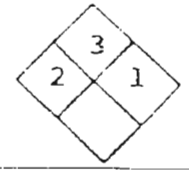
NOTICE: While the information and recommendations set forth herein are believed to be accurate as of this date, American Colors, Inc. makes no warranty with respect to and disclaims all liability from reliance thereon.

MATERIAL SAFETY DATA SHEET

Best Available Copy

8010-658064
8030-626674

NFPA 704 DESIGNATION



DIN #
80
3140
6960

X-10-84 JA

Section I

RECEIVED

MANUFACTURER'S NAME
FIBRE GLASS-EVERCOAT CO., INC

MAY 03 1988

STREET ADDRESS
6600 CORNELL ROAD

CITY, STATE AND ZIP CODE
CINCINNATI, OHIO 45242

HEALTH SERVICES DEPT

EMERGENCY TELEPHONE NO.

REGULATORY CLASS — MANUFACTURER'S CODE IDENTIFICATION

TRADE NAME Feather Fill

391, 401

Section II — HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV ppm	TLV mg/m³	LEL	VAPOR PRESSURE
Styrene (Cas = 100-42-5)	20	100			4.5mm Hg
Acetone (Cas = 67-64-1)	20	1000			185mm Hg
Ethyl Acetate (Cas = 141-76-6)	20	400			76mm Hg
unsaturated polyester and talc	40	non-hazardous			

Ingredient not listed as carcinagen ~~mutagen, teratogen or neurotoxin.~~

Section III — PHYSICAL DATA

BOILING RANGE 133-293°F

VAPOR DENSITY X HEAVIER ☐ LIGHTER THAN AIR

EVAPORATION RATE ☐ FASTER X SLOWER THAN ETHER

PERCENT VOLATILE BY WEIGHT 40

WEIGHT PER GALLON 10.4 lb.

Section IV — FIRE AND EXPLOSION HAZARD DATA

DOT CATEGORY Resin Solution, Flammable liquid
UN = 1866.

FLASH POINT -4° F

LEL 2.6

EXTINGUISHING MEDIA

Co_2, Dry chemical, or foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

SPECIAL FIRE FIGHTING PROCEDURES

None

Section V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Styrene 100 ppm

Best Available Copy

EFFECTS OF OVEREXPOSURE

May cause irritation to skin, eyes, nose and throat.
Inhalation may cause headache, dizziness, nausea and unconsciousness.

EMERGENCY AND FIRST AID PROCEDURES Eyes: wash promptly with plenty of water. Get medical attention. Skin: wash with plenty of soap and water. Remove contaminated clothing. Inhalation: Remove victim to fresh air. Give artificial respiration if not breathing.
Swallowing: Do not induce vomiting. Get immediate medical attention.

Section VI — REACTIVITY DATA

STABILITY UNSTABLE X STABLE CONDITIONS TO AVOID

INCOMPATIBILITY (MATERIALS TO AVOID) Strong oxidizing or reducing agents

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Monoxide, Carbon Dioxide, Low molecular weight hydrocarbons, organic acids.

HAZARDOUS POLYMERIZATION ☐ MAY OCCUR X WILL NOT OCCUR

CONDITIONS TO AVOID Exposure to heat or open flame. Contamination by oxidizing agent.

Section VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Remove all sources of ignition and ventilate area.

WASTE DISPOSAL METHOD Cover spill with inert absorbent agent. Scrap up into a closed container and dispose as solid waste. Clean area with non-flammable solvent or trisodium phosphate and water.

Section VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION Up to 100 ppm: none
If TLV is exceeded use U.S. Bureau of Mines approved airline mask or self contained breathing apparatus.

VENTILATION Provide general dilution or local exhaust ventilation to draw fumes away from workers.

PROTECTIVE GLOVES neoprene or non-soluble plastic

EYE PROTECTION face shield or goggles

OTHER PROTECTIVE EQUIPMENT Protective clothing to minimize skin contact.

Section IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Store in original containers. Store below 80°F.

OTHER PRECAUTIONS
Avoid heat, spark or open flame.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PARTALL® FILM NO. 10

SECTION 1 - MANUFACTURER

REXCO
PO BOX 4430
SANTA BARBARA, CA 93140

HAZARD RATING

0 LEAST
1 SLIGHT
2 MODERATE
3 HIGH
4 EXTREME

HEALTH	2
FIRE	3
REACTIVITY	0

Date Prepared: June 8, 1993

D.O.T. Shipping Name: Alcohol N.O.S. (Ethyl Alcohol Mix); 3; U.N. 1987; N.M.F.C. 42690-2; Packing Grp.II

Emergency Telephone No.:ChemTrec 1-800-424-9300
Other Calls: Rexco 1-800-888-1060

SECTION 2 - HAZARDOUS INGREDIENTS

Chemicals/Common Name	OSHA/PEL	ACGIH/TLV	CAS No.
Ethyl Alcohol	1000	1000	64-17-5
Butyl Alcohol (Skin Absorbable)	100	50	71-36-3

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point:	158 - 220° F.	Specifc Gravity(H_20=1):	0.914	Vapor Pressure (mm Hg):	26.67
Solubility in Water:	Complete	Reactivity in Water:	No	Vapor Density(Air=1):	1.2
Appearance and Odor:	Clear or Green Liquid/Alcohol			V.O.C.#(By Percent Calculation):	325G/L

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point: 70° F. T.C.C. Flammable Limits in Air % By Volume: LEL Lower 3.3% UEL Upper 18.7%
Auto Ignition: 670° F. Extinguishing Media: Use Foam, CO_2, or Dry Chemical

Fire Fighting Procedures: The use of self-contained breathing apparatus is recommended for Fire Fighters. Water may be unsuitable as an extinguishing media, but helpful in keeping adjacent containers cool. Avoid spreading burning liquid with water used for cooling purposes.

Unusual Fire & Explosion Hazards: Low flash point. Keep work areas free of hot metal surfaces and other sources of ignition.

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Stable Conditions to Avoid: Open flames, hot surfaces, or any ignition source.

Incompatibility: This product is incompatible with strong oxidizing agents. strong acids or bases, alkali metals halogens and strong alkalies.

Hazardous Decomposition: Thermal decomposition in the prescence of air may yield carbon monoxide and/or carbon dioxide. Above 200° C., acetaldehyde, crotonaldehyde and acetone.

Hazardous Polymerization: Will not occur.

DISCLAIMER

MATERIAL SAFETY DATA SHEET	BJB ENTERPRISES, INC. 13912 NAUTILUS DR. GARDEN GROVE, CA 92643 (714)554-4640
Emergency Phone: 1(800)424-9300 *** CHEMTREC ***	

TC-960 B-10 FLESH

REVISION DATE:.....07/18/96 PRINT DATE:.....07/18/96

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME.. TC-960 B-10 FLESH
PRODUCT CLASS. POLYURETHANE CURING AGENT
CHEMICAL TYPE. AROMATIC DIAMINE-GLYCOL MIXTURE

SECTION 2 HAZARDOUS INGREDIENTS

SUBSTANCE NAME/CAS NUMBER	OSHA TWA	ACGIH TWA	OTHER LIMITS	% (OPTIONAL)
AROMATIC DIAMINE CAS # 106264-79-3	N/E	N/E		5-10%
ARYL MERCURIC CARBOXYLATE CAS # 27236-65-3	0.1mg/m3	0.1mg/m3		<0.10

SECTION 3 U.S. REGULATORY INFORMATION

TSCA..... All compents of this product are registered under the regulations of the Toxic Substance Control Act
SARA TITLE III, (APPLICABLE). NA

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE/ODOR..... Pink/Flesh/Slight Amine
SPECIFIC GRAVITY (DENSITY). 1.03
BOILING POINT..... N/A
VAPOR PRESSURE..... Low, <.01 mm Hg @ 20° C
% VOLATILE..... NIL
SOLUBILITY IN WATER..... Slightly soluble
V.O.C..... 10 gm/l per EPA Ref Meth 24

SECTION 5 EMERGENCY AND FIRST AID PROCEDURES

IF IN EYE..... Flush with water for 15 minutes. Seek medical follow-up
IF ON SKIN..... Wash with soap and water
INHALATION..... Not likely. Remove to fresh air
INGESTION..... Immediately drink water to dilute. Seek medical attention
IN CASE OF FIRE..... NFPA ratings not established
SPILL OR LEAK..... Absorb with sand, diatomaceous earth; contain spill; clean up with detergent and water
DECONTAMINATION SOLUTION. N/A

SECTION 6 OCCUPATIONAL CONTROL RECOMMENDATIONS

EYE PROTECTION..... Splash goggles or chemical safety glasses with side wings
SKIN PROTECTION..... Rubber or latex gloves
RESPIRATORY PROTECTION. Not normally required. Remove to fresh air
VENTILATION..... Exhaust any curing ovens to outside. Normal shop ventilation in work areas

SECTION 7 FIRE HAZARD AND PROTECTION DATA

FLASH POINT..... 300° F. S.E.T.A.
EXTINGUISHING MEDIA..... Water spray, carbon dioxide, dry chemical or foam
SPECIAL FIRE FIGHTING PROCEDUR. NFPA ratings not established. Air supplied respirator should be used for fighting any large fires
UNUSUAL FIRE/EXPLOSION HAZARD.. None

SECTION 8 REACTIVITY DATA

STABILITY..... Stable
INCOMPATIBILITY-MATRLS TO AVOID... Isocyanates, oxidizing agents, strong mineral acids
POLYMERIZATION..... Will not occur

SECTION 9 HEALTH AND HAZARD DATA

EYES..... May cause irritation
SKIN..... May cause irritation and possible delayed or hypersensitization allergic reaction with repeated contact
INHALATION/INGESTION..... Excessive vapors caused by heat or spray mist can cause respiratory problems
EXISTING MEDICAL CONDITIONS. N/A

SECTION 10 SPECIAL PRECAUTIONS, HANDLING, AND STORAGE DATA

HANDLING PRECAUTIONS..... Avoid skin contact; prolonged exposure to damp air
STORAGE TEMPERATURE(MIN/MAX). N/A
SHELF LIFE..... 6 months under manufacturer recommended conditions
STORAGE..... Store in a cool, dry place; keep containers close when not in use.

SECTION 11 SPILL, LEAK, AND DISPOSAL PROCEDURES

SPILL OR LEAK PROCEDURES. Absorb with sand, diatomaceous earth, contain spill, clean up with detergent
WASTE DISPOSAL..... Controlled incineration or burial in landfill

SECTION 12 SHIPPING INFORMATION

DOT SHIPPING NAME..... Non-restricted, N.O.I
TECHNICAL SHIPPING NAME... Plastic Material
DOT HAZARD CLASSIFICATION. Non-restricted
UN/NA NUMBER..... None
IATA CLASSIFICATION..... Non-restricted
DOT LABELS REQUIRED..... None

SECTION 13 EMERGENCY NOTICE

Contact CHEMTREC only in event of chemical emergencies of spills, leaks, fires, exposures, or accidents involving chemicals.

AKZO

Material Safety Data Sheet*

Chemical Division

82046
87001

DATE PRINTED: 4/07/1994
Cadox L-50

PAGE
MSDS NO. 12-07-141

SECTION 1. PRODUCT INFORMATION

PRODUCT NAME
Cadox L-50

CHEMICAL NAME
Methyl ethyl ketone peroxide in solution

SYNONYM
MEKP

CHEMICAL FORMULA Mixture

CAS # MIXTURE

CHEMICAL FAMILY
Organic peroxides/Ketone peroxides

PRODUCT USE
Polymerization initiator

SECTION 2. MANUFACTURERS INFORMATION

MANUFACTURERS NAME
Akzo Chemicals Inc.

ADDRESS
300 South Riverside Plaza
Chicago, IL 60606

EMERGENCY CONTACT
Douglas Klapper

COUNTRY
U.S.A.

EMERGENCY TELEPHONE #1
1-312-906-7054

EMERGENCY TELEPHONE #2
CHEMTREC 1-800-424-9300

ISSUE DATE
3/31/1994

SECTION 3. INGREDIENTS/REGULATORY INFORMATION

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Methyl ethyl ketone peroxide (MEKP)	32.000	1338-23-4
Dimethyl phthalate (DMP)	45.000- 50.000	131-11-3
Hydrogen peroxide	5.000	7722-84-1
2,2,4-Trimethylpentanediol-1,3-diisobutyrate	15.000- 20.000	6846-50-0
Water	2.000	7732-18-5

EXPOSURE LIMITS/REGULATORY INFORMATION (IN MG/M3)

SUBSTANCE DESCRIPTION	REG. AGCY	PEL	TLV	TWA	STEL	CEIL
Methyl ethyl ketone peroxide (MEKP)	OSHA	N/D	N/D	N/D	N/D	5.0000
	ACGIH	N/D	N/D	N/D	N/D	1.5000
	NIOSH	N/D	N/D	N/D	N/D	1.5000
	SUPPLIER	N/D	N/D	N/D	N/D	N/D
LISTED ON THE FOLLOWING: CERCLA DSL MA. LIST NJ-R-T-K PA. LIST SARA 302 TSCA						
Dimethyl phthalate (DMP)	OSHA	5.0000	N/D	N/D	N/D	N/D
	ACGIH	N/D	5.0000	N/D	N/D	N/D
	NIOSH	N/D	N/D	5.0000	N/D	N/D
	SUPPLIER	N/D	N/D	N/D	N/D	N/D
LISTED ON THE FOLLOWING: CAA 112 CERCLA DSL MA. LIST NJ R-T-K PA. LIST SARA 302 SARA 313 TSCA						

*Also referred to as a Product Safety Information Sheet

Akzo Chemicals Inc.
300 S. Riverside Plaza
Chicago, Illinois 60606
(312) 906-7500

MATERIAL SAFETY DATA SHEET

SECTION 3. INGREDIENTS/REGULATORY INFORMATION (CONTINUED)

EXPOSURE LIMITS/REGULATORY INFORMATION (IN MG/M3)

SUBSTANCE DESCRIPTION	REG. AGCY	PEL	TLV	TWA	STEL	CEIL
Hydrogen peroxide	OSHA	1.4000	N/D	N/D	N/D	N/D
	ACGIH	N/D	1.4000	N/D	N/D	N/D
	NIOSH	N/D	N/D	1.4000	N/D	N/D
	SUPPLIER	N/D	N/D	N/D	N/D	N/D
LISTED ON THE FOLLOWING: CERCLA DSL MA. LIST NJ R-T-K PA. LIST SARA 302 TSCA						
2,2,4-Trimethylpentanediol-1,3 -diisobutyrate	OSHA	N/D	N/D	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D	N/D	N/D
	NIOSH	N/D	N/D	N/D	N/D	N/D
	SUPPLIER	N/D	N/D	N/D	N/D	N/D
LISTED ON THE FOLLOWING: TSCA						
Water	OSHA	N/D	N/D	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D	N/D	N/D
	NIOSH	N/D	N/D	N/D	N/D	N/D
	SUPPLIER	N/D	N/D	N/D	N/D	N/D
LISTED ON THE FOLLOWING: DSL TSCA						

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS
CEIL Ceiling Exposure Limit
PEL Permissible Exposure Limit
STEL Short Term Exposure Limit
TLV Threshold Limit Value
TWA Time Weighted Average

REGULATORY LIST DESCRIPTIONS
CAA 112 Clean Air Act Sect. 112
CERCLA CERCLA Hazardous Substances
DSL Domestic Substance List-Canada
IARC IARC Carcinogens-Grps. 1,2A,2B
MA. LIST Massachusetts Substance List
NDSL Non-Domestic Subst.List-Canada
NJ R-T-K New Jersey R-T-K Hazard. Sub.
PA. LIST Penn. Hazardous Substance List
PROP 65 California Proposition 65
SARA 302 SARA Title III, Section 302
SARA 313 SARA Title III, Section 313
TSCA Toxic Subst. Cont. Act -listed
N/D = Not Determined

MATERIAL SAFETY DATA SHEET

SECTION 4. HAZARDS IDENTIFICATION

APPEARANCE & ODOR
Clear, colorless liquid with a faint ketone odor.

STATEMENT OF HAZARDS
DANGER!
ORGANIC PEROXIDE.
HEAT OR CONTAMINATION MAY CAUSE HAZARDOUS DECOMPOSITION.
CAUSES SEVERE EYE BURNS.
CAUSES SKIN BURNS.
HARMFUL IF ABSORBED THROUGH SKIN.
COMBUSTIBLE LIQUID AND VAPORS.
OVEREXPOSURE MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION AND MAY AFFECT LIVER, KIDNEYS AND LUNGS.

FIRE AND EXPLOSION HAZARDS
This product is highly reactive and thermally unstable. Peroxides and their decomposition products are flammable and can ignite with explosive force if confined.

PRIMARY ROUTE OF EXPOSURE
Skin or eye contact and inhalation of vapor are the principal routes of exposure to this product.

INHALATION ACUTE EXPOSURE EFFECTS
Inhalation of vapor or mist can cause severe irritation to the respiratory tract and central nervous system depression.

SKIN CONTACT ACUTE EXPOSURE EFFECTS
Skin contact can cause chemical burns with severe blistering.

EYE CONTACT ACUTE EXPOSURE EFFECTS
Direct eye contact with this chemical can cause an immediate severe reaction and may result in loss of functional vision in the involved eye. Use of fully protective goggles is essential when using this product.

INGESTION ACUTE EXPOSURE EFFECTS
May cause burning sensation of the mouth, abdominal pain and chemical burns of the gastrointestinal tract with scarring and stricture of the esophagus.
May also cause nausea, vomiting, diarrhea, headache and dizziness. Central nervous system depression may occur with hypotension and unconsciousness.

CARCINOGENICITY
IARC ....NO OSHA ....NO NTP ....ND ACGIH ....NO

SECTION 5. FIRST AID MEASURES

INHALATION
Remove to fresh air. If breathing becomes difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration. Get medical attention.

SKIN CONTACT
Immediately remove contaminated clothing and shoes. Wash skin with soap and plenty of water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention. Wash contaminated clothing before reuse. Thoroughly clean or destroy contaminated shoes.

MATERIAL SAFETY DATA SHEET

SECTION 5. FIRST AID MEASURES (CONTINUED)

EYE CONTACT
Immediately flush eyes with large quantities of running water for a minimum of 15 minutes. If the victim is wearing contact lenses, remove them. Take care not to contaminate the victim's healthy skin and eyes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids. DO NOT let victim rub eye(s). Do not attempt to neutralize with chemical agents. Obtain medical attention as soon as possible. Oils or ointments should not be used at this time. Continue the flushing for an additional 15 minutes if a physician is not immediately available.

INGESTION
Immediately give several glasses of water. DO NOT induce vomiting. If vomiting occurs, keep head below hips to reduce the risk of aspiration. Give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Never give anything by mouth to a person who is unconscious or convulsing.

If victim is unconscious, monitor pulse, breathing and airway. If breathing stops, begin artificial respiration immediately. If the heart has stopped, give cardiopulmonary resuscitation (CPR). Get medical attention immediately.

MEDICAL CONDITIONS AGGRAVATED
Persons with pre-existing skin and/or respiratory disease may be at increased risk if exposed to this material.

NOTE TO PHYSICIAN
Methyl ethyl ketone peroxide is severly corrosive to the eyes and may cause delayed kertitis. The normally prescribed 15 minute eye irrigation after exposure may be difficult because of the severe pain. The prior installation of a topical ocular anesthetic is essential to facilitate a comprehensive ocular lavage.

SECTION 6. FIRE FIGHTING MEASURES

FLASH POINT
179.60 F 82.00 C

FLASH METHOD
Setaflash Closed Cup

AUTO IGNITION TEMPERATURE
N/D F N/D C

UPPER EXPLOSION LIMIT
N/D

LOWER EXPLOSION LIMIT
N/D

EXTINGUISHING METHOD
Use water fog, dry chemical, carbon dioxide, or foam extinguishing agents.
Extinguish large fires with large amounts of water spray, fog or foam from a safe/protected position.

MATERIAL SAFETY DATA SHEET

SECTION 6. FIRE FIGHTING MEASURES (CONTINUED)

FIRE FIGHTING PROCEDURES
As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate non-essential personnel from the fire area. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. If possible, move containers from the fire area. If not leaking, keep fire exposed containers cool with a water fog or spray to prevent rupture due to excessive heat. High pressure water may spread product from broken containers increasing contamination or fire hazard.

Contaminated buildings, areas and equipment must not be used until they are properly decontaminated. Dike fire water for later disposal. Do not allow contaminated water to enter waterways.

FIRE AND EXPLOSION HAZARDS
This product is highly reactive and thermally unstable. Peroxides and their decomposition products are flammable and can ignite with explosive force if confined.

OTHER FIRE + EXPLOSION HAZARDS
This product can produce flammable vapors which may travel to a source of ignition and flash back.

HAZARDOUS PRODUCTS/COMBUSTION
Thermal decomposition products may include toxic oxides of carbon and flammable gasses and vapors.

NFPA HEALTH RATING
2

NFPA FLAMMABILITY RATING
2

NFPA REACTIVITY RATING
2

NFPA OTHER

SECTION 7. ACCIDENTAL RELEASE MEASURES

CLEAN-UP
Remove all sources of ignition from the spill area. Stop source of spill. If tools are needed, they should be non-sparking. Dike area to prevent spill from spreading. If permitted to enter sewers, this material may create a fire or explosion hazard. Ventilate enclosed areas to prevent formation of flammable or oxygen deficient atmosphere. A water fog, fine spray or blanket of fire-fighting foam can be used to reduce vapors.

Evacuate all non-essential personnel upwind. Any person entering an area of a significant spill or of an unknown concentration of a gas or a vapor should use a NIOSH-approved, positive-pressure/pressure-demand, self-contained breathing apparatus. Protective equipment to prevent skin and eye contact should be worn.

Soak up liquid with polyethylene foam absorbant. Sweep up absorbed material and place in a chemical waste container for disposal.

The following CERCLA Section 103 reportable quantities apply to this product;
Dimethyl phthalate - 5000 lbs.

MATERIAL SAFETY DATA SHEET

SECTION 7. ACCIDENTAL RELEASE MEASURES (CONTINUED)

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity established for that substance be immediately reported to the local emergency planning committee and the state emergency response commission. If the release of a substance is reportable under CERCLA section 103, the National Response Center must be notified immediately.

WASTE DISPOSAL
The characteristics of Ignitability and Reactivity per RCRA would be exhibited by unused product if it becomes a waste material. It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristic or listing. All waste should be disposed of in accord with federal, state and local regulations. Note: State and/or local regulations may be more stringent than federal regulations.

CONTAINER DISPOSAL
Containers should be drained of residual product before disposal. Empty containers should be disposed of in accordance with all applicable laws and regulations.

SECTION 8. HANDLING/STORAGE/TRANSPORTATION

HANDLING
Wear protective clothing when handling this product to avoid eye and skin contact. Wash thoroughly after handling.

Electrically grounded tanks and containers should always be used as should non-sparking, electrically grounded hand tools and appliances. Ground or bond to ground all vessels when transferring to prevent the accumulation of static electricity. See National Electric Code.
Emptied container may retain product residues. Follow all warnings and precautions even after container is emptied.

STORAGE
To insure product quality, storage temperatures should not exceed 86 F (30 C).
To insure against possible exothermic self accelerating decomposition, storage temperatures must not exceed 131 F (55 C). This emergency temperature is derived from the SADT (see Sect. 11).
Keep containers tightly closed. Store away from reducing agents (e.g. amines, acids, alkalis) and heavy metal compounds (e.g. driers metal soaps and accelerators).

MAXIMUM STORAGE TEMPERATURE
86.00 F 30.00 C (to maintain product quality)

GENERAL COMMENTS
Containers should not be opened until ready for use. Use clean non-sparking equipment and tools when handling.

MATERIAL SAFETY DATA SHEET

SECTION 9. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION
Use NIOSH-approved organic vapor respirators with dust, mist and fume filters to reduce potential for inhalation exposure if use conditions generate vapor, mist or aerosol and adequate ventilation (e.g., outdoor or well-ventilated area) is not available. Where exposure potential necessitates a higher level of protection, use a NIOSH-approved, positive-pressure/pressure-demand, air-supplied respirator.

When using respirator cartridges or canisters, they must be changed frequently (following each use or at the end of the workshift) to assure breakthrough exposure does not occur.

SKIN PROTECTION
Skin contact with liquid or its aerosol must be prevented through the use of permeation resistant clothing, gloves and footwear. Unprotected skin exposed to vapor, aerosol or mist must be thoroughly washed before eating, drinking, smoking and at the end of the workshift.

EYE PROTECTION
Because eye contact with this product may cause burns and possibly permanent damage, chemical goggles and/or a full face shield must be worn whenever handling this product.

VENTILATION PROTECTION
Local exhaust ventilation, enclosed system design, continuous monitoring devices, process isolation and remote control are traditional exposure control techniques which may be used to effectively minimize employee exposure.

OTHER PROTECTION
Safety showers, with quick opening valves which stay open, and eye wash fountains, or other means of washing the eyes with a gentle flow of cool to tepid tap water, should be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

APPLICABLE EXPOSURE LIMITS
Other than any exposure limits which may be displayed in Section 3., there are no other known exposure limits applicable for this product.

SECTION 10. PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (mm Hg)
N/D

VAPOR DENSITY (Air = 1.0)
N/D

EVAPORATION RATE
N/D

VOLATILE %
N/D

BOILING POINT
N/D F N/D C

ODOR THRESHOLD (ppm)
N/D

SPECIFIC GRAVITY
1.17
@ 25 C.

BULK DENSITY
N/D

MATERIAL SAFETY DATA SHEET

SECTION 10. PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

SOLUBILITY IN WATER
N/D

SOLUBILITY IN OTHER SOLVENTS

COEFFICIENT OF OIL/WATER
N/D

POUR POINT
N/D F N/D C

MELTING POINT
N/D F N/D C

PH FACTOR
N/D

CLOUD POINT
N/D F N/D C

OTHER
SADT = 140 F (60 C) (See Sect. 11).

SECTION 11. STABILITY AND REACTIVITY

STABILITY
This product is stable at ambient temperatures but may decompose if exposed to temperatures above 131 F (55 C).

INCOMPATIBILITIES
Avoid contact with strong acids, strong alkalis, strong oxidizers, accelerators and reducing agents.

POLYMERIZATION
Hazardous polymerization is not expected to occur under normal temperatures and pressures.

DECOMPOSITION
Decomposition products include carbon dioxide, carbon monoxide, ethane and methane.

CONDITIONS TO AVOID
The SADT for this product is 140 F (60 C).
The SADT (self accelerating decomposition temperature) is an experimentally derived temperature at which a typical package of the product will undergo self accelerating decomposition. Decomposition can be expected to be hazardous and uncontrollable.
Under no circumstances should this product be exposed to temperatures near or above the emergency temperature of 131 F (55 C). Such an exposure could initiate hazardous decomposition.
Contact with incompatible materials such as acids, alkalis, heavy metals and reducing agents will also result in hazardous decomposition.

SECTION 12. TOXICOLOGICAL INFORMATION

INHALATION EFFECTS
Inhalation toxicity data is not available for this product. However, the acute LC50 for a 40% MEKP product in dimethyl phthalate is 17.0 mg/L in rats (4 hr exposure).

INHALATION CHRONIC EXPOSURE EFFECTS
Prolonged and/or repeated inhalation may cause respiratory irritation.

MATERIAL SAFETY DATA SHEET

SECTION 12. TOXICOLOGICAL INFORMATION (CONTINUED)

DERMAL EFFECTS
Dermal toxicity data is not available for this product. However, the dermal LD50 for a 40% MEKP product in dimethyl phthalate is 4000 mg/kg in rabbits.
A 33% MEKP in dimethyl phthalate product was corrosive to albino rabbits after a 4 hour occlusive contact.

SKIN CONTACT CHRONIC EXPOSURE EFFECTS
Skin contact with this product will cause severe chemical burns. Chronic dermal exposure effects for this product are not known.

EYE EFFECTS
This product can be expected to be corrosive to eyes based upon tests with 40% MEKP in dimethyl phthalate.

INGESTION EFFECTS
Ingestion toxicity data is not available for this product. However, the acute oral LD50 for 40% MEKP in dimethyl phthalate is 1017 mg/kg in rats.

INGESTION CHRONIC EXPOSURE EFFECTS
Chronic ingestion effects of this product are not known.

CARCINOGENICITY/MUTAGENICITY
This product is not classified as a carcinogen by IARC, NTP, OSHA or ACGIH.

REPRODUCTIVE EFFECTS
The reproductive toxicity of this product is not known.

NEUROTOXICITY
The neurotoxic effects of this product are not known.

OTHER EFFECTS
Exposure to DIMETHYL PHTHALATE has shown a very low order of toxicity in animals by the oral, inhalation or dermal routes. It is not irritating to the skin but is absorbed through the skin. Dimethyl phthalate can cause respiratory irritation, eye pain and stomach irritation. Inhalation has been reported to cause cough, irritation and/or paralysis.

While the toxicity of dimethyl phthalate has been minimized by most reviewers, there have been poisonings from ingestion of a product where dimethyl phthalate has been mixed with methyl ethyl ketone peroxide. These cases have resulted in a burning sensation of the mouth, vomiting, diarrhea, and coma followed by liver and kidney failure and pneumonitis. It is problamatic that these effects were primarily from the methyl ethyl ketone peroxide and not the dimethyl phthalate.

TARGET ORGANS
Overexposure to this product may affect the skin, eyes and respiratory system.

MATERIAL SAFETY DATA SHEET

SECTION 13. ECOLOGICAL INFORMATION

ECOLOGICAL TOXICITY
The ecological toxicity of this product is not known. However, the following data exists for the following product components;
DIMETHYL PHTHALATE
Grass shrimp larvae: LC50: (8 days)-100 ppm (no significant increase at 1 ppm after 26 days)

Marine dinoflagellate: TLm: (96 hr): 125-185 ppm.
Marine dinoflagellate: EC50: 54-96 ppm*
*EC50: median growth limit conc. causing 50% growth reduction.

OTHER ECOLOGICAL INFORMATION
Other ecological information on this product is not known.

CHEMICAL FATE INFORMATION
Chemical fate information on this product is not known.

OTHER REGULATORY INFORMATION
No other regulatory information is available on this product.

SECTION 14. TRANSPORT INFORMATION

SHIPPING DESCRIPTION
ORGANIC PEROXIDE TYPE E, LIQUID
(METHYL ETHYL KETONE PEROXIDE, <=40%)
5.2, UN3107, PG II
DOT EMERGENCY GUIDE NO: 48
ICAO: UN3107
IMO: UN3107

REQUIRED LABEL(S)
ORGANIC PEROXIDE.

ENVIRON. HAZARDOUS SUBSTANCE
This product contains dimethyl phthalate which is an environmentally hazardous material per 49 CFR 172.101 Appendix with a reportable quantity of 5000 lbs.

SECTION 15. OTHER INFORMATION

CREATED BY Product Safety 312-906-7500 **REVISION NO.** 001
12/10/1985

OTHER INFORMATION
CADOX is a registered trademark of Akzo Chemicals Inc.
WHMIS HAZARD CLASS B-2,C,D-2B,F

HAZARD RATING SOURCE HMIS

HEALTH	2	**FLAMMABILITY**	2
REACTIVITY	2	**OTHER**	

KEY TO ABBREVIATIONS:

EQ=EQual
AP=APproximately
LT=Less Than
TR=TRace
GT=Greater Than
ND=No Data available

SIGMA CHEMICAL -- POLYVINYL ALCOHOL - POLYVINYL ALCOHOL, TECHNICAL
MATERIAL SAFETY DATA SHEET
NSN: 6810002649031
Manufacturer's CAGE: 21076
Part No. Indicator: A
Part Number/Trade Name: POLYVINYL ALCOHOL

General Information

Item Name: POLYVINYL ALCOHOL, TECHNICAL
Company's Name: SIGMA CHEMICAL CO
Company's P. O. Box: 14508
Company's City: ST. LOUIS
Company's State: MO
Company's Zip Code: 63178
Company's Emerg Ph #: 314-771-5765
Company's Info Ph #: 800-325-8070
Record No. For Safety Entry: 003
Tot Safety Entries This Stk#: 004
Status: SM
Date MSDS Prepared: 02AUG88
Safety Data Review Date: 13APR92
Supply Item Manager: CX
MSDS Serial Number: BMQBH
Specification Number: MIL-P-265
Spec Type, Grade, Class: I CLASS A GRADE
Hazard Characteristic Code: N1
Unit Of Issue: DR
Unit Of Issue Container Qty: 100 POUNDS
Type Of Container: DRUM
Net Unit Weight: 100 POUNDS

Ingredients/Identity Information

Proprietary: NO
Ingredient: POLYVINYL ALCOHOL
Ingredient Sequence Number: 01
NIOSH (RTECS) Number: TR8100000
CAS Number: 9002-89-5
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE SPECIFIED

Physical/Chemical Characteristics

Appearance And Odor: WHITE TO CREAM COLORED POWDER, ODOR NOT SPECIFIED
Boiling Point: NOT GIVEN
Melting Point: NOT GIVEN
Vapor Pressure (MM Hg/70 F): NOT GIVEN
Vapor Density (Air=1): NIL
Specific Gravity: 1.27 - 1.31
Decomposition Temperature: 392F,200C
Evaporation Rate And Ref: NIL
Solubility In Water: SOLUBLE
Percent Volatiles By Volume: 0 %
Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: NONFLAMMABLE
Lower Explosive Limit: NOT GIVEN
Upper Explosive Limit: NOT GIVEN
Extinguishing Media: CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR

POLYMER FOAM.
Special Fire Fighting Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.
Unusual Fire And Expl Hazrds: EMITS TOXIC FUMES UNDER FIRE CONDITIONS. THIS MATERIAL, LIKE MOST MATERIALS IN POWDER FORM, IS CAPABLE OF CREATING A DUST EXPLOSION.

Reactivity Data

Stability: YES
Cond To Avoid (Stability): NONE SPECIFIED BY MANUFACTURER.
Materials To Avoid: STRONG OXIDIZING AGENTS
Hazardous Decomp Products: CARBON MONOXIDE AND CARBON DIOXIDE
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NONE. WILL NOT OCCUR.

Health Hazard Data

LD50-LC50 Mixture: 14,700 MG/KG ORAL LD50
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: MAY BE HARMFUL BY INHALATION, INGESTION OR SKIN ABSORPTION; POSSIBLE CARCINOGEN
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: IARC INDICATES THAT THE AGENT IS NOT CLASSIFIABLE AS TO ITS CARCINOGENICITY TO HUMANS.
Signs/Symptoms Of Overexp: RESPIRATORY TRACT IRRITATION, DIGESTIVE TRACT IRRITATION
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: IF SWALLOWED, WASH OUT MOUTH WITH WATER IF CONSCIOUS. CALL A PHYSICIAN. IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN. IN INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN. IN CASE OF EYE CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. CALL PHYSICIAN.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY RUBBER GLOVES. SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL. AVOID RAISING DUST. VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DISSOLVE OR MIX MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AFTERBURNER AND SCRUBBER. INCINERATION AND/OR DISPOSAL MUST BE IN ACCORDANCE WITH ALL APPLICABLE STATE, LOCAL AND FEDERAL REGULATIONS.
Precautions-Handling/Storing: WEAR APPROPRIATE PERSONAL PROTECTION. MECHANICAL EXHAUST VENTILATION REQUIRED.
Other Precautions: POSSIBLE RISK OF IRREVERSIBLE EFFECTS. DO NOT BREATHE DUST.

Control Measures

Respiratory Protection: IF VENTILATION DOES NOT MAINTAIN INHALATION EXOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH RESPIRATOR SELECTION.
Ventilation: MECHANICAL EXHAUST REQUIRED
Protective Gloves: NATURAL RUBBER
Eye Protection: SAFETY GOGGLES
Other Protective Equipment: EMERGENCY EYEWASH AND SHOWER

Work Hygienic Practices: WASH WITH SOAP AND WATER AFTER HANDLING PRODUCT AND BEFORE EATING DRINKING OR SMOKING.
Suppl. Safety & Health Data: NONE SPECIFIED BY MANUFACTURER.

Transportation Data

Trans Data Review Date: 92104
DOT PSN Code: ZZZ
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
IMO PSN Code: ZZZ
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION
IATA PSN Code: ZZZ
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION
AFI PSN Code: ZZZ
AFI Prop. Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

Disposal Data

Label Data

Label Required: YES
Technical Review Date: 30APR92
MFR Label Number: NONE
Label Status: F
Common Name: POLYVINYL ALCOHOL
Chronic Hazard: NO
Signal Word: WARNING!
Acute Health Hazard-Moderate: X
Contact Hazard-Slight: X
Fire Hazard-Slight: X
Reactivity Hazard-None: X
Special Hazard Precautions: WEAR APPROPRIATE PERSONAL PROTECTION. MECHANICAL EXHAUST VENTILATION REQUIRED. FIRST AID: IF SWALLOWED, WASH OUT MOUTH WITH WATER IF CONSCIOUS. CALL A PHYSICIAN. IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN. IN INHALED, REMOVE TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, CALL A PHYSICIAN. IN CASE OF EYE CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. CALL PHYSICIAN.
Protect Eye: Y
Protect Skin: Y
Label Name: SIGMA CHEMICAL CO
Label P.O. Box: 14508
Label City: ST. LOUIS
Label State: MO
Label Zip Code: 63178
Label Country: US
Label Emergency Number: 314-771-5765

CAROLINA BIOGOLICAL SUPPLY -- 88-2375 POLYVINYL ALCOHOL 14% - NONE
MATERIAL SAFETY DATA SHEET
NSN: 681000D006392
Manufacturer's CAGE: 59896
Part No. Indicator: A
Part Number/Trade Name: 88-2375 POLYVINYL ALCOHOL 14%

General Information

Item Name: NONE
Company's Name: CAROLINA BIOGOLICAL SUPPLY CO
Company's Street: 2700 YORK RD
Company's City: BURLINGTON
Company's State: NC
Company's Country: US
Company's Zip Code: 27215-3387
Company's Emerg Ph #: 800-424-9300 CHEMTREC
Company's Info Ph #: 910-584-0381
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SE
Date MSDS Prepared: 21NOV96
Safety Data Review Date: 18APR97
MSDS Preparer's Name: UNKNOWN
MSDS Serial Number: CDMLZ
Specification Number: NONE
Spec Type, Grade, Class: NONE
Hazard Characteristic Code: N1
Unit Of Issue Container Qty: 500 ML
Type Of Container: UNKNOWN
Net Unit Weight: EST 2.2 LBS

$\frac{500\,ml}{2.2\,lb} = \frac{2.2\,lb}{500\,ml} * \frac{1000\,ml}{L} \times \frac{3.785\,l}{gal} = 16.7\,lb/gal$

Ingredients/Identity Information

Proprietary: NO
Ingredient: POLYVINYL ALCOHOL
Ingredient Sequence Number: 01
Percent: 14
NIOSH (RTECS) Number: TR8100000
CAS Number: 9002-89-5
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Physical/Chemical Characteristics

Appearance And Odor: CLEAR, VISCOUS LIQUID; CHARACTERISTIC ODOR.
Boiling Point: UNKNOWN
Melting Point: UNKNOWN
Vapor Pressure (MM Hg/70 F): UNKNOWN
Vapor Density (Air=1): UNKNOWN
Specific Gravity: UNKNOWN
Decomposition Temperature: UNKNOWN
Evaporation Rate And Ref: 1 (WATER=1)
Solubility In Water: COMPLETE
Percent Volatiles By Volume: 80
Viscosity: UNKNOWN
Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: UNKNOWN
Lower Explosive Limit: UNKNOWN

Upper Explosive Limit: UNKNOWN
Extinguishing Media: USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.
Special Fire Fighting Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL FIRE FIGHTER'S PROTECTIVE GEAR. USE WATER TO COOL FIRE EXPOSED CONTAINERS.
Unusual Fire And Expl Hazrds: DUE TO DILUTION THIS PRODUCT IS NOT EXPECTED TO POSE A SIGNIFIGANT HAZARD. IF HEATED TO DECOMPOSITION THIS PRODUCT MAY EVOLVE TOXIC OXIDES OF CARBON.

Reactivity Data

Stability: YES
Cond To Avoid (Stability): NO INFORMATION AVAILABLE.
Materials To Avoid: STRONG OXIDIZING AGENTS.
Hazardous Decomp Products: CARBON MONOXIDE AND CARBON DIOXIDE
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): WILL NOT OCCUR.

Health Hazard Data

LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
Route Of Entry - Inhalation: NO
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: ACUTE: NOT EXPECTED TO POSE A SIGNIFIGANT HAZARD UNDER NORMAL CONDITIONS OF USE. EXPOSURE MAY CAUSE EYE, SKIN & RESPIRATORY TRACT IRRITATION. INGESTION MAY CAUSE GI TRACT DISCOMFORT. CHRONIC: PRODUCT NOT LISTED AS CAUSING CANCER BY NTP & OSHA; IARC CANCER REVIEW LIMITED ANIMAL/HUMAN INADEQUATE EVIDENCE.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: YES
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: IARC LISTS POLYVINYL ALCOHOL AS GROUP 3-LIMITED ANIMAL/INADEQUATE HUMAN EVIDENCE OF CANCER.
Signs/Symptoms Of Overexp: EYES-IRRITATION. SKIN-IRRITATION. INHALED-IRRITATION. INGESTED-GI TRACT DISCOMFORT.
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: EYES-FLUSH WITH WATER FOR 15 MINUTES, LIFT LIDS. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. SKIN-REMOVE CONTAMINATED CLOTHES. WASH WITH MILD SOAP & WATER. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. INHALED-REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED. INGESTED-IF CONSCIOUS, GIVE LOTS OF WATER. CONTACT POISON CONTROL CENTER AND OBTAIN IMMEDIATE MEDICAL ATTENTION.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: VENTILATE AREA OF SPILL. ELIMINATE ALL SOURCES OF IGNITION. REMOVE ALL NON-ESSENTIAL PERSONNEL. CLEAN-UP PERSONNEL SHOULD ALL WEAR APPROPRIATE PERSONAL PROTECTIVE GEAR. ABSORB MATERIAL WITH SUITABLE ABSORBENT AND CONTAINERIZE FOR DISPOSAL.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS. ALWAYS CONTACT A PERMITTED WAST DISPOSE (TSD) TO ASSURE COMPLIANCE.
Precautions-Handling/Storing: STORE IN A COOL, DRY PLACE. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT GET IN EYES, ON SKIN OR CLOTHES. DO NOT TAKE INTERNALLY.
Other Precautions: WASH THOROUGHLY AFTER HANDLING.

Control Measures

Respiratory Protection: IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED RESPIRATOR OR AN AIR-SUPPLIED RESPIRATOR OR SCBA, AS REQUIRED. USE IAW 29 CFR 1910.134.

MATERIAL SAFETY DATA SHEET

Consumer Products Division, Division of Borden, Inc.
180 EAST BROAD STREET, COLUMBUS, OHIO 43215

800-624139
Emergency Telephone
(614) 431-6600
(OPERATION ALERT)
800-623911

MAY 1 0 1988

THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200 REQUIRES THAT THE INFORMATION CONTAINED ON THIS SHEET BE MADE AVAILABLE TO YOUR WORKERS.

INSTRUCT YOUR WORKERS TO HANDLE THIS PRODUCT PROPERLY

NAME **KRYLON 1311 MATTE FINISH SPRAY COATING**
TYPE **AEROSOL SPRAY**
APPLICATION **NON-GLOSSY ACRYLIC COATING**

30-Jun-86

SIGNAL WORD-DANGER!

THIS MATERIAL IS A HEALTH HAZARD AND OR A PHYSICAL HAZARD AS DETERMINED WHEN REVIEWED ACCORDING TO THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION 29 CFR PART 1910.1200 HAZARD COMMUNICATION STANDARD

CHEMICAL HAZARD RATING

HEALTH=2 MODERATE)
FIRE=4 EXTREME)
REACTIVITY=0 LEAST)
CHRONIC=*

29CFR1910.1200 HAZARDOUS INGREDIENTS/REPORTED HEALTH EFFECTS

CAS REGISTRY NO.	MATERIAL DESCRIPTION	% BY WT.
67-64-1	ACETONE	12.6

CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE DIZZINESS NAUSEA VOMITING UNCONSCIOUSNESS AND EVEN ASPHYXIATION
ACGIH TLV [illegible] PPM [illegible] MG M3 TWA 1000 PPM 2375 MG M3 STEL
OSHA PEL 1000 PPM 2400 MG M3 TWA
NIOSH DOCUMENT NUMBER 78-170

74-98-6	PROPANE	12.9

THIS MATERIAL [illegible] MAY FLASH FIRE SIGNS AND SYMPTOMS OF OVEREXPOSURE MAY INCLUDE HEADACHE RESPIRATORY DISTRESS HEADACHE DIZZINESS DROWSINESS UNCONSCIOUSNESS AND ASPHYXIATION
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION
ACGIH TLV SIMPLE ASPHYXIANT-SEE ACGIH TLVS APPENDIX F
OSHA PEL 1000 PPM 1800 MG M3 TWA

75-28-5	ISOBUTANE	17.1

108-88-3	TOLUENE	49.9

OVEREXPOSURE MAY CAUSE LIVER DAMAGE
OVEREXPOSURE MAY CAUSE KIDNEY DAMAGE
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE DIZZINESS NAUSEA VOMITING UNCONSCIOUSNESS AND EVEN ASPHYXIATION REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY LEAD TO ADDICTION AND MAY BE HARMFUL OR FATAL
ACGIH TLV 100 PPM 375 MG M3 TWA 150 PPM 560 MG M3 STEL
OSHA PEL 200 PPM TWA 300 PPM CEILING 500 PPM 10-MIN. PEAK
NIOSH DOCUMENT NUMBER 73-11023

PHYSICAL DATA

VAPOR PRESSURE -- SEE CAN PRESSURE
VAPOR DENSITY HEAVIER THAN AIR
SOLUBILITY IN WATER -- SLIGHT
SPECIFIC GRAVITY LIGHTER THAN WATER
EVAP RATE FASTER THAN BUTYL ACETATE
BOILING POINT, APPEARANCE, ODOR -- N A
PERCENT VOLATILE BY WEIGHT 92 5
PERCENT NON-VOLATILE BY WEIGHT 7 5
PRESSURE IN CONTAINER, PSIG @ 70 F APPROX 60

ACUTE HEALTH HAZARD DATA

SKIN ABSORPTION NO HAZARDS KNOWN TO BORDEN
INGESTION MAY BE HARMFUL IF SWALLOWED.
INHALATION MAY BE HARMFUL IF INHALED LIQUID OR VAPOR CAN CAUSE IRRITATION OF NOSE, THROAT AND LUNGS
SKIN CAUSES IRRITATION
EYES CAUSES IRRITATION

HANDLING PRECAUTIONS

INHALATION AVOID BREATHING VAPOR OR MIST
USE WITH ADEQUATE VENTILATION
SKIN AVOID CONTACT WITH SKIN
EYES AVOID CONTACT WITH EYES
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND REMOVAL OF THE MATERIAL FROM EYES SKIN AND CLOTHING
WASH THOROUGHLY AFTER HANDLING

EMERGENCY AND FIRST AID PROCEDURES

INGESTION IF SWALLOWED DO NOT INDUCE VOMITING CALL A PHYSICIAN IMMEDIATELY
INHALATION REMOVE TO FRESH AIR IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION PREFERABLY MOUTH-TO-MOUTH IF BREATHING IS DIFFICULT GIVE OXYGEN, CALL A PHYSICIAN
SKIN CONTACT FLUSH SKIN WITH WATER IF IRRITATION PERSISTS CALL A PHYSICIAN
EYE CONTACT IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES EYELIDS SHOULD BE HELD APART DURING IRRIGATION TO INSURE WATER CONTACT WITH ENTIRE SURFACE OF EYES AND LIDS CALL A PHYSICIAN.

FIRE AND EXPLOSION HAZARD DATA

EXTREMELY FLAMMABLE.
CONTENTS UNDER PRESSURE EXPOSURE TO HIGH TEMPERATURE MAY CAUSE BURSTING AVOID RADIATORS, STOVES, DIRECT SUNLIGHT, OR OTHER HEAT SOURCE DO NOT PUNCTURE OR INCINERATE CONTAINER DO NOT SPRAY NEAR OPEN FLAME.
IN CASE OF FIRE, USE DRY CHEMICAL, FOAM OR CO2, WATER MAY BE INEFFECTIVE BUT SHOULD BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL

REACTIVITY DATA

NORMALLY STABLE AS DEFINED IN NFPA 704-12(4-3 1).
MAJOR DECOMPOSITION PRODUCTS, CO, CO2
HAZARDOUS POLYMERIZATION WILL NOT OCCUR

SEE REVERSE SIDE

DISCLAIMER—SEE REVERSE SIDE

CONTROL MEASURES

IF AIRBORNE CONTAMINANTS ARE GENERATED WHEN THE MATERIAL IS HEATED OR HANDLED, SUFFICIENT VENTILATION IN VOLUME AND AIR FLOW PATTERNS SHOULD BE PROVIDED TO KEEP AIR CONTAMINANT CONCENTRATION LEVELS BELOW ACCEPTABLE CRITERIA.

ENGINEERING CONTROLS. THE FOLLOWING EXPOSURE CONTROL TECHNIQUES MAY BE USED TO EFFECTIVELY MINIMIZE EMPLOYEE EXPOSURE: LOCAL EXHAUST VENTILATION, ENCLOSED SYSTEM DESIGN, PROCESS ISOLATION AND REMOTE CONTROL IN COMBINATION WITH APPROPRIATE USE OF PERSONAL PROTECTIVE EQUIPMENT AND PRUDENT WORK PRACTICES. THESE TECHNIQUES MAY NOT NECESSARILY ADDRESS ALL ISSUES PERTAINING TO YOUR OPERATIONS. WE, THEREFORE, RECOMMEND THAT YOU CONSULT WITH EXPERTS OF YOUR CHOICE TO DETERMINE WHETHER OR NOT YOUR PROGRAMS ARE ADEQUATE.

PERSONAL PROTECTION INFORMATION

WHERE AIR CONTAMINANTS CAN EXCEED ACCEPTABLE CRITERIA, USE NIOSH/MSHA APPROVED RESPIRATORY PROTECTION EQUIPMENT. RESPIRATORS SHOULD BE SELECTED BASED ON THE FORM AND CONCENTRATION OF CONTAMINANTS IN AIR IN ACCORDANCE WITH OSHA 29 CFR 1910.134 OR OTHER APPLICABLE STANDARDS OR GUIDELINES.

USE GOGGLES IF CONTACT IS LIKELY.

WEAR IMPERVIOUS GLOVES AS REQUIRED TO PREVENT SKIN CONTACT.

SPILL OR LEAK PROCEDURES

ELIMINATE ALL IGNITION SOURCES.

SOAK UP WITH ABSORBENT MATERIAL AND REMOVE TO A CHEMICAL DISPOSAL AREA.

PREVENT ENTRY INTO NATURAL BODIES OF WATER.

WASTE DISPOSAL METHOD

DISPOSE OF ACCORDING TO LOCAL, STATE AND FEDERAL REQUIREMENTS.

EMPTY CONTAINER. MAY CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEARBY. INCINERATION WILL CAUSE CONTAINER TO BURST VIOLENTLY.

STORAGE PRECAUTIONS

DO NOT STORE AT TEMPERATURES OVER 120 F.

DOT CLASSIFICATION

ORM-D CONSUMER COMMODITY

DISCLAIMER

MATERIAL SAFETY DATA SHEET

Consumer Products Division, Division of Borden, Inc.
180 EAST BROAD STREET, COLUMBUS, OHIO 43215

Emergency Telephone
(614) 431-6600
(OPERATION ALERT)

2.

F P R AH CH F14
Y Y N Y Y mixture liquid

THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200 REQUIRES THAT THE INFORMATION CONTAINED ON THIS SHEET BE MADE AVAILABLE TO YOUR WORKERS.

INSTRUCT YOUR WORKERS TO HANDLE THIS PRODUCT PROPERLY

8010-623945

NAME: **KRYLON FLUORESCENT SPRAY PAINT**
TYPE: **SPRAY PAINT "AEROSOL"** **30-Jun-86**
APPLICATION: **ITEM NOS.: 3101, 3102, 3103, 3104, 3105, 3106, 3107**

SIGNAL WORD-DANGER!

THIS MATERIAL IS A "HEALTH HAZARD" AND/OR A "PHYSICAL HAZARD" AS DETERMINED WHEN REVIEWED ACCORDING TO THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION 29 CFR PART 1910.1200 "HAZARD COMMUNICATION" STANDARD.

CHEMICAL HAZARD RATING

HEALTH=2-MODERATE)
FIRE=4,EXTREME)
REACTIVITY=0(LEAST)
CHRONIC=*

29CFR1910.1200 HAZARDOUS INGREDIENTS/REPORTED HEALTH EFFECTS

CAS REGISTRY NO. MATERIAL DESCRIPTION	% BY WT.
74-98-6 PROPANE	**12.0**

THIS MATERIAL IS A SIMPLE ASPHYXIANT. SIGNS AND SYMPTOMS OF OVEREXPOSURE INCLUDE CYANOSIS, RESPIRATORY DISTRESS, HEADACHE, DIZZINESS, DROWSINESS, UNCONSCIOUSNESS AND ASPHYXIATION.
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.
ACGIH TLV: SIMPLE ASPHXIANT-SEE ACGIH TLVS. APPENDIX E
OSHA PEL: 1000 PPM (1800 MG/M3) TWA

75-28-5 ISOBUTANE	**16.0**
108-88-3 TOLUENE	**12.0**

OVEREXPOSURE MAY CAUSE LIVER DAMAGE.
OVEREXPOSURE MAY CAUSE KIDNEY DAMAGE.
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND ASPHYXIATION. REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY LEAD TO ADDICTION AND MAY BE HARMFUL OR FATAL.
ACGIH TLV: 100 PPM (375 MG/M3) TWA; 150 PPM (560 MG/M3) STEL
OSHA PEL: 200 PPM TWA; 300 PPM CEILING; 500 PPM 10-MIN. PEAK
NIOSH DOCUMENT NUMBER: 73-11023

110-54-3 HEXANE	**18.0**

CHRONIC EXPOSURES HAVE CAUSED PERIPHERAL NEUROPATHY.
CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, AND DROWSINESS.
ACGIH TLV: 50 PPM (180 MG/M3) TWA
OSHA PEL: 500 PPM (1800 MG/M3) TWA
NIOSH DOCUMENT NUMBER: 77-151

142-82-5 HEPTANE	**17.0**

CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.
ACGIH TLV: 400 PPM, 8-HR TWA
OSHA PEL: 500 PPM ,8-HR TWA
NIOSH DOCUMENT NUMBER: 77-151

8032-32-4 V.M.&P. NAPHTHA	**8.0**

CAN CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. SIGNS AND SYMPTOMS MAY INCLUDE HEADACHE, DIZZINESS, NAUSEA, VOMITING, UNCONSCIOUSNESS AND EVEN ASPHYXIATION.
ACGIH TLV: 300 PPM (1350 MG/M3) TWA; 400 PPM (1800 MG/M3) STEL
NIOSH DOCUMNT NUMBER: 77-192

PHYSICAL DATA

VAPOR PRESSURE -- SEE CAN PRESSURE
VAPOR DENSITY HEAVIER THAN AIR
SOLUBILITY IN WATER -- SLIGHT
SPECIFIC GRAVITY LIGHTER THAN WATER
EVAP RATE FASTER THAN BUTYL ACETATE
BOILING POINT, APPEARANCE: ODOR -- N.A.
PERCENT VOLATILE BY WEIGHT 83
PERCENT NON-VOLATILE BY WEIGHT 17
PRESSURE IN CONTAINER, PSIG @ 70 F, APPROX. 50

ACUTE HEALTH HAZARD DATA

SKIN ABSORPTION: NO HAZARDS KNOWN TO BORDEN.
INGESTION: MAY BE HARMFUL IF SWALLOWED.
INHALATION: MAY BE HARMFUL IF INHALED. LIQUID OR VAPOR CAN CAUSE IRRITATION OF NOSE, THROAT AND LUNGS.
SKIN: CAUSES IRRITATION
EYES: CAUSES IRRITATION

HANDLING PRECAUTIONS

INHALATION: AVOID BREATHING VAPOR OR MIST.
USE WITH ADEQUATE VENTILATION.
SKIN: AVOID CONTACT WITH SKIN.
EYES: AVOID CONTACT WITH EYES
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND REMOVAL OF THE MATERIAL FROM EYES, SKIN AND CLOTHING.
WASH THOROUGHLY AFTER HANDLING.

EMERGENCY AND FIRST AID PROCEDURES

INGESTION: IF SWALLOWED, DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.
SKIN CONTACT: FLUSH SKIN WITH WATER. IF IRRITATION PERSISTS, CALL A PHYSICIAN.
EYE CONTACT: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. EYELIDS SHOULD BE HELD APART DURING IRRIGATION TO INSURE WATER CONTACT WITH ENTIRE SURFACE OF EYES AND LIDS. CALL A PHYSICIAN.

FIRE AND EXPLOSION HAZARD DATA

EXTREMELY FLAMMABLE.
CONTENTS UNDER PRESSURE; EXPOSURE TO HIGH TEMPERATURE MAY CAUSE BURSTING. AVOID RADIATORS, STOVES, DIRECT SUNLIGHT, OR OTHER HEAT SOURCE. DO NOT PUNCTURE OR INCINERATE CONTAINER. DO NOT SPRAY NEAR OPEN FLAME.
IN CASE OF FIRE, USE DRY CHEMICAL, FOAM OR CO2. WATER MAY BE INEFFECTIVE, BUT SHOULD BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL.

REACTIVITY DATA

NORMALLY STABLE AS DEFINED IN NFPA 704-12(4-3.1).
MAJOR DECOMPOSITION PRODUCTS: CO, CO2.
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SEE REVERSE SIDE

CONTROL MEASURES

IF AIRBORNE CONTAMINANTS ARE GENERATED WHEN THE MATERIAL IS HEATED OR HANDLED, SUFFICIENT VENTILATION IN VOLUME AND AIR FLOW PATTERNS SHOULD BE PROVIDED TO KEEP AIR CONTAMINANT CONCENTRATION LEVELS BELOW ACCEPTABLE CRITERIA.

ENGINEERING CONTROLS: THE FOLLOWING EXPOSURE CONTROL TECHNIQUES MAY BE USED TO EFFECTIVELY MINIMIZE EMPLOYEE EXPOSURE: LOCAL EXHAUST VENTILATION, ENCLOSED SYSTEM DESIGN, PROCESS ISOLATION AND REMOTE CONTROL IN COMBINATION WITH APPROPRIATE USE OF PERSONAL PROTECTIVE EQUIPMENT AND PRUDENT WORK PRACTICES. THESE TECHNIQUES MAY NOT NECESSARILY ADDRESS ALL ISSUES PERTAINING TO YOUR OPERATIONS. WE, THEREFORE, RECOMMEND THAT YOU CONSULT WITH EXPERTS OF YOUR CHOICE TO DETERMINE WHETHER OR NOT YOUR PROGRAMS ARE ADEQUATE

PERSONAL PROTECTION INFORMATION

WHERE AIR CONTAMINANTS CAN EXCEED ACCEPTABLE CRITERIA, USE NIOSH MSHA APPROVED RESPIRATORY PROTECTION EQUIPMENT. RESPIRATORS SHOULD BE SELECTED BASED ON THE FORM AND CONCENTRATION OF CONTAMINANTS IN AIR IN ACCORDANCE WITH OSHA 29 CFR 1910.134 OR OTHER APPLICABLE STANDARDS OR GUIDELINES

USE GOGGLES IF CONTACT IS LIKELY

WEAR IMPERVIOUS GLOVES AS REQUIRED TO PREVENT SKIN CONTACT.

SPILL OR LEAK PROCEDURES

ELIMINATE ALL IGNITION SOURCES

SOAK UP WITH ABSORBENT MATERIAL AND REMOVE TO A CHEMICAL DISPOSAL AREA.

PREVENT ENTRY INTO NATURAL BODIES OF WATER

WASTE DISPOSAL METHOD

DISPOSE OF ACCORDING TO LOCAL, STATE, AND FEDERAL REQUIREMENTS

EMPTY CONTAINER MAY CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, PUNCTURE OR WELD ON OR NEARBY. INCINERATION WILL CAUSE CONTAINER TO BURST VIOLENTLY.

STORAGE PRECAUTIONS

DO NOT STORE AT TEMPERATURES OVER 120 F.

DOT CLASSIFICATION

ORM-D CONSUMER COMMODITY

DISCLAIMER

Ashland Chemical Co.

Date Prepared: 05/28/97
Date Printed: 08/19/97
MSDS No: 0003736-011.001

METHYLENE CHLORIDE TECH/INDUSTRIAL

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity
Product Name: METHYLENE CHLORIDE TECH/INDUSTRIAL
General or Generic ID: CHLORINATED HYDROCARBON

Company
Ashland Chemical Co.
P.O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:
1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
METHYLENE CHLORIDE	75-09-2	100.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Continued on next page

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing this material may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Symptoms of Exposure

stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, irregular heartbeat, elevated carbon monoxide levels in the blood, and death.

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: kidney damage, liver damage.

Developmental Information

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

This material (or a component) causes cancer in laboratory animals and therefore may present a carcinogenic risk to humans. This material (or a component) is listed as a carcinogen by the International Agency for Reseach on Cancer and the National Toxicology Program.

Continued on next page

Other Health Effects
No data

Primary Route(s) of Entry
Inhalation, Skin absorption, Skin contact, Eye contact.

4. FIRST AID MEASURES

Eyes
If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin
Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing
Do not induce vomiting. This material is an aspiration hazard. If individual is drowsy or unconscious, place on left side with the head down. Seek medical attention. If possible, do not leave individual unattended.

Inhalation
If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians
Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

Continued on next page

5. FIRE FIGHTING MEASURES

Flash Point
Not applicable

Explosive Limit
(for product) Lower 13.0 Upper 23.0 %

Autoignition Temperature
> 999.0 F

Hazardous Products of Combustion
May form: carbon dioxide and carbon monoxide, chlorine, hydrogen chloride, phosgene.

Fire and Explosion Hazards
Vapors concentrated in a confined/poorly ventilated area can be ignited upon contact with a high energy spark, flame or high intensity source of heat. Vapors are heavier than air and will collect in low areas.

Extinguishing Media
water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions
Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating
Health - 2, Flammability - 1, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill
Absorb liquid on vermiculite, floor absorbent or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

Continued on next page

Large Spill

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

Aluminum equipment should not be used for storage and/or transfer, e.g. pumps, mixers, fittings, storage tanks, etc. Contact with aluminum parts in a pressurizable fluid system may cause violent reactions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier)., To prevent skin contact, wear impervious clothing and boots..

Continued on next page

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure. See 29 CFR 1910.1052 for specific OSHA requirements for employee exposure to methylene chloride.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines
Component

METHYLENE CHLORIDE (75-09-2)
OSHA VPEL 25.000 ppm - TWA See 29 CFR 1910.1052
OSHA VPEL 125.000 ppm - STEL (as determined over a sampling period of fifteen minutes)
ACGIH TLV 50.000 ppm - TWA

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 102.9 - 104.7 F (39.3 - 40.3 C) @ 760 mmHg

Vapor Pressure

(for product) 355.000 mmHg @ 68.00 F

Specific Vapor Density

2.930 @ AIR=1

Specific Gravity

1.318 - 1.322 @ 77.00 F

Continued on next page

Liquid Density
10.970 lbs/gal @ 77.00 F
1.320 kg/l @ 25.00 C

Percent Volatiles
100.0 %

Volatile Organic Compounds (VOC)
.000 %
> 999.000 g/l
10.970 lbs/gal

Evaporation Rate
1.80 (ETHYL ETHER)

Appearance
CLEAR COLORLESS LIQUID

State
LIQUID

Physical Form
NEAT

Color
CLEAR, PT-CO COLOR 10 MAX

Odor
MILDLY SWEET ODOR

pH
No data

Freezing Point
-142.1 F (-96.7 C)

Molecular Weight
83.9

Continued on next page

Solubility in Water
2.0G/100G

Bulk Density
1.470 lbs/ft3

10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition
May form: carbon dioxide and carbon monoxide, chlorine, hydrogen chloride, phosgene, Open flame, welding arcs, resistance heaters, etc., which can result in thermal decomposition releasing hydrogen chloride and small amounts of phosgene and chlorine..

Chemical Stability
Stable. Gross contamination with water can cause hydrolysis, producing small amounts of hydrochloric acid.

Incompatibility
Avoid contact with: amines, reactive metals such as aluminum and magnesium, strong alkalies, strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

Continued on next page

13. DISPOSAL CONSIDERATION

Waste Management Information
Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101
DOT Description:
DICHLOROMETHANE MIXTURE,6.1,UN1593,III

Container/Mode:
55 GAL DRUM/TRUCK PACKAGE

NOS Component:
None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs)	Component
1000	DICHLOROMETHANE

15. REGULATORY INFORMATION

US Federal Regulations
TSCA (Toxic Substances Control Act) Status
TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)

Component	RQ (lbs)
METHYLENE CHLORIDE	1000

Continued on next page

SARA 302 Components - 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class - 40 CFR 370.2
Immediate(X) Delayed(X) Fire( ) Reactive( ) Sudden Release of Pressure( )

SARA 313 Components - 40 CFR 372.65

Section 313 Component(s)	CAS Number	%
DICHLOROMETHANE (METHYLENE CHLORIDE)	75-09-2	100.00

International Regulations

Inventory Status

DSL (CANADA) The intentional ingredients of this product are listed.
EINECS (EUROPE) The intentional ingredients of this product are listed.

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.
DICHLOROMETHANE (METHYLENE CHLORIDE)

New Jersey RTK Label Information

METHYLENE CHLORIDE	75-09-2

Pennsylvania RTK Label Information

METHANE, DICHLORO-	75-09-2

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Last page

MATERIAL SAFETY DATA SHEET
MATTHEWS PAINT COMPANY

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY:	287113SP
REVISION DATE:	11/15/96 (001) 0808
CUSTOMER PART #/NAME:	Not applicable
PRODUCT TRADE NAME:	VOC MAP SUEDE ADDITIVE
CHEMICAL FAMILY:	POLYETHYLENE
EMERGENCY MEDICAL/SPILL INFO:	(800) 424-9300 CHEMTREC (U.S.) 91-800-00-214 (MEXICO) (514) 645-1320 (CANADA)
TECHNICAL INFORMATION:	(800) 323-6593
PRODUCT SAFETY/MSDS INFORMATION:	8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739 (414) 947-0700
DATE OF MSDS PREPARATION:	12/16/96

PRIMARY HAZARD WARNING

There are no hazardous ingredients in this product as defined by the OSHA Hazard Communication Standard.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

Manufactured and Supplied by:
MATTHEWS PAINT COMPANY
LAKE VIEW CORPORATE PARK 8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

There are no hazardous ingredients in this product as defined by the OSHA Hazard Communication Standard.

ODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES CONTROL ACT

All chemical substances in this product are listed on the U.S. TSCA Inventory or are otherwise exempt from TSCA Inventory reporting requirements.

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE FROM:

▸INGESTION: May be harmful if swallowed.

▸EYE CONTACT: Causes eye irritation.

▸SKIN CONTACT: May cause slight skin irritation.

▸INHALATION: Dust may be harmful if inhaled. Dust irritates eyes, nose and throat.

▸CHRONIC OVEREXPOSURE: Not applicable

SIGNS AND SYMPTOMS OF OVEREXPOSURE: None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

SECTION 4 - FIRST AID MEASURES

▸INGESTION: If swallowed, do not induce vomiting. Gently wipe out inside mouth to remove any residual material.

▸EYE CONTACT: In case of eye contact, remove contact lenses and flush eyes immediately with a gentle stream of luke warm water for at least 15 minutes.

▸SKIN CONTACT: In case of skin contact, flush immediately with plenty of water for at least 15 minutes followed by washing with soap and water.

▸INHALATION: If affected by inhalation of dust, remove to fresh air. Apply artificial respiration and other support measures as required.

▸OTHER: If ingestion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison control center, emergency room or physician immediately; have Material Safety Data Sheet information available.

SECTION 5 - FIRE FIGHTING MEASURES

▸FLASHPOINT: 450 Degrees F (230 Degrees C) (PENSKY-MARTENS CLOSED CUP)

▸FLAMMABLE LIMITS: Lower explosion limit (LEL): Not available

▸Upper explosion limit (UEL): Not available

▸EXTINGUISHING MEDIA: Use extinguishers appropriate for surrounding fire.

▸UNUSUAL FIRE AND EXPLOSION HAZARDS: Material not known to be explosive.

▸SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective. Water spray may be used to cool closed containers that are exposed to extreme heat. If water is used, fog nozzles are preferable. Firefighters should wear self-contained breathing apparatus and full protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

▸STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

▸WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 7 - HANDLING AND STORAGE

▸HANDLING AND STORAGE PRECAUTIONS: Do not store above 120 degrees F. (48 degrees C.).

▸OTHER PRECAUTIONS: If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT FOR:

'E PROTECTION: Wear safety glasses.

.SKIN PROTECTION: Wear protective clothing. Gloves should be constructed of: rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or

total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

►RESPIRATORY PROTECTION: Use an appropriate NIOSH-approved particulate filter respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

►OTHER EQUIPMENT: Do not reuse contaminated clothing, shoes, or gloves.

VENTILATION REQUIREMENTS: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

[FORMULA VALUES, NOT SALES SPECIFICATIONS]

BOILING RANGE: Not applicable
VAPOR PRESSURE: N.A. mmHg
VAPOR DENSITY: Heavier than air
% VOLATILE/VOLUME: .010
SPECIFIC GRAVITY: .900
SOLUBILITY IN WATER: .0 %
WEIGHT/GALLON : 7.50 (LBS/U.S. GAL.)
pH: Not applicable
% SOLIDS BY WEIGHT: 100.00
EVAPORATION RATE(BuOAc = 100): 0

ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the solvents listed in Section 2.

SECTION 10 - STABILITY AND REACTIVITY

►This product is normally stable and will not undergo hazardous reactions.

►INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID): High concentrations of airborne dust may ignite explosively. Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.

►HAZARDOUS DECOMPOSITION PRODUCTS: May produce the following hazardous decomposition products when exposed to extreme heat: carbon monoxide ; carbon dioxide ; lower molecular weight polymer fractions; . . . . Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

THIS IS THE END OF THE MSDS FOR: 287113SP (00058416.001287113SP)

BJB Thinner

714
7MD

MATERIAL SAFETY DATA SHEET
FOR COATINGS, RESINS, AND RELATED MATERIALS.
CONFIDENTIAL TRADE SECRET OF JONES BLAIR COMPANY

MANUFACTURERS NAME
GILMAN COMPANY
P O BOX 1257
CHATTANOOGA, TN 37401

EMERGENCY TELEPHONE NO.
(1-800-424-[redacted])

INFORMATION TELEPHONE NO.
(615)-756-5185

DATE OF PREPERATION 5/16/91
REPLACES MSDS DATED 5/16/91

H.M.I.S. (SEE SEC VIII)
* 2 HEALTH *
* 3 FLAMMABILITY *
* 0 REACTIVITY *
* H PERSONAL PROTECTIVE EQUIPMENT *

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER 18-C-128

PRODUCT NAME GILMAN URETHANE LACQUER THINNER

PRODUCT CLASS SOLVENT MIXTURE THINNER

SECTION II - HAZARDOUS/SARA 313 INGREDIENTS

INGREDIENT	SEC 313 OF SARA	PERCENT BY WT	CAS #	(MM HG)VAPOR PRESSURE
ISOPROPANOL	Y	35-45	67-63-0	31.20
TOLUENE	Y	35-45	108-88-3	28.00
PM ACETATE	N	5-15	108-65-6	2.40

OCCUPATIONAL EXPOSURE LIMITS (TLV)

TWA=TIME WEIGHTED AVG.
STE=SHORT TERM EXPOSURE
S=SKIN ABSORPTION

	TWA ACIGH (PPM)	STE ACIGH (PPM)	TWA OSHA (PPM)	STE OSHA (PPM)	CEILING OSHA (PPM)
ISOPROPANOL 400.00	N/A	400.00	500.00	N/A	
TOLUENE 100.00	150.00	100.00	150.00	N/A	
PM ACETATE 100.00	N/A	N/A	N/A	N/A	

***** RECOMMENDED THRESHOLD LIMIT VALUE (TLV) 100.00 **********

SECTION III - PHYSICAL DATA

BOILING RANGE(F) 179.00 302.00 VAPOR DENSITY - HEAVIER THAN AIR
VOC (LB/GAL)
EVAPORATION RATE - SLOWER THAN ETHER % VOLATILE VOLUME 100 WT/GAL 6.94

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY OSHA CLASS IB FLASH POINT 43 F LEL 1.20

CLASSIFICATION DOT FLAMMABLE LIQUID-RED LABEL

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, OR SAND

UNUSUAL FIRE AND EXPLOSION HAZARDS - CONTAINERS MAY RUPTURE DUE TO VERY HIGH TEMPERATURE INDUCED PRESSURE.

SPECIAL FIREFIGHTING PROCEDURES - GENERAL PROCEDURES RECOMMENDED. AVOID USE OF WATER.

SECTION V - HEALTH HAZARD DATA

PRIMARY ROUTES OF EXPOSURE - INHALATION (X) SKIN ABSORPTION (X) INGESTION (X)

EFFECTS OF OVEREXPOSURE - (SHORT TERM, LONG TERM, CUMULATIVE)

ACUTE(SHORT TERM): EXCESSIVE INHALATION MAY RESULT IN HEADACHES, NAUSEA, EYE AND LUNG IRRITATION, AND NARCOSIS.

CHRONIC(LONG TERM): REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

EMERGENCY AND FIRST AID PROCEDURES -
IN CASE OF EYE CONTACT, FLUSH EYES WITH EYE-WASH OR WATER FOR 15 MINUTES. IF EYE IRRITATION PERSISTS, GET MEDICAL ATTENTION PROMPTLY. IN CASE OF SKIN CONTACT, WIPE MATERIAL OFF AND WASH CONTACTED AREA. IF INGESTED, DO NOT INDUCE VOMITING. GET PATIENT TO FRESH AIR AND CONSULT PHYSICIAN. PROMPTLY REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

SECTION VI - REACTIVITY DATA

ALL PRECAUTIONS DETAILED IN SECTION VIII MUST BE OBSERVED.

STABILITY - STABLE

HAZARDOUS POLYMERIZATION WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS - N/A

CONDITIONS TO AVOID - HEAT AND OPEN FLAMES, SPARKS

INCOMPATABILITY (MATERIALS TO AVOID) - STRONG OXIDIZING MATERIALS

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED -
ELIMINATE IGNITION SOURCES. STOP SPILL OR LEAK AT ONCE, BY CREATING DIKE, ETC., & COVER WITH INERT ABSORBANT MATERIAL. SHOVEL OR SWEEP INTO DISPOSABLE CONTAINER.
CONTAINS A CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA.

WASTE DISPOSAL METHOD - SHOVEL INTO DRUMS. INCINERATE AS LOCAL LAWS PERMIT.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

H.M.I.S. HAZARDOUS MATERIALS IDENTIFICATION SYSTEM. (NATIONAL PAINT & COATING ASSOCIATION.)

RESPIRATORY PROTECTION - PROVIDE ADEQUATE VENTILATION (SEE BELOW).
PROVIDE ADEQUATE VENTILATION FOR CONFINED AREAS OR WHEN USING SPRAY APPLICATION. WEAR APPROPRIATE, PROPERLY FITTED RESPIRATOR (NIOSH/MSHA APPROVED) DURING AND AFTER APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST LEVELS BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE.
VENTILATION - LOCAL EXHAUST PREFERABLE TO NATURAL DILUTION.

PROTECTIVE GLOVES - RECOMMENDED (MUST NOT DISSOLVE IN SOLVENTS)

EYE PROTECTION - FACE SHIELD OR GOGGLES

OTHER PROTECTIVE EQUIPMENT - NONE UNLESS LISTED BELOW.

HYGIENIC PRACTICES: WASH HANDS THROUGHLY WITH SOAP & WATER AFTER USE.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING - KEEP AWAY FROM SPARKS, HEAT, AND OPEN FLAMES.

OTHER PRECAUTIONS - DO NOT TAKE INTERNALLY. AVOID PROLONGED CONTACT OR INHALATION.
THIS PRODUCT CONTAINS A CHEMICAL KNOWN IN THE STATE OF CALIFORNIA TO CAUSE CANCER.
THIS PRODUCT CONTAINS A CHEMICAL KNOWN IN THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NOTICE: THE DATA AND RECOMMENDATIONS PRESENTED HEREIN ARE BASED UPON OUR RESEARCH AND THE RESEARCH OF OTHERS AND ARE BELIEVED TO BE ACCURATE. NO GUARANTEE OF THEIR ACCURACY IS MADE, HOWEVER, AND THE PRODUCTS DISCUSSED ARE DISTRIBUTED WITHOUT WARRANTY (EXPRESSED OR IMPLIED)-- AND THE PERSON RECEIVING THEM SHALL MAKE HIS OWN DETERMINATION OF THE SUITABILITY THEREOF FOR HIS PARTICULAR PURPOSE.

AROMATIC

DISNEY THINNER 500 PAGE: 1

MATERIAL SAFETY DATA SHEET

ACCEPTED BY O.S.H.A. AS ESSENTIALLY SIMILIAR TO O.S.H.A. FORM 20
CHEMICAL CO,ENVIRONMENTAL&OCCUPATIONAL SAFETY DEPT,BOX 2219,COLUMBUS,OH4321
24-HOUR EMERGENCY TELEPHONE: 606-324-1133 (LOCATED AT ASHLAND, KENTUCKY)

****

HLAND PRODUCT NAME: DISNEY THINNER 500

WALT DISNEY WORLD CO
PO BOX 40
ORLANDO FLORIDA 32802

05 50 093 2610700-
DATA SHEET NO: 0013134-002
LATEST REVISION DATE: 10/78-78277
PRODUCT: 2244103
INVOICE: 423103
INVOICE DATE: 10/17/78
TO: SAME

ATTN: PURCHASING/SAFETY DEPT.

********** SECTION I-PRODUCT IDENTIFICATION **********

NERAL OR GENERIC ID: SOLVENT BLEND

RD CLASSIFICATION: (03) FLAMMABLE LIQUID (173.115)

********** SECTION II-HAZARDOUS COMPONENTS **********

INGREDIENT	PERCENT	TLV	
	10-30 %	200 PPM	
IC HYDROCARBON	30-60 %	200 PPM	(1)
COL ETHER	1-10 %	50 PPM	
ONE	10-30 %	100 PPM	
OHOL	1-10 %	400 PPM	

1 ACGIH RECOMMENDS A TLV OF 100 PPM (SKIN).

********** SECTION III-PHYSICAL DATA **********

PROPERTY	REFINEMENT	MEASUREMENT	
IAL BOILING POINT	FOR COMPONENT(10-30 %)	175.00	DEG F
		(79.44	DEG C)
		@ 760.00	MMHG
R PRESSURE	FOR COMPONENT(10-30 %)	70.00	MMHG
		@ 68.00	DEG F
		(20.00	DEG C)
DR DENSITY		HEAVIER THAN AIR	
CIFIC GRAVITY		LESS THAN WATER	
NT VOLATILES		100.00 %	

CONTINUED ON PAGE: 2

********** SECTION III-PHYSICAL DATA (CONTINUED) **********

PROPERTY	REFINEMENT	MEASUREMENT
PORATION RATE		SLOWER THAN ETHER

********** SECTION IV-FIRE AND EXPLOSION DATA **********

SH POINT(CLOSED CUP) < 73 DEG F
(<23 DEG C)

ER EXPLOSIVE LIMIT (LOWEST VALUE OF COMPONENT) 1.1 %

INGUISHING MEDIA: REGULAR FOAM OR CARBON DIOXIDE OR DRY CHEMICAL

ZARDOUS DECOMPOSITION PRODUCTS: MAY FORM TOXIC MATERIALS:, CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS, MAY FORM TOXIC MATERIALS:, CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS, ETC., ETC.

ECIAL FIREFIGHTING PROCEDURES: SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE. SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.

SUAL FIRE & EXPLOSION HAZARDS: VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

********** SECTION V-HEALTH HAZARD DATA **********

ESHOLD LIMIT VALUE: NOT ESTABLISHED FOR PRODUCT. SEE SECTION II.

ECTS OF OVEREXPOSURE: FOR PRODUCT

S - CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION.
N - PROLONGED OR REPEATED CONTACT CAN CAUSE MODERATE IRRITATION, DEFATTING, DERMATITIS.
BE ABSORBED IN TOXIC AMOUNTS, ESPECIALLY FROM PROLONGED OR REPEATED EXPOSURE.
ATHING - EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONSCIOUSNESS, AND EVEN ASPHYXIATION.
ALLOWING - CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, AND DIARRHEA. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

CONTINUED ON PAGE: 3

********** SECTION V-HEALTH HAZARD DATA (CONTINUED) **********

AID:

N SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDER CONTAMINATED CLOTHING BEFORE RE-USE.

N EYES: FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY, GET MEDICAL ATTENTION.

WALLOWED: DO NOT INDUCE VOMITING, KEEP PERSON WARM, QUIET, AND GET MEDICAL ATTENTION. ASPIRATION OF MATERIAL INTO THE LUNGS DUE TO VOMITING CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

REATHED: IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.

********** SECTION VI-REACTIVITY DATA **********

RDOUS POLYMERIZATION: CANNOT OCCUR
ILITY: STABLE

MPATABILITY: AVOID CONTACT WITH:, STRONG OXIDIZING AGENTS (E.G. NITRIC ACID, PERMANGANATES, ETC.), STRONG ALKALIES (E.G. NAOH, NH4OH, ETC.)

********** SECTION VII-SPILL OR LEAK PROCEDURES **********

TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

L SPILL: ABSORB LIQUID ON PAPER, VERMICULITE, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD.

E SPILL: ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO CONTAINERS.

E DISPOSAL METHOD:

L SPILL: ALLOW VOLATILE PORTION TO EVAPORATE IN HOOD. ALLOW SUFFICIENT TIME FOR VAPORS TO COMPLETELY CLEAR HOOD DUCT WORK. DESTROY REMAINING MATERIAL BY BURNING IN AN IRON PAN.

GE SPILL: DESTROY BY LIQUID INCINERATION.
MATERIAL COLLECTED ON ABSORBENT MATERIAL MAY BE DEPOSITED IN A POSTED TOXIC SUBSTANCE LANDFILL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

CONTINUED ON PAGE: 4

********** SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED **********

ATORY PROTECTION: IF TLV OF THE PRODUCT OR ANY COMPONENT IS EXCEEDED, A NIOSH/MESA JOINTLY APPROVED SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACE PIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE IS ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MESA RESPIRATORS UNDER SPECIFIED CONDITIONS. (SEE YOUR SAFETY EQUIPMENT SUPPLIER).

TILATION: PROVIDE SUFFICIENT MECHANICAL (GENERAL) AND/OR LOCAL EXHAUST VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

TECTIVE GLOVES: WEAR RESISTANT GLOVES SUCH AS:, NEOPRENE, BUNA-N

PROTECTION: CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. (SEE YOUR SAFETY EQUIPMENT SUPPLIER).

R PROTECTIVE EQUIPMENT: TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

********** SECTION IX-SPECIAL PRECAUTIONS OR OTHER COMMENTS **********

AINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN THIS DATA SHEET MUST BE OBSERVED.

XPOSURE TO COMPONENTS HAS APPARENTLY BEEN FOUND TO CAUSE THE FOLLOWING EFFECTS IN LABORATORY ANIMALS:, ANEMIA, LIVER ABNORMALITIES, KIDNEY DAMAGE, LUNG DAMAGE, BLOOD ABNORMALITIES, SPLEEN DAMAGE, BRAIN DAMAGE

EREXPOSURE TO COMPONENTS HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING EFFECTS IN HUMANS:, LIVER ABNORMALITIES, KIDNEY DAMAGE, CENTRAL NERVOUS SYSTEM DAMAGE

INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH ASHLAND OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

F P R AH CH
Y N N Y Y
F14
mixture liquid 8.532 Lbs/Gal

MANUFACTURER:
MATTHEWS PAINT COMPANY
400 SOUTH MERCANTILE COURT
WHEELING, ILLINOIS 60090

EMERGENCY PHONE: (800) 424-9300
INFORMATION PHONE: (708) 537-9200

1

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER : VOC-914
PRODUCT NAME : DARK RED

HMIS : H2F3R1PI
PREPARATION DATE: 01/23/90

CHEMICAL NAME : ORGANIC COATING
CHEMICAL FAMILY : PAINT

SECTION II - HAZARDOUS INGREDIENTS

DESCRIPTION	CAS NUMBER	% (WGT)	TLV-TWA	PEL
REACTIVE MODIFIER	MIXTURE	9.14	100.00 PPM	100.00 PPM
TOLUOL	108-88-3	7.29	100.00 PPM	100.00 PPM
BUTYL ACETATE	123-86-4	10.54	150.00 PPM	150.00 PPM
METHYL ISOBUTYL KETONE	108-10-1	12.61	50.00 PPM	100.00 PPM
METHYL AMYL KETONE	110-43-0	3.27	50.00 PPM	100.00 PPM

SECTION III - PHYSICAL DATA

BOILING RANGE	: 230 TO 375 (deg F)	VAPOR DENSITY	: HEAVIER THAN AIR	% VOLATILE VOLUME	: 41.762
WEIGHT PER GALLON	: 8.532	EVAPORATION RATE	: SLOWER THAN ETHER	% NON-VOLATILE (WGT)	: 65.750
VOC	: 2.922 (lb/gl)			% NON-VOLATILE (VOL)	: 58.238
APPEARANCE	: RED LIQUID	ODOR	: TYPICAL SOLVENT ODOR		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATON: UN1263 PAINT FLAMMABLE LIQUID
FLASH POINT: 45 (deg F) TCC LEL: 1.00 UEL: 12.00

SPECIAL FIRE FIGHTING PROCEDURES: Foam, CO2N, or dry chemical. Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed container to prevent pressure build up, explosion, or possible auto ignition when exposed to extreme heat.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Should be stored in tightly closed containers away from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. During emergency conditions, over-exposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SECTION V - REACTIVITY DATA

STABILITY	: STABLE
CONDITIONS TO AVOID	: Heat, sparks, open flame/fire and open containers.
MATERIALS TO AVOID	: Stong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS	: Normal decomposition may yield oxides of carbon.
HAZARDOUS POLYMERIZATION	: Will not occur.

NOTE: THIS PRODUCT CONTAINS A LIQUID CO-REACTANT THAT IS VOLATILE UNTIL A CHEMICAL REACTION HAS OCCURRED WITH A ANOTHER COMPONENT CONTACT MANUFACTURER FOR VOC COMPLIANCE TEST PROCEDURE

SECTION VI - HEALTH HAZARD DATA

TARGET ORGANS/SYSTEMS WHICH MAY BE AFFECTED:
eyes, skin, respiratory system, gastro-intestinal system, central nervous system, ORDOS, kidney, liver, blood, lungs

EFFECTS OF OVEREXPOSURE:

ACUTE OVEREXPOSURE MAY LEAD TO THE FOLLOWING INDICATIONS/CONDITIONS:

CONTACT:
irritates eyes, irritates skin, dry skin, irritates mucous membranes

INHALATION:
irritates respiratory system, irritates gastro-intestinal system, dizziness, loss of coordination, drowsiness, fatigue, headache, anethesia, irritates nose and throat, shortness of breath, light headedness, lung damage/inflammation, liver damage, kidney damage

INGESTION:
irritates gastro-intestinal system, irritates nose and throat, dizziness, loss of coordination, drowsiness, fatigue, lung damage/inflammation, pulmonary edema, headache, nausea, vomiting, narcosis, coma, single dose toxicity

ABSORBTION:
single dose toxicity

CHRONIC OVEREXPOSURE MAY LEAD TO THE FOLLOWING INDICATIONS/CONDITIONS:
dermatitis, asthma, liver damage, kidney damage, blood disorders, lung damage/inflammation, reproductive disorders

WARNING: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

PRIMARY ROUTE(S) OF ENTRY: [X] DERMAL [X] INHALATION [X] INGESTION

EMERGENCY FIRST AID PROCEDURES: Remove to fresh air and treat symptomatically, flush skin or eyes with water. Call physician if ingested. DO NOT induce vomiting.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition (flame, hot surfaces, electrical, static or frictional sparks). Avoid breathing vapors. Ventilate area. Contain and remove with inert absorbent and non-sparking tools.

WASTE DISPOSAL METHOD: Dispose in accordance with local, state and federal regulations. Incinerate in approved facility. Do not incinerate closed containers.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Wear appropriate, properly fitted respirator (NIOSH/MSHA approved for ISOCYANATES) during and after application, and until all fumes and mists have been removed. Follow respirator manufacturer's directions for respirator use.

VENTILATION: Local exhaust ventilation is recommended to control exposures to within OSHA limitations for lead, chromates and solvents.

PROTECTIVE GLOVES: Impervious gloves.

EYE PROTECTION: Chemical goggles or face shield.

OTHER PROTECTIVE EQUIPMENT: Impervious apron,safety shoes, eye wash facility, emergency shower.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: MAP contains ester solvents. Breathing of these solvents is hazardous and should be avoided. Always keep containers closed when not in use. Always provide adequate ventilation. DO NOT use near flames or sparks. Avoid prolonged skin contact and breathing of vapor mist. Ground all containers when pouring.

SECTION X - REGULATORY INFORMATION

SARA TITLE III
SECTION 313 - SUPPLIER NOTIFICATION

"Effective January 1, 1989 any facility in Standard Industrial Classification (SIC) Codes 20 through 39 that manufactures, processes, distributes, or sells a mixture or trade name product containing toxic chemicals must provide written notice to the recipient of this product with the first shipment in each calender year. If you are unsure of your reporting responsibilities or if you require more information the EPA suggests contacting the SARA Title III Hotline at 1-800-535-0202."

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 (SARA TITLE III) AND OF 40 CFR 372. (NO MATERIALS LISTED INDICATES THERE ARE NO REPORTABLE CHEMICALS IN THIS PRODUCT):

CHEMICAL NAME	CAS #	% BY WGT
TOLUOL	108-88-3	7.29
METHYL ISOBUTYL KETONE	108-10-1	12.61

CALIFORNIA PROPOSITION 65 WARNING (If there is no warning - this material contains no Proposition 65 ingredients.)

FOR INDUSTRIAL USE ONLY

The information contained herein is furnished without warranty of any kind. Users should consider these data only as supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

MATERIAL SAFETY DATA SHEET
MATTHEWS PAINT COMPANY

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY:	287484SP
REVISION DATE:	11/14/96 (001) 0808
CUSTOMER PART #/NAME:	Not applicable
PRODUCT TRADE NAME:	HS TURBO ENHANCER
CHEMICAL FAMILY:	CATALYST
EMERGENCY MEDICAL/SPILL INFO:	(800) 424-9300 CHEMTREC (U.S.) 91-800-00-214 (MEXICO) (514) 645-1320 (CANADA)
TECHNICAL INFORMATION:	(800) 323-6593
PRODUCT SAFETY/MSDS INFORMATION:	8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739 (414) 947-0700
DATE OF MSDS PREPARATION:	12/11/96

PRIMARY HAZARD WARNING

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. Harmful or fatal if swallowed. May cause skin burns. Causes severe eye irritation. May be harmful if absorbed through the skin. Vapor and/or spray mist harmful if inhaled.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

Denied 1. 7

ALBERTO CULVER

MATERIAL SAFETY DATA SHEET Page 1 of 4

SECTION I - PRODUCT INFORMATION

Product Identifier: STATIC GUARD Catalog Number:

Distributor: Alberto Culver Canada, LTD.
506 Kipling Avenue
Toronto M8Z 5E2
Ontario Canada

Product Use: Anti-Static Spray

Preparer: ALBERTO-CULVER USA, INC.
2525 ARMITAGE AVENUE
MELROSE PARK, IL 60160
August E. Fiebig, Ph.D.
Director Applied Research

EMERGENCY PHONE: (312) 450-3175
Business Phone: (312) 450-3135

Date Prepared: January 2, 1996 Date Revised:

SECTION II - INGREDIENTS

Chemical Identity	CAS Numbers	Approx %	Exposure Limits in Air OSHA (PEL)	ACGIH (TLV)
SD Alcohol 40	64175	66	1000 ppm	1000 ppm
Tert-Butyl Alcohol	75650	<4	100 ppm	150 ppm
Brucine Sulfate	4845992	<0.4	Not Avail.	Not Avail.
Ditallowdimonium Chloride	68783788	<2	Not Avail.	Not Avail.
Isopropyl Alcohol	67630	<1	400 ppm	400 ppm
Ammonium Acetate	631618	<1	Not Avail.	Not Avail.
Isobutane	75285	15	Not Avail.	Not Avail.
Propane	74986	12	1000 ppm	Not Avail.
Chloromethane	74873	0.0004 Max if present	50 ppm TWA 100 ppm STEL	50 ppm TWA 100 ppm STEL
Fragrance	N/A	<0.5	N/A	N/A

TOXICITY INFORMATION

Chemical Identity	Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
STATIC GUARD	None Available	None Available	>200 MG/L/1H
SD Alcohol 40	13.7 G/KG (Rat)	>2 G/KG (Rabbit)	>16,000 ppm/8H (Rat)
Tert-Butyl Alcohol	3.5 G/KG (Rat)	None Available	None Available
Brucine Sulfate	None Available	None Available	None Available
Ditallowdimonium Chloride	None Available	None Available	None Available
Isopropyl Alcohol	5045 MG/KG (Rat)	None Available	None Available
Ammonium Acetate	None Available	None Available	None Available
Isobutane	None Available	None Available	None Available
Propane	None Available	None Available	None Available
Chloromethane	None Available	None Available	152000 MG/M3/30M

Please note that this is a "consumer product" and under the "Food & Drugs Act".

SECTION III - PHYSICAL CHARACTERISTICS

Physical Form: Aerosol Anti-Static Spray
Boiling Point: 173-181 Degrees F (Aerosol Concentrate-Ethanol)
Specific Gravity (H2O=1): Less than 1
Water Solubility: Concentrate 100% soluble
Vapor Density (air=1): Greater than 1
Appearance: Aerosol Spray-Clear Colorless Liquid — Melting Point: N/A
Evaporation Rate (Ethyl Alcohol=1): 1 — Apparent pH: 7.5-8.5
Aerosol Can Pressure: 68 psig — Odor: Characteristic

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS (HMIS) For Total Product - Normal Usage

Rating Scale for Hazard Determination:
0 Minimal 1 Slight 2 Moderate 3 Serious 4 Severe

Product Rating:
Health: 1 Flammability: 2 Reactivity: 0 Personal Protection: 0

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point: 56 Degrees F Method Used: TCC
Auto Ignition Temperature: 685 Degrees F (Ethanol)
Flammable Limits in Air, % Volume LEL: 3.3% UEL: 19.0% Concentrate
LEL: 1.8% UEL: 9.5% Propellant

Extinguishing Media _X_ Water Spray _X_ Foam _X_ Carbon Dioxide
_X_ Dry Chemical ___ Other (specify):

Special Fire Fighting Procedures: WARNING. FLAMMABLE LIQUID AND GAS. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container explosion and rocketing. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent explosion and rocketing of aerosol cans.

SECTION V - REACTIVITY

Stability Stable: _X_ Unstable ___ Conditions to avoid: N/A

Incompatibility (materials to avoid): Materials damaged by Ethyl Alcohol

Hazardous Decomposition or Byproducts: Carbon Monoxide, Nitrogen compounds, Carbon Dioxide, Hydrogen Chloride and unidentified organic compounds may be formed during combustion.

Hazardous Polymerization: None Conditions to Avoid: Ignition sources

SECTION VI - HEALTH HAZARDS

Route(s) of Entry Inhalation: _X_ Skin: ___ Ingestion: _X_

Health Hazards:

Acute: Product may cause moderate to severe eye irritation. Vapors may cause slight irritation to mucous membranes. High vapor concentrations may cause CNS depression.

Chronic: Studies in laboratory animals involving prolonged and repeated exposures to ethyl alcohol have resulted in such effects as liver damage, embryotoxicity, fetotoxicity, and teratogenicity. A transient mutagenic effect has been reported in rats.

Signs and Symptoms of Exposure: CNS depression may be evidenced by giddiness, headache, dizziness and nausea.

Medical Conditions Generally Aggravated by Exposure: Prolonged exposure may aggravate preexisting eye, skin and respiratory disorders. Impaired liver function from preexisting disorders may also be aggravated.

EMERGENCY AND FIRST AID TREATMENT

Eye Contact: Rinse well with plenty of running water. Seek medical attention if irritation persists.

Skin Contact: Product is intended to be left on clothing. No special precautions necessary for incidental contact. Soap and water can be used to remove product from the skin.

Inhalation: Move victim to fresh air if necessary.

Ingestion: If ingestion occurs seek medical attention.

SECTION VII - ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES

WARNING. FLAMMABLE LIQUID AND GAS. ELIMINATE ALL IGNITION SOURCES. Handling equipment must be grounded to prevent sparking. *** LARGE SPILLS*** Evacuate the hazard area of unprotected personnel. Wear appropriate respirator and protective clothing. Shut off source of leak only if safe to do so. Dike and contain. If vapor cloud forms, water fog may be used to suppress; contain run-off. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material; place in non-leaking containers for appropriate disposal. Flush area with water to remove trace residue; dispose of flush solutions as above. *** SMALL SPILLS *** Take up with an absorbent material and place in non-leaking containers; seal tightly for proper disposal.

WASTE DISPOSAL

A small number of empty containers can be disposed of in ordinary trash. For disposal of a large number of empty containers or full containers contact a licensed waste hauler.

Under EPA-RCRA (40 CFR 261.21), If this product becomes a waste material, it would be ignitable hazardous waste, hazardous waste number D001. Refer to latest EPA or State regulations regarding proper disposal.

ENVIROMENTAL HAZARDS

EPA - Comprehensive Enviromental Response, Compensation and Liability Act. Under EPA-CERCLA ("superfund") releases to air, land or water may be reportable to the National Response Center, 800-424-8802 (circumstances surrounding the release and cleanup determine reportability).

SECTION VIII - CONTROL MEASURES

Specified Respiratory Protection: None required for normal usage.

Ventilation required: Spark proof solvent ventilation may be required if large amounts of product are expelled.

Protective Gloves: None required

Eye Protection: Keep out of eyes

Other Protective Equipment: N/A

Work/Hygienic Practices: N/A

SECTION IX - SAFE HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage: Cool dry storage away from ignition sources at temperatures below 120 DEGREES F. Keep out of reach of children.

SECTION X - TRANSPORTATION REQUIREMENTS

Hazardous materials description and proper shipping name: Consumer Commodity
Hazard class: N/A
Identification number: N/A
Labels required: N/A

NOTICE: The information presented herein is based on experimental data submitted by the manufacturers of the raw materials and is considered scientifically correct, however, no warranty, expressly implied or otherwise, is made to the accuracy or suitability of this information for application to the purchaser's intended purpose or for consequences of its use. Use these materials only as directed. For further information concerning product safety and use, call the number listed on the front of the MSDS.

MATERIAL SAFETY DATA SHEET

CTC PRODUCT #: 47-3111
01 00

SUPPLIER'S NAME
CANADIAN TIRE CORP.
P.O. Box 770, Station K
Toronto, ON M4P 2V8

EMERGENCY TELEPHONE NO.
(905) 764-6334

MANUFACTURER'S NAME
DUPLI-COLOR/KRYLON CANADA LTD.
66 W. Beaver Creek Rd
Richmond Hill, ON L4B 1G5

EMERGENCY TELEPHONE NO.
(216) 566-2917

DATE OF PREPARATION
23-JUL-96

INFORMATION TELEPHONE NO.
(905) 764-6334

Section I -- PRODUCT IDENTIFICATION AND USE

PRODUCT NUMBER

47-3111-8

HMIS CODES

Health	2
Flammability	4
Reactivity	0

PRODUCT NAME
WHITE
PRODUCT CLASS
Paint

Section II -- HAZARDOUS INGREDIENTS

INGREDIENT CAS No.	% by WT	ACGIH TLV <STEL>	UNITS	LD-50 (Rat-Oral) Mg/Kg	LC-50 (Rat) PPM/4H
Propane 74-98-6	10	NAv		NAv	NAv
Butane 106-97-8	10	800	PPM	NAv	NAv
Toluene. 108-88-3	8	50	PPM (Skin)	5000	NAv
Ethanol 64-17-5	1	1000	PPM	7060	NAv
Acetone. 67-64-1	42	750 <1000>	PPM PPM	5800	NAv
Methyl Ethyl Ketone. 78-93-3	7	200 < 300>	PPM PPM	2740	NAv
Ethyl 3-Ethoxypropionate. 763-69-9	8	NAv		5000	NAv
Titanium Dioxide. 13463-67-7	3	10	MG/M3 as Dust	NAv	NAv

Section III -- PHYSICAL DATA

PRODUCT WEIGHT -- 772.19 g/l
SPECIFIC GRAVITY -- 0.78
BOILING POINT -- <0 -698 F
VOLATILE VOLUME -- 93 %

EVAPORATION RATE -- Faster than Ether
VAPOR DENSITY -- Heavier than Air
MELTING POINT -- N.A.
SOLUBILITY IN WATER -- N.A.

Continued on page 2

Section IV -- FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	LEL	UEL
-20 F TCC	1.0	19.0

FLAMMABILITY CLASSIFICATION

RED LABEL -- Extremely Flammable, Flash below 21 F

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Section V -- TOXICOLOGICAL PROPERTIES

ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

ACUTE Health Hazards

EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CHRONIC Health Hazards

No ingredient in this product is an IARC or NTP listed carcinogen.

Methyl Ethyl Ketone may increase the nervous system effects of other solvents.

Prolonged overexposure to solvent ingredients in Section II may cause adverse effects to the liver, urinary, cardiovascular and reproductive systems.

Rats exposed to titanium dioxide dust at 250 mg./m3 developed lung cancer, however, such exposure levels are not attainable in the workplace.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Section VI -- REACTIVITY DATA

STABILITY -- Stable

Continued on page 3

MSDS

Product **6A386** PAINT 1GL FLAT BLACK is a current Grainger item.

MATERIAL SAFETY DATA SHEET
For Coatings, Resins and Related Materials

==========
SECTION I-PRODUCT AND PREPARATION INFORMATION
==========

MANUFACTURER: RUST-OLEUM CORPORATION EMERGENCY AND INFORMATION
TELEPHONE: (708)367-7700
ADDRESS: 11 Hawthorn Parkway
Vernon Hills, IL
60061

PRODUCT CLASS: Alkyd Resin-High Gloss and Flat Enamels
MANUFACTURER'S CODE: 6H096, 6H100, 6H102, 6H103, 6H104, 6H105, 6H106, 6H107, 6H108, 6H109, 6H110, 6H111, 6H112, 6H115, 6H116, 6H117, 6H120, 6H121, 6H122, 6H123, 6H124, 6H125, 6H126, 6H127, 6H128
TRADE NAME: Industrial Enamels
DATE OF PREPARATION: September 11, 1992 (rwb)

==========
SECTION II-HAZARDOUS INGREDIENTS
==========

INGREDIENT/CAS NO	WT %	ACGIH-TLV	OSHA-PEL	LEL	mm Hg@20C
Mineral Spirits/ 8052-41-3	30-55%*	100ppm	100ppm	1.0%	2.0

* Nearest 5%
NE - Not established NA - Not Applicable

==========
SECTION III-PHYSICAL DATA
==========

Boiling Range: 307-389 F (153-198 C)
Vapor Density: Heavier than air

Evaporation Rate: Slower (Ether=1)
% Volatile: 51-66% (by volume)
Wt/gal: 7.5-11.0 lbs.
ph: NA

==========
SECTION IV-FIRE AND EXPLOSION HAZARDS
==========

Flammability Classification: OSHA Class II Combustible liquid
Flashpoint: 104 F(TCC)

DOT Classification: Combustible paint liquid

Extinguishing Media: NFPA Class B extinguishers (Carbon dioxide, dry chemical or foam).

Special Fire Fighting Procedures: Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion. If water is used, fog nozzles are preferred.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode when exposed to extreme heat. DO NOT apply to hot surfaces.

==========
SECTION V-HEALTH HAZARD DATA
==========

EFFECTS OF OVEREXPOSURE:

Acute (Inhalation): Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Repeated overexposures may lead progressively to staggering gait, confusion, unconsciousness or coma. Causes nose and throat irritation.

Acute (Skin or Eye Contact): Causes eye and skin irritation which can lead to dermatitis with repeated overexposures.

Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

EMERGENCY AND FIRST AID PROCEDURES:

Inhalation: Remove from exposure, restore breathing and notify a physician.

Eye Contact: Flush immediately with large amounts of water for at least 15 minutes. Notify a physician.

Skin Contact: Wash affected area with soap and water, remove contaminated clothing and wash before reuse.

Ingestion: DO NOT induce vomiting. Keep person warm, quiet and get medical attention. Aspiration of this material into the lungs can cause chemical pneumonitis which can be fatal.

SECTION VI-REACTIVITY DATA

Stability: Stable
Incompatible: With strong oxidizing agents
Hazardous Decomposition Products: By open flame - Carbon monoxide and Carbon dioxide.
Hazardous Polymerization: Will not Occur

SECTION VII-SPILL OR LEAK PROCEDURES

Release or Spill Procedures: Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools.

Waste Disposal Method: Dispose of according to local, state and federal regulations. DO NOT incinerate closed containers.

SECTION VIII-SPECIAL PROTECTION INFORMATION

Respiratory Protection: Use NIOSH approved chemical cartridge respirator (TC23C) to remove solid airborne particles of overspray and organic vapors during spray application.

In Confined Areas: Use NIOSH approved supplied-air respirators or hoods (TC19C).

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other Protective Equipment: Use impervious gloves and/or clothing to prevent prolonged skin contact.

Ventilation: Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits.

SECTION IX-SPECIAL PRECAUTIONS AND REGULATORY ISSUES

Handling and Storage Precautions: Do not store above 120F. Store large quantities in buildings designed and protected for storage of NFPA Class II Combustible liquids. Containers should be grounded when pouring. Empty containers may be hazardous.

CALIFORNIA PROPOSITION 65 WARNING: These products are not known to contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

047-5657-8 PART# 5657
REPAIR KIT,AUTOBODY
BONDO CORPORATION
STATUS: ACT VENDOR#: 8097

Product #47-5657-8

MATERIAL SAFETY DATA SHEET

RPM - DYNATRON/BONDO CORPORATION
3700 ATLANTA INDUSTRIAL PARKWAY, N.W.
ATLANTA, GA 30331
404-696-2730
FOR TRANSPORTATION EMERGENCIES, call CHEMTREC 800-424-9300

HEALTH HAZARD	2
FLAMMABILITY HAZARD	3
REACTIVITY HAZARD	1
PERSONAL PROTECTION	I

SECTION I - PRODUCT IDENTIFICATION

Product Name: Lightweight Filler for Motomaster Autobody Repair Kit
Chemical Family: Unsaturated Polyester Resin
TDG Classification: Consumer Commodity

SECTION II - HAZARDOUS INGREDIENTS & OTHER COMPONENTS

Ingredient	% By Weight	Exposure Limits	CAS #
Unsaturated Polyester Resin	<35	NE	26123-45-5
Styrene Monomer	<18	50 ppm-TWA 100 ppm-STEL	100-42-5
Inert Powders & Fibers, <50 such as			
Talc		2 mg/m^3-TWA	14807-96-6
Fibrous Glass		15 mg/m^3-TWA-total dust 5 mg/m^3-TWA-respirable 10 mg/m^3-ACGIH-TLV-total	65997-17-3

SECTION III - PHYSICAL DATA

Boiling Point: 293°F (Styrene) **Specific Gravity:** 1.2 ± .15

Vapor Pressure: (mm Hg) 5.2 (Styrene) **Percent Volatile By Wt.:** <18

Vapor Density (AIR=1): 3.6 (Styrene) **Evaporation Rate (Bu Ace=1):** UK

Solubility in Water: Negligible **Appearance/Odor:** White Paste, Styrene Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 90°F (Styrene) (PMCC) **Flammable Limits:** LEL-1.1% UEL-6.1% (Styrene)

Extinguishing Media:
Carbon dioxide, dry chemical (small fires); foam and water fog (large fires)

Special Fire Fighting Procedures:
Cool containers with water. Fire fighters should wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards:
High temperature exposure for extended periods of time will result in spontaneous uncontrolled exothermic polymerization.

SECTION V - REACTIVITY DATA

Stability: Stable
Incompatibility (Materials to Avoid):
Strong acids and oxidizing agents
Hazardous Decomposition Products:
Heating of this material to decomposition may cause the emission of irritating, acrid fumes.
Hazardous Polymerization: May occur
Conditions to Avoid:
Heat and direct sunlight

SECTION VI - SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:
Remove all sources of ignition. Ventilate area. Absorb spill with an absorbent material such as sawdust, vermiculite or sand and place in a closed container. If large spill, dike the area to prevent this material from entering water systems or sewers.

Waste Disposal Method:
Dispose in accordance with Federal, State and Local regulations. If discarded, this material and containers are considered RCRA hazardous wastes based on the characteristic of ignitability (40CFR 261.21).

For further information, contact your state or local solid waste agency or the United States Environmental Protection Agency's RCRA hotline (1-800-424-9346 or 202-382-3000).

SECTION VII - HEALTH HAZARD DATA

Permissible Exposure Level:
OSHA PEL and ACGIH TLV are both 50 ppm for an 8-hour Time Weighted Average (TWA). The OSHA and ACGIH Short Term Exposure Level (STEL) are 100 ppm for a 15-minute period. Exposure to styrene may exceed the STEL during a 15-minute period (no ceiling for brief exposures); however, the average for a single STEL period must not exceed 100 ppm.

Primary Route(s) of Entry:
Skin Absorption
Inhalation

Effects of Overexposure:
Acute: May cause eye and skin irritation. Vapors may cause mucous membrane irritation and upper respiratory tract discomfort.
Chronic: Repeated exposure to high concentrations of vapor may cause liver and kidney damage.

Signs and Symptoms of Exposure:
Eyes: May cause irritation. Liquid splashes may result in more serious injuries. May cause tearing.
Skin: Prolonged or frequent contact may cause defatting and dryness of the skin with resultant irritation and possible dermatitis. Styrene may be absorbed through the skin in toxic amounts.
Inhalation: Vapors may cause mucous membrane irritation and upper respiratory tract discomfort. High concentrations may result in headache, nausea, insensibility and other central nervous system effects.
Ingestion: May cause gastrointestinal disturbances, pain and discomfort.

Medical Conditions Generally Aggravated by Exposure:
Individuals with chronic respiratory conditions (i.e., asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any fume or airborne particulate matter exposure.

SECTION VII - HEALTH HAZARD DATA - CONTINUED

Carcinogenicity:
For hazard communication purposes under OSHA Standard 29CFR 1910.1200, styrene is listed as possibly carcinogenic to humans (Class 2B) by the International Agency for Research on Cancer (IARC). Neither data from various long-term animal studies nor from epidemiological studies of workers exposed to styrene provide adequate basis to conclude that styrene is carcinogenic.

Emergency and First Aid Procedures:
Eyes: Flush with plenty of water for at least 15 minutes. Seek immediate medical aid.
Skin: Wash with soap and water.
Inhalation: Remove victim from exposure. If unconscious, administer artificial respiration and/or oxygen as needed. Seek medical aid.
Ingestion: **DO NOT INDUCE VOMITING** (aspiration hazard). Seek immediate medical aid.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection:
Organic vapor respirator if PEL or TLV is exceeded. Appropriate respirator selection depends upon type and magnitude of exposure.
Ventilation:
General ventilation is required during normal use. Local ventilation may be required during certain operations to keep exposure levels below the limits listed in Section II.
Eye Protection:
Face shield or chemical goggles
Protective Gloves:
Appropriate impervious gloves to prevent skin contact. Polyvinyl alcohol and polyethylene protective garments have been recommended for protection against materials of this chemical class.
Other Protective Equipment:
Wear protective clothing to prevent skin contact. Eye wash stations and safety showers should be available.
Hygienic Practices:
Wash hands with soap and water after every usage.

SECTION IX - SPECIAL PRECAUTIONS

Precautions To Be Taken in Handling and Storage:
Avoid storage above 100°F. Avoid prolonged or repeated skin contact. Avoid inhalation of vapors. **KEEP OUT OF REACH OF CHILDREN.**

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MATERIAL SAFETY DATA SHEET

RPM - DYNATRON/BONDO CORPORATION
3700 ATLANTA INDUSTRIAL PARKWAY, N.W.
ATLANTA, GA 30331
404-696-2730
FOR TRANSPORTATION EMERGENCIES, CALL CHEMTREC 800-424-9300

HEALTH HAZARD	2
FLAMMABILITY HAZARD	2
REACTIVITY HAZARD	2
PERSONAL PROTECTION	H

SECTION I - PRODUCT IDENTIFICATION

Product Name: Red Cream Hardener for Body Repair Kit
Chemical Family: Organic Peroxide

SECTION II - HAZARDOUS INGREDIENTS & OTHER COMPONENTS

Ingredient	% By Weight	Exposure Limits	CAS #
Benzoyl Peroxide	50	5 mg/m^3-TWA-10 hr. shift	94-36-0
Isodecyl Benzoate	15-20	NE	131298-44-7
Water	21	NE	7732-18-5

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SECTION III - PHYSICAL DATA

Boiling Point: Decomposes **Specific Gravity:** 1.2

Vapor Pressure: Not Applicable **Percent Volatile By Wt.:** Not Applicable

Vapor Density (AIR=1): Not Applicable **Evaporation Rate (Diethyl Ether=1):** Not Applicable

Solubility in Water: Slight **Appearance/Odor:** Red, Smooth Paste/ Slight Ester Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: Not Applicable **Flammable Limits:** Not Applicable

Extinguishing Media:
Water from a safe distance - preferably with a fog nozzle. In case of very small fires, other means such as carbon dioxide, foam or dry chemical extinguishers may be effective.
Special Fire Fighting Procedures:
Firemen should be equipped with protective clothing and SCBAs. In case of fire near storage area, cool the containers with water spray.
Unusual Fire and Explosion Hazards:
Part of oxygen for combustion is supplied by the peroxide itself. Fire hazard increases when material becomes dry.

SECTION V - REACTIVITY DATA

Stability: Stable unless exposed to heat, flames and drying conditions
Incompatibility (Materials to Avoid):
Dimethylaniline, cobalt naphthanate and other promoters, accelerators, reducing agents or any hot material.
Hazardous Decomposition Products:
Dense white smoke of benzoic acid; phenyl benzoate; terphenyls; biphenyls; benzene and carbon dioxide
Hazardous Polymerization: Will not occur

SECTION VI - SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:
Material left uncovered could increase the fire hazard due to evaporation of water and leaching of plasticizer away from the benzoyl peroxide. Dike to prevent runoff from entering drains, sewers, streams, etc., and transfer into containers. Clean up residue or small spills immediately by soaking up with an inert diluent and transfer to a clean DOT approved container.
Waste Disposal Method:
Immediately dispose in accordance with Federal, State and Local regulations.

SECTION VII - HEALTH HAZARD DATA

Primary Route(s) of Entry:
Eye Contact
Skin Absorption
Ingestion

Carcinogenicity:
None of the components of this material are listed as carcinogens by NTP, IARC or OSHA.

Effects of Overexposure:
May cause dermatitis, lung irritation, asthmatic effects, testicular atrophy, and vasolidation. Mutation data reported.

Medical Conditions Generally Aggravated by Exposure:
Unknown

Toxicological Data:
(Benzoyl Peroxide)
oral-rat LD_{50}: 7710 mg/kg
(Isodecyl Benzoate)
oral-rat LD_{50}: >5000 mg/kg

Emergency and First Aid Procedures:
Eyes: Flush eyes with water for 15 minutes and seek medical attention.
Skin: Wash contaminated area thoroughly with soap and water.
Ingestion: Call a poison control center and seek medical attention.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection:
None
Ventilation:
No special ventilation required.
Eye Protection:
Safety goggles recommended
Protective Gloves:
Protective gloves recommended
Other Protective Equipment:
None
Hygienic Practices:
Wash hands with soap and water after every usage.

SECTION IX - SPECIAL PRECAUTIONS

Precautions To Be Taken in Handling and Storage:
Avoid contact with eyes and skin. Keep away from heat, sparks, flame and direct sunlight. Keep container closed when not in use. Store in proper storage area and remove only as needed.

SECTION X - SUPPLEMENTAL INFORMATION

Regulatory Information:
SARA Title III:Benzoyl peroxide is listed as a SARA toxic chemical and is subject to the reporting requirements of section 313 Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Prepared/Revised By: Safety/Environmental Services

Latest Revision Date: April 17, 1995

All statements, technical information, and recommendations contained herein are based upon available scientific tests or data which we believe to be reliable. Since we cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used, Dynatron/Bondo makes no warranties, express or implied, and assumes no responsibility in connection with any use of this information.

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MATERIAL SAFETY DATA SHEET

RPM - DYNATRON/BONDO CORPORATION
3700 ATLANTA INDUSTRIAL PARKWAY, N.W.
ATLANTA, GA 30331
404-696-2730
FOR TRANSPORTATION EMERGENCIES, call CHEMTREC 800-424-9300

HEALTH HAZARD	2
FLAMMABILITY HAZARD	3
REACTIVITY HAZARD	2
PERSONAL PROTECTION	B

SECTION I - PRODUCT IDENTIFICATION

Product Name: Glazing & Spot Putty for Motomaster Body Repair Kit

SECTION II - HAZARDOUS INGREDIENTS & OTHER COMPONENTS

Ingredient	% By Weight	Exposure Limits	CAS #
Acetone	1-5	750 ppm-TWA 1000 ppm-STEL	67-64-1
Xylene	10-15	100 ppm-TWA 150 ppm-STEL	1330-20-7
Methyl Isobutyl Ketone	1-5	100 ppm-PEL 50 ppm-TLV 75 ppm-ACGIH-STEL 50 ppm-NIOSH-8 hr. TWA	108-10-1
2-Butoxyethanol	5-10	25 ppm-PEL-skin 25 ppm-TLV-skin	111-76-2
Propylene Glycol Monomethyl Ether Acetate	5-10	NE	108-65-6
Ethylene Glycol Monoethyl Ether Acetate	<5	100 ppm-PEL-skin 5 ppm-TLV-skin	111-15-9
Inert Fillers:	>50		
Talc, Non-Asbestiform		2 mg/m^3-TWA	14807-96-6
Ferric Oxide	<5	10 mg/m^3-total fume-OSHA 5 mg/m^3-total fume-ACGIH	1309-37-1

SECTION III - PHYSICAL DATA

Boiling Point: 132°F

Specific Gravity: 1.60 ± .15

Vapor Pressure: (mm Hg.) 16 @ 68°

Percent Volatile By Wt.: <35

Vapor Density (AIR=1): Heavier

Evaporation Rate (Bu Ace=1): NA

Solubility in Water: Slight

Appearance/Odor: Red Viscous Paste/ Solvent Odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: -4°F TCC

Flammable Limits: LEL-1.1 UEL-12.8

Extinguishing Media:
Carbon dioxide, dry chemical, foam

Special Fire Fighting Procedures:
Water may be used to cool fire exposed containers to prevent pressure build up when exposed to extreme heat.

Unusual Fire and Explosion Hazards:
When exposed to heat and flame, material is a fire and explosion hazard. When involved in fire, toxic degradation products can be produced, including CO, CO_2, and oxides of nitrogen.

SECTION V - REACTIVITY DATA

Stability: Stable
Incompatibility (Materials to Avoid):
Strong oxidizers, strong acids, strong bases
Hazardous Decomposition Products:
Carbon dioxide, carbon monoxide. Dense toxic smoke can be produced when material burns.
Hazardous Polymerization: Will not occur
Conditions to Avoid:
Heat, sparks, sources of ignition, open flame

SECTION VI - SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled:
Remove all sources of ignition. Flush spilled material into stable retaining areas or containers with large quantities of water. Small amounts of spilled material may be absorbed into an appropriate absorbent. Dried film should be considered extremely flammable. Use only non-sparking tools to clean dried film. Eliminate all sources of flame or heat before proceeding with cleanup.

Waste Disposal Method:
Dispose in accordance with Federal, State and Local regulations. If discarded, this material and containers are considered RCRA hazardous wastes based on the characteristic of ignitability (40CFR 261.21).

For further information, contact your state or local solid waste agency or the United States Environmental Protection Agency's RCRA hotline (1-800-424-9346 or 202-382-3000).

SECTION VII - HEALTH HAZARD DATA

Primary Route(s) of Entry:
Eye Contact
Skin Contact
Skin Absorption
Inhalation

Carcinogenicity:
None of the components of this material are listed as carcinogens by OSHA, NTP or IARC.

Effects of Overexposure:
Acute: May cause severe eye irritation, moderate skin irritation, defatting, dermatitis
Chronic: Prolonged or repeated exposure by inhalation of vapor concentrations in excess of TLV and/or by skin contact with liquid may cause damage to nervous system, blood and kidneys. Symptoms include headache, lethargy, drowsiness, weakness, difficulty walking, personality change, poor appetite, nausea and weight loss.

Medical Conditions Generally Aggravated by Exposure:
Preexisting skin, respiratory, liver and kidney disorders

Emergency and First Aid Procedures:
Eyes: Flush with large amounts of water for at least 15 minutes. If irritation persists, consult a physician.
Skin: Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse.
Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.
Ingestion: If swallowed, call a physician immediately. **ONLY** induce vomiting at the instructions of a physician. Never give anything by mouth to an unconscious person.

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SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection:
The use of respiratory protection depends on vapor concentration above the exposure limits: Use NIOSH approved organic cartridge vapor respirator if necessary.
Ventilation:
Provide sufficient mechanical (general and/or local exhaust) to maintain exposure below limits.
Eye Protection:
Safety glasses
Protective Gloves:
Solvent resistant, such as rubber or neoprene
Hygienic Practices:
Wash hands with soap and water after every usage.

SECTION IX - SPECIAL PRECAUTIONS

Precautions To Be Taken in Handling and Storage:
Keep product and containers cool, dry, and away from sources of ignition. Use and store product with adequate ventilation. Keep containers closed when not in use. Avoid personal contact with product.

SECTION X - SUPPLEMENTAL INFORMATION

Regulatory Information:
SARA Title III: Acetone, xylene, methyl isobutyl ketone and ethylene glycol monoethyl ether acetate are listed as a SARA toxic chemicals and are subject to the reporting requirements of section 313 Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Prepared/Revised By: Safety/Environmental Services

Date: April 17, 1995

All statements, technical information, and recommendations contained herein are based upon available scientific tests or data which we believe to be reliable. Since we cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used, Dynatron/Bondo makes no warranties, express or implied, and assumes no responsibility in connection with any use of this information.

MATERIAL SAFETY DATA SHEET

RPM - DYNATRON/BONDO CORPORATION
3700 ATLANTA INDUSTRIAL PARKWAY, N.W.
ATLANTA, GA 30331
404-696-2730
FOR TRANSPORTATION EMERGENCIES, call CHEMTREC 800-424-9300

HEALTH HAZARD	2
FLAMMABILITY HAZARD	4
REACTIVITY HAZARD	0
PERSONAL PROTECTION	J

SECTION I - PRODUCT IDENTIFICATION

Product Name: Primer Motomaster Autobody Repair Kit
Chemical Family: Coating (Aerosol)

SECTION II - HAZARDOUS INGREDIENTS & OTHER COMPONENTS

Ingredient	% By Weight	Exposure Limits	CAS #	Vapor Pressure
Methylene Chloride	50-55	500 ppm-OSHA-PEL-TWA 50 ppm-ACGIH-TLV	75-09-2	340.00 mmHg.
Methyl Ethyl Ketone	20-25	200 ppm-OSHA-PEL-TWA 200 ppm-ACGIH-TLV	78-93-3	70.00 mmHg.
Toluene	<5	100 ppm-OSHA-PEL-TWA 50 ppm-ACGIH-TWA	108-88-3	22.00 mmHg.
Propylene Glycol Monomethyl Ether Acetate	<5	N/E	108-65-6	3.70 mmHg.
Propylene Oxide	<0.1	20 ppm-OSHA-TWA[1] 20 ppm-ACGIH-TLV	75-56-9	442.00 mmHg.
Propane (propellant)	10-15	1000 ppm-OSHA-PEL-TWA Simple asphyxiant-ACGIH	74-98-6	124 psia @70°F

N/E-OSHA PEL or ACGIH TLV not established for this material.
N/A - Not applicable.

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SECTION VII - HEALTH HAZARD DATA

Chronic Effects of Overexposure:
Excessive overexposure to components of this material has been suggested to cause liver abnormalities in humans. Overexposure to components of this material has also been found to cause the following effects in laboratory animals: liver abnormalities, kidney damage, lung damage, spleen damage, and brain damage. Minor embryotoxic/fetotoxic effects have been observed in laboratory rats exposed to methyl ethyl ketone by inhalation at levels greater than 1000 ppm (five times the OSHA PEL/TWA) for most of the gestation period.
Methylene Chloride is listed as a potential carcinogen by IARC (List 2A). Overexposure to Methylene Chloride can raise the level of carbon monoxide in the blood causing cardiovascular stress. Results of laboratory animal tests show that methylene chloride produced benign tumors in rats exposed to 500 ppm and cancer in rats and mice exposed to 1500 ppm and higher, but not in hamsters. Limited epidemiology studies failed to show a tumorigenic response in plant workers. Consequently, Methylene Chloride is not believed to pose a measurable cancer risk to man when handled as recommended. Laboratory animal studies to evaluate potential birth defects and effects on reproduction show a low degree of maternal and embryotoxicity at 4500 ppm, no teratological effects and no effects on reproduction at concentrations of 4500 and 1225 ppm.
Propylene Oxide has been listed as a probable carcinogen by IARC and NTP although there are no published epidemiology studies relating propylene oxide to chronic health effects. Animal studies indicate a tumorigenic effect after life time exposures to levels of propylene oxides exceeding the ACGIH TLV.
Acute Effects of Overexposure:
Eyes: Contact with liquid or vapor may result in irritation, redness, tearing, and blurred vision.
Skin: Contact with wet material may result in irritation, dermatitis, and possible defatting of the skin.
Inhalation: Excessive inhalation of vapors may cause nasal and respiratory irritation, acute nervous system depression, fatigue, weakness, nausea, headache, dizziness, possible unconsciousness and even asphyxiation.
Swallowing: Ingestion of this material may cause gastrointestinal irritation, nausea, diarrhea, and vomiting. Aspiration of material into the lungs due to vomiting produce chemical pneumonitis which can be fatal.
First Aid Procedures:
If In Eyes: Flush immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment.
If On Skin: Immediately wash affected area with soap and water. Remove contaminated clothing. Consult a Physician if irritation develops.
If Inhaled: Remove person to fresh air. Restore breathing. Keep person warm and quiet. Treat symptomatically. Get medical attention.
If Swallowed: Drink one or two glasses of water to dilute. Keep person warm and quiet. Consult a physician or poison control center immediately.

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SECTION VIII - SPECIAL PROTECTION INFORMATION

Eye Protection: Splash goggles should be worn.
Skin Protection: Protective gloves and proper clothing should be worn to prevent skin contact. Gloves should be made of neoprene or natural rubber.
Respiratory Protection: Use NIOSH-approved respirators designed to remove particulate matter and organic solvent vapors.
Ventilation: General dilution or local exhaust ventilation should be provided to keep exposures below acceptable limits (Section II) and to keep solvent vapors below the lower explosion limit.
Other Protective Equipment: Impermeable clothing should be worn to prevent prolonged or repeated contact of wet material with the skin.
Hygienic Practices: Always wash hands after using this material and before eating, drinking, or smoking.

SECTION IX - SPECIAL PRECAUTIONS

Precautions To Be Taken in Handling and Storage: Store material in a cool, well-ventilated area. Do not store at temperatures above 120 degrees F. Do not use or store neat heat, sparks, or open flame.
Other Precautions: Keep out of reach of children. Do not take internally. Avoid contact with eyes and skin. Do not puncture or incinerate aerosol containers.

SECTION X - SUPPLEMENTAL INFORMATION

Regulatory Information:
SARA Title III: Methylene chloride, methyl ethyl ketone, toluene, and propylene oxide are listed as a SARA toxic chemicals and are subject to the reporting requirements of section 313 Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Prepared By: Safety/Environmental Services

Latest Revision Date: April 17, 1995

All statements, technical information, and recommendations contained herein are based upon available scientific tests or data which we believe to be reliable. Since we cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used, Dynatron/Bondo makes no warranties, express or implied, and assumes no responsibility in connection with any use of this information.

[redacted]

PRODUCT : 470 FOAM ADHESIVE

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER.....[redacted]
[redacted]
[redacted], [redacted]
CANADA ; L3R 1B3
PREPARED BY.....PROCESS DEVELOPMENT
PREPARATION DATE.....NOV 16/95
PRODUCT USES.....FOAM ADHESIVE
CHEMICAL FAMILY.....SOLVENT BLEND.

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	%	T.L.V.	C.A.S. #	LD/50, ROUTE, SPECIES	LC/50, ROUTE, SPECIES
METHYLENE CHLORIDE	60 - 100	50 ppm	75-09-2	ORL-RAT 1600 mg/kg	MOUSE-INH 14,400 PPM 7 HOURS
ACETONE	5 - 10	750 PPM	67-64-1	9,750 mg/kg RAT ORAL	16,000 ppm 4 HOURS RAT INHALATION

SECTION 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY.....SKIN CONTACT, INHALATION, INGESTION, EYE CONTACT
SKIN CONTACT.....CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.
SKIN ABSORPTION.....CAN BE ABSORBED THROUGH THE SKIN GIVING TOXIC EFFECTS.
INHALATION, CHRONIC.....SEE "EFFECTS OF CHRONIC EXPOSURE"
INHALATION.....BREATHING OF HIGH VAPOUR CONCENTRATIONS MAY HAVE RESULTS RANGING FROM DIZZINESS AND HEADACHE TO UNCONSCIOUSNESS. MAY BE ANAESTHETIC AND MAY CAUSE OTHER CENTRAL NERVOUS SYSTEM EFFECTS.
INGESTION.....CAN CAUSE GASTRO-INTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. SMALL AMOUNTS OF LIQUID ASPIRATED INTO RESPIRATORY SYSTEM CAN CAUSE SEVERE HEALTH EFFECTS. (E.G. BRONCHOPNEUMONIA OR PULMONARY EDEMA).
EYE CONTACT.....CONTAINS MATERIALS THAT ARE SEVERELY IRRITATING TO THE EYES.
EFFECTS OF ACUTE EXPOSURE.....AS DESCRIBED ABOVE
EFFECTS OF CHRONIC EXPOSURE.....MAY CAUSE DAMAGE TO THE CENTRAL NERVOUS SYSTEM. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING OR CRACKING OF SKIN. SEE "CARCINOGENICITY OF MATERIAL" UNDER TOXICOLOGICAL INFORMATION IN SECTION 11.

SECTION 04: FIRST AID MEASURES

EYE CONTACT.....IMMEDIATELY FLUSH WITH WATER FOR A MINIMUM OF 20 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT.....REMOVE CONTAMINATED CLOTHING. WASH AFFECTED AREA WITH WATER AND SOAP. SEEK MEDICAL ATTENTION IF IRRITATION OCCURS OR PERSISTS.
INHALATION.....REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING QUALIFIED PERSONNEL SHOULD ADMINISTER ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION.
INGESTION.....DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION
ADDITIONAL INFORMATION.....GET IN CONTACT WITH YOUR LOCAL POISON CONTROL CENTRE.

SECTION 05: FIRE FIGHTING MEASURES

FLAMMABLE ?.....NON FLAMMABLE UNDER ORDINARY CONDITIONS .
IF YES UNDER WHICH CONDITIONS?...NOT APPLICABLE
SPECIAL PROCEDURES.....A SELF CONTAINED BREATHING APPARATUS IS REQUIRED FOR FIRE FIGHTERS. USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES AND TO PROTECT PERSONNEL.
FLASH POINT (C), METHOD.....NO FLASH TO BOILING POINT.
AUTO IGNITION TEMPERATURE.....NOT AVAILABLE
UPPER FLAMMABLE LIMIT (% VOL)....NOT AVAILABLE
LOWER FLAMMABLE LIMIT (% VOL)....NOT AVAILABLE
EXTINGUISHING MEDIA.....USE EXTINGUISHING MEDIA FOR SURROUNDING FIRE.
HAZARDOUS COMBUSTION PRODUCTS....HYDROCHLORIC ACID, OXIDES OF CARBON (CO,CO2), PHOSGENE
SENSITIVITY TO MECHANICAL.....UNKNOWN
IMPACT
SENSITIVITY TO STATIC.....UNKNOWN
DISCHARGE

PRODUCT : 478 FOAM ADHESIVE

SECTION 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL.....VENTILATE. REMOVE ALL SOURCES OF IGNITION, OPEN FLAMES, SPARKS, ETC. WEAR PROTECTIVE GEAR.(SEE SECTION 8). LARGE SPILLS SHOULD BE COLLECTED FOR DISPOSAL. SMALL SPILLS MAY BE WIPED. USE A NON-COMBUSTIBLE ABSORBANT INORGANIC MATERIAL. PREVENT RUNOFF INTO DRAINS, SEWERS, AND OTHER WATERWAYS.

SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES.....AVOID SKIN AND EYE CONTACT. AVOID BREATHING VAPOURS. USE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.

STORAGE NEEDS.....STORE AWAY FROM ALL SOURCES OF HEAT AND IGNITION. STORE IN A WELL VENTILATED AREA. KEEP CONTAINER CLOSED WHEN NOT IN USE.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT

- EYE/TYPE.....SAFETY GLASSES
- RESPIRATORY/TYPE.....NONE REQUIRED FOR NORMAL USE IF ADEQUATE VENTILATION IS MAINTAINED. IF USED INDOORS ON A CONTINUOUS BASIS, OR IF THE TLV IS EXCEEDED, USE OF A CARTRIDGE TYPE RESPIRATOR (NIOSH /MSHATC 23 C OR EQUIVALENT) IS RECOMMENDED.
- GLOVES/ TYPE.....WEAR IMPERVIOUS GLOVES (IN NEOPRENE OR RUBBER).
- CLOTHING/TYPE.....NOT APPLICABLE.
- FOOTWEAR/TYPE.....NOT APPLICABLE.
- OTHER/TYPE.....EYE BATH AND SAFETY SHOWER.

VENTILATION REQUIREMENTS.....NATURAL OR MECHANICAL (EXPLOSION PROOF) VENTILATION TO KEEP VAPOUR CONCENTRATION WELL BELOW TLV.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE.....LIQUID
ODOR.....MILD ODOR
SPECIFIC GRAVITY.....1.15 - 1.25
ODOR THRESHOLD (ppm).....NOT AVAILABLE
VAPOR PRESSURE (mm Hg).....400 @ 20 C
VAPOUR DENSITY (Air=1).....> 1
EVAPORATION RATE.....NOT AVAILABLE
BOILING POINT (deg C).....40 C - 55 C
pH.....NOT APPLICABLE
SOLUBILITY IN WATER (% W/W).....NEGLIGIBLE
COEFFICIENT OF WATER\OIL DISTRIBUTION.....NOT AVAILABLE
FREEZING POINT.....< 0 C
MELTING POINT (deg C).....NOT APPLICABLE
MOLECULAR WEIGHT.....NOT APPLICABLE

SECTION 10: STABILITY AND REACTIVITY

INCOMPATIBILITY.....ALUMINUM AND IT'S ALLOYS, STRONG ACIDS AND STRONG BASES, OXIDIZING AGENTS
REACTIVITY CONDITIONS ?.....EXCESSIVE HEAT, SPARKS, AND OPEN FLAME.
HAZARDOUS PRODUCTS OF DECOMPOSITION.....OXIDES OF CARBON (CO,CO2), HYDROFLUORIC ACID, PHOSGENE

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL.....SEE HAZARDOUS INGREDIENTS SECTION (2)
IRRITANCY OF MATERIAL.....MODERATE
SENSITIZING CAPABILITY OF MATERIAL.....NOT AVAILABLE.
CARCINOGENICITY OF MATERIAL.....METHYLENE CHLORIDE IS LISTED AS A POTENTIAL CARCINOGEN (2B) BY IARC. RESULTS OF LABORATORY ANIMAL TESTS SHOW THAT METHYLENE CHLORIDE PRODUCED BENIGN TUMOURS IN RATS AND MICE EXPOSED TO 500 PPM; CANCER IN RATS AND MICE EXPOSED TO 1500 PPM AND HIGHER, LIMITED EPIDEMIOLOGY STUDIES FAILED TO SHOW A TUMORIGEN RESPONSE IN PLANT WORKERS.
TERATOGENICITY.....NO EFFECTS NOTED AT 1200 AND 4500 PPM OF METHYLENE CHLORIDE.
MUTAGENICITY.....NOT AVAILABLE
REPRODUCTIVE EFFECTS.....NO EFFECTS NOTED AT 1200 & 4500 PPM OF METHYLENE CHLORIDE.
SYNERGISTIC MATERIALS.....NOT AVAILABLE.

PRODUCT : 478 FOAM ADHESIVE

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENT.I.....NOT AVAILABLE
BIODEGRADABILITY.....NOT AVAILABLE

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL.....SPILLED MATERIAL AND WATER RINSES ARE CLASSIFIED AS CHEMICAL WASTE. DISPOSE OF IN ACCORDANCE WITH CURRENT LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

T.D.G. CLASSIFICATION.....CLASS 6.1 U.N. 1593 P.G. III

SECTION 15: REGULATORY INFORMATION

CPR COMPLIANCE.....THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.
WHMIS CLASSIFICATION.....CLASS D DIV.1 SUBDIV.B AND DIV.2 SUBDIV.A AND SUBDIV.B

SECTION 16: OTHER INFORMATION

NOTICE FROM THE MANUFACTURER:....THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY THE MANUFACTURER FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. THE MANUFACTURER ASSUMES NO RESPONSIBILITY FOR EVENTS RESULTING OR DAMAGES INCURRED FROM IT'S USE. THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS.

CANUTEC EMERGENCY (613) 996-6666

MATERIAL SAFETY DATA SHEET

DATE OF PRINTING: 02/23/95

SECTION I

MANUFACTURER: THE CONTINENTAL PRODUCTS COMPANY
1150 EAST 222 STREET
EUCLID, OH 44117
TELEPHONE: (216) 531-0710
PRODUCT CLASS: VINYL PAINT
CODE IDENTIFICATION: 88-5424
TRADE NAME: FLEXIBOND SEMI-GLOSS COATING, O'HARA RED HMIS: 201B

EMERGENCY CONTACT NUMBER: 1-800-255-3924

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT BY WEIGHT	ACGIH TLV PPM	ACGIH TLV mg/cu.m.	OSHA PEL PPM	OSHA PEL mg/cu.m.
SILICA CAS NUMBER 68855-54-9	8.6		6		80
* N-METHYL-2-PYRROLIDONE CAS NUMBER 872-50-4	4.2		NOT ESTB		NOT ESTB
* ISOPROPANOL CAS NUMBER 67-63-0	1.5	400	983	400	980

ISOPROPANOL has a STEL of 500 PPM.
PARTICULATES not otherwise regulated have TLV and PEL Values of 15 mg/M3 for TOTAL DUST and 5 mg/M3 for the RESPIRABLE FRACTION.
THIS MATERIAL MAY CONTAIN INGREDIENTS COVERED BY THE CALIFORNIA "SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986" (PROPOSITION 65).
* THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 (TITLE III, SARA) AND OF 40 CFR 372.
N/A MEANS "NOT APPLICABLE" CEIL MEANS "CEILING"
NOT ESTB MEANS "NOT ESTABLISHED"

SECTION III - PHYSICAL DATA

BOILING RANGE: 180.0 TO 364.0 F VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
PERCENT VOLATILE BY VOLUME: 61.2 VOC (less water): 1.50 LBS/GAL.
WEIGHT PER GALLON: 9.27 POUNDS
VAPOR PRESSURE: NOT DETERMINED MELTING POINT: NOT APPLICABLE
SOLUBILITY IN WATER: READILY SOLUBLE
APPEARANCE AND ODOR: RED COLORED LIQUID WITH CHARACTERISTIC PAINT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

OSHA CATEGORY: NOT REGULATED

FLASH POINT : DOES NOT FLASH LEL: N/A UEL: N/A
EXTINGUISHING MEDIA:
Carbon dioxide, dry chemical or foam. If water, fog nozzles preferred.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Isolate from heat, electrical equipment, sparks, and open flame.

Closed containers may explode (due to the build-up of steam pressure) when exposed to extreme heat.

SPECIAL FIRE FIGHTING PROCEDURES:

Water may be used to cool closed containers to prevent pressure buil up when exposed to extreme heat. Firefighting personnel should wear self-contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II

PRIMARY ROUTE(S) OF ENTRY:

Inhalation and skin contact.

EFFECTS OF OVEREXPOSURE:

May cause headache, nausea, eye or skin irritation. (Material is slightly alkaline.)

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Repeated exposure to emitted vapors may cause irritation to the upper respiratory tract. Preexisting skin sensitization may be aggravated.

CARCINOGENICITY:

None of the components of this product are reported carcinogens.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air. Administer artificial respiration or oxygen if breathing is difficult.

SKIN: Wash affected area with soap and water. Remove and launder contaminated clothing. Consult a physician if irritation persists.

EYES: Flush immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment.

INGESTION: Do not induce vomiting. Call a physician immediately.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE

CONDITIONS TO AVOID:

None known.

INCOMPATIBILITY (Materials to avoid)

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

BY FIRE: Normal products of incomplete combustion.

May produce fumes when heated to decomposition, as in welding. Fumes may contain carbon monoxide/dioxide or oxides of nitrogen.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:

Heat, sparks, open flame and fire. Material is subject to freezing. Do not store above 120 Degrees Fahrenheit.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Dike spill area. Ventilate area if necessary. Recover free liquid by addition of inert absorbent to spill area. Sweep up and place material in a suitable disposal container. Wash down spill area with

copious quantities of water.

WASTE DISPOSAL METHOD:

Disposal must be made in accordance with Local, State and Federal regulations. Incineration or landfilling must be in an approved facility. Do not incinerate closed containers.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

In outdoor or open areas, use MSHA/NIOSH approved mechanical filter respirator to remove solid airborne particulates or overspray. Indoors, where ventilation is inadequate, use MSHA/NIOSH approved chemical-mechanical respirators designed to remove both particulate matter and vapor.

VENTILATION:

All applications areas should be ventilated in accordance with the applicable regulations found in 29 CFR, Part 1910.

PROTECTIVE GLOVES:

Recommended if skin contact is likely.

EYE PROTECTION:

Chemical goggles or safety eyewear with splash shields is recommended.

OTHER PROTECTIVE EQUIPMENT:

Suitable barrier creams, impervious clothing and boots are recommended to reduce repeated contact with material and limit contamination.

HYGIENIC PRACTICES:

Wash hands with soap and water before eating or using the washroom. Smoke in smoking areas only. Remove and wash contaminated clothing before re-use.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING OR STORING:

Store out of the sun and away from heat, sparks and open flame. Keep containers closed and upright to prevent leakage. Do not store below 40 Degrees Fahrenheit or above 120 Degrees Fahrenheit for extended periods. Do not reuse product container for any purpose.

OTHER PRECAUTIONS:

Do not get in eyes. Avoid skin contact. Do not take internally. Prevent prolonged or repeated breathing of vapor or spray mist. Keep out of the reach of children.

PREPARED BY: ROBERT W. COOK
REGULATORY AFFAIRS
REFERENCE DATE: FEBRUARY 22, 1995

MATERIAL SAFETY DATA SHEET

DATE OF PRINTING: 12/10/93

SECTION I

MANUFACTURER: THE CONTINENTAL PRODUCTS COMPANY
1150 EAST 222 STREET
EUCLID, OH 44117
TELEPHONE: (216) 531-0710
PRODUCT CLASS: VINYL PAINT REVISION: I-93
CODE IDENTIFICATION: 88-9351
TRADE NAME: CONTINENTAL FLEXIBOND COATING, FLAT BLACK HMIS: 201B

EMERGENCY CONTACT NUMBER: 1-800-255-3924

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT BY WEIGHT	ACGIH TLV PPM	ACGIH TLV mg/cu.m.	OSHA PEL PPM	OSHA PEL mg/cu.m.
CARBON BLACK CAS NUMBER 1333-86-4	2.0		3.5		3.5
SILICA CAS NUMBER 68855-54-9	13.4		6		80
N-METHYL-2-PYRROLIDONE CAS NUMBER 872-50-4	4.6		NOT ESTB		NOT ESTB

PARTICULATES not otherwise regulated have TLV and PEL Values of 15 mg/M3 for TOTAL DUST and 5 mg/M3 for the RESPIRABLE FRACTION.
THIS MATERIAL MAY CONTAIN INGREDIENTS COVERED BY THE CALIFORNIA "SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986" (PROPOSITION 65).
* THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 (TITLE III, SARA) AND OF 40 CFR 372.
N/A MEANS "NOT APPLICABLE" CEIL MEANS "CEILING"
NOT ESTB MEANS "NOT ESTABLISHED"

SECTION III - PHYSICAL DATA

BOILING RANGE: 212.0 TO 364.0 F VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
PERCENT VOLATILE BY VOLUME: 62.6 VOC (less water): 1.46 LBS/GAL.
WEIGHT PER GALLON: 9.76 POUNDS
VAPOR PRESSURE: NOT DETERMINED MELTING POINT: NOT APPLICABLE
SOLUBILITY IN WATER: READILY SOLUBLE
APPEARANCE AND ODOR: BLACK COLORED LIQUID WITH CHARACTERISTIC ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

OSHA CATEGORY: NOT REGULATED

FLASH POINT : DOES NOT FLASH LEL: N/A UEL: N/A
EXTINGUISHING MEDIA:
Carbon dioxide, dry chemical or foam. If water, fog nozzles preferred.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Isolate from heat, electrical equipment, sparks, and open flame.
Closed containers may explode (due to the build-up of steam pressure)

when exposed to extreme heat.

SPECIAL FIRE FIGHTING PROCEDURES:

Water may be used to cool closed containers to prevent pressure build-up when exposed to extreme heat. Firefighting personnel should wear self-contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II

PRIMARY ROUTE(S) OF ENTRY:

Inhalation and skin contact.

EFFECTS OF OVEREXPOSURE:

May cause headache, nausea, eye or skin irritation. (Material is slightly alkaline.)

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Repeated exposure to emitted vapors may cause irritation to the upper respiratory tract. Preexisting skin sensitization may be aggravated.

CARCINOGENICITY:

None of the components of this product are reported carcinogens.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air. Administer artificial respiration or oxygen if breathing is difficult.

SKIN: Wash affected area with soap and water. Remove and launder contaminated clothing. Consult a physician if irritation persists.

EYES: Flush immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment.

INGESTION: Do not induce vomiting. Call a physician immediately.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE

CONDITIONS TO AVOID:

None known.

INCOMPATIBILITY (Materials to avoid)

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

BY FIRE: Normal products of incomplete combustion.

May produce fumes when heated to decomposition, as in welding. Fumes may contain carbon monoxide/dioxide or oxides of nitrogen.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:

Heat, sparks, open flame and fire. Material is subject to freezing. Do not store above 120 Degrees Fahrenheit.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Dike spill area. Ventilate area if necessary. Recover free liquid by addition of inert absorbent to spill area. Sweep up and place material in a suitable disposal container. Wash down spill area with copious quantities of water.

WASTE DISPOSAL METHOD:

Disposal must be made in accordance with Local, State and Federal regulations. Incineration or landfilling must be in an approved facility. Do not incinerate closed containers.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

In outdoor or open areas, use MSHA/NIOSH approved mechanical filter respirator to remove solid airborne particulates or overspray. Indoors, where ventilation is inadequate, use MSHA/NIOSH approved chemical-mechanical respirators designed to remove both particulate matter and vapor.

VENTILATION:

All applications areas should be ventilated in accordance with the applicable regulations found in 29 CFR, Part 1910.

PROTECTIVE GLOVES:

Recommended if skin contact is likely.

EYE PROTECTION:

Chemical goggles or safety eyewear with splash shields is recommended.

OTHER PROTECTIVE EQUIPMENT:

Suitable barrier creams, impervious clothing and boots are recommended to reduce repeated contact with material and limit contamination.

HYGIENIC PRACTICES:

Wash hands with soap and water before eating or using the washroom. Smoke in smoking areas only. Remove and wash contaminated clothing before re-use.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING OR STORING:

Store out of the sun and away from heat, sparks and open flame. Keep containers closed and upright to prevent leakage. Do not store below 40 Degrees Fahrenheit or above 120 Degrees Fahrenheit for extended periods. Do not reuse product container for any purpose.

OTHER PRECAUTIONS:

Do not get in eyes. Avoid skin contact. Do not take internally. Prevent prolonged or repeated breathing of vapor or spray mist. Keep out of the reach of children.

PREPARED BY: ROBERT W. COOK
REGULATORY AFFAIRS
REFERENCE DATE: DECEMBER 9, 1993

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : FLAT WHITE
IDENTIFICATION NUMBER: 0000201412 DATE PRINTED: 12/04/96
PRODUCT USE/CLASS :

SUPPLIER:
SEYMOUR OF SYCAMORE
917 CROSBY AVENUE
SYCAMORE, IL 60178

24 hr. Telephone: (800) 255-3924

MANUFACTURER:
SEYMOUR OF SYCAMORE
917 CROSBY AVENUE
SYCAMORE, IL 60178

24 hr. Telephone: (800) 255-3924

PREPARER: WGZ, PHONE: 815-895-9101, PREPARE DATE: 01/19/96

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT % LESS THAN
01	Propane	00074-98-6	20.0 %
02	Acetone	00067-64-1	15.0 %
03	Xylene	01330-20-7	15.0 %
04	N-Butane	00106-97-8	10.0 %
05	Titanium Dioxide	13463-67-7	10.0 %
06	Toluol	00108-88-3	5.0 %
07	SC 100 Solvent	64742-95-6	5.0 %
08	Ethyl Benzene	00100-41-4	5.0 %

EXPOSURE LIMITS

ITEM	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING	COMPANY TLV-TWA	SKIN
01	1000 ppm	N.E.	1000 ppm	N.E.	N.E.	NO
02	750 ppm	1000 ppm	750 ppm	1000 ppm	N.E.	YES
03	100 ppm	150 ppm	100 ppm	150 ppm	N.E.	YES
04	800 ppm	N.E.	800 ppm	N.E.	N.E.	NO
05	5 mg/m3	N.E.	5 mg/m3	N.E.	N.E.	NO
06	50 ppm	N.E.	100 ppm	150 ppm	N.E.	YES
07	N.E.	N.E.	N.E.	N.E.	N.E.	YES
08	100 ppm	125 ppm	100 ppm	125 ppm	N.E.	NO

(See Section 16 for abbreviation legend)

(Continued on Page 2)

SECTION 3 - HAZARDS IDENTIFICATION

*** EMERGENCY OVERVIEW ***: May cause flash fire or explosion.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Causes skin irritation. Allergic reactions are possible. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

EFFECTS OF OVEREXPOSURE - INHALATION: Headaches, dizziness, nausea, decreased blood pressure, changes in heart rate and cyanosis may result from over-exposure to vapor or skin exposure. Prolonged inhalation may be harmful.

EFFECTS OF OVEREXPOSURE - INGESTION: This material may be harmful or fatal if swallowed. Irritating to mouth, throat and stomach.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Possible reproductive hazard.

PRIMARY ROUTE(S) OF ENTRY: SKIN ABSORPTION INHALATION INGESTION EYE CONTACT SKIN CONTACT

SECTION 4 - FIRST AID MEASURES

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

FIRST AID - SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists. Remove contaminated clothing. Wash skin with soap and water. Get medical attention.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: -4 F

LOWER EXPLOSIVE LIMIT: 1.0 %
UPPER EXPLOSIVE LIMIT: 12.8 %

(Continued on Page 3)

SECTION 5 - FIRE FIGHTING MEASURES

AUTOIGNITION TEMPERATURE:

EXTINGUISHING MEDIA: WATER FOG DRY CHEMICAL CO2 ALCOHOL FOAM FOAM

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors may form explosive mixture with air.

SPECIAL FIREFIGHTING PROCEDURES: Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Wash thoroughly after handling.

STORAGE: Keep away from heat, sparks and flame.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: Where splashing is possible, full chemically resistant protective clothing (e.g. acid suit) and boots are required.

(Continued on Page 4)

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

HYGIENIC PRACTICES: No Information.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE	: -44 - 344 F	VAPOR DENSITY	: Is heavier than air
ODOR	: AROMATIC	ODOR THRESHOLD	: NA
APPEARANCE	: LIQUID	EVAPORATION RATE	: Is faster than Ether
SOLUBILITY IN H2O	: SLIGHT		
FREEZE POINT	: NA	SPECIFIC GRAVITY	: 0.9277
VAPOR PRESSURE	: 40 PSI	pH @ 0.0 %	: NA
PHYSICAL STATE	: LIQUID	VISCOSITY	: NA

COEFFICIENT OF WATER/OIL DISTRIBUTION:

(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Do not store above 120 deg. F. Keep away from sparks, pilot lights, and/or open flames.

INCOMPATIBILITY: No Information.

HAZARDOUS DECOMPOSITION PRODUCTS: May produce hazardous fumes when heated to decomposition. Fumes may contain carbon dioxide and/or carbon monoxide.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: This product does not contain chlorinated solvnets or lead.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact.

(Continued on Page 5)

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: CONSUMER COMMODITY ORM-D

DOT TECHNICAL NAME: N/A

DOT HAZARD CLASS: N/A HAZARD SUBCLASS:

DOT UN/NA NUMBER: PACKING GROUP: RESP. GUIDE PAGE:

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:
This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD CHRONIC HEALTH HAZARD FIRE HAZARD PRESSURIZED GAS HAZARD

SARA SECTION 313:
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

---------- CHEMICAL NAME ----------	CAS NUMBER	WT/WT % IS LESS THAN
Xylene	01330-20-7	15.0 %
Toluol	00108-88-3	5.0 %
Ethyl Benzene	00100-41-4	5.0 %
Glycol Ether EP	02807-30-9	1.0 %
Methanol	00067-56-1	0.1 %

U.S. STATE REGULATIONS: AS FOLLOWS -

NEW JERSEY RIGHT-TO-KNOW:
The following materials are non-hazardous, but are among the top five components in this product:

---------- CHEMICAL NAME ----------	CAS NUMBER
Calcium Carbonate	01317-65-3

PENNSYLVANIA RIGHT-TO-KNOW:
The following non-hazardous ingredients are present in the product at greater than 3%:

---------- CHEMICAL NAME ----------	CAS NUMBER
Calcium Carbonate	01317-65-3
Soya Alkyd Resin	NA

(Continued on Page 6)

Loctite Corporation
1001 Trout Brook Crossing
Rocky Hill, CT 06067-3910
Emergency Phone: (860) 571-5100

Issued: 12/04/96
09:48:03

Fax: (860) 571-5465

Denise T.?

Product Name: BLAIR(TM) SUPER GLOSS DECO GLAZE
Prod., Part or Item No: 20216

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Type: Aerosol spray paint

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients	CAS No.	%
ISOPROPYL ACETATE	108-21-4	20-30
TOLUENE*	108-88-3	20-30
PROPANE	74-98-6	5-10
ISOBUTANE	75-28-5	5-10
BUTANE	106-97-8	5-10
DIACETONE ALCOHOL	123-42-2	1-10
Hydrocarbon resin	Proprietary	1-10
Non-hazardous ingredients	Proprietary	1-10
XYLENES*	1330-20-7	1-10

* This component is listed as a SARA Section 313 Toxic Chemical.

Ingredients which have exposure limits

Exposure Limits (TWA) Ingredients	ACGIH (TLV)	OSHA (PEL)	OTHER
ISOPROPYL ACETATE	250 ppm TWA 1040mg/M3	250 ppm TWA 950mg/M3	None
TOLUENE	50 ppm skin 188 mg/M3 skin	100 ppm 375mg/M3	None
PROPANE	Asphyxiant	1000 ppm 1800 mg/m3	None
BUTANE	800 ppm TWA 1900mg/M3	800 ppm TWA 1900mg/M3	None
DIACETONE ALCOHOL	50 ppm 238 mg/m3	50 ppm 240 mg/m3	None
XYLENES	100 ppm TWA 434 mg/m3	100 ppm TWA 435 mg/m3	None

Exposure Limits (STEL) Ingredients	ACGIH (TLV)	OSHA (PEL)

ISOPROPYL ACETATE	310 ppm 1290mg/M3	310 ppm 1185mg/M3
TOLUENE	None	150 ppm 560mg/M3
XYLENES	150 ppm 651 mg/m3	150 ppm 655 mg/m3

3. HAZARDS IDENTIFICATION

Toxicity: May cause defatting of the skin.
Eye & skin irritant.
Aspiration hazard if swallowed.

Primary Routes of Entry: Inhalation, skin & ingestion.

Signs and symptoms of Exposure: In a confined area, vapors in high concentrations are anesthetic. May result in light-headedness, staggering gait, giddiness & possible nausea.

Existing Conditions Aggravated by Exposure: Heart disease & respiratory disorders.

Ingredients	Literature Referenced Target Organ and Other Health Effects	Carcinogen NTP	IARC	OSHA
ISOPROPYL ACETATE	CNS IRR	NO	NO	NO
TOLUENE	CAR CNS DEV IRR	NO	NO	NO
PROPANE	CAR CNS IRR	NO	NO	NO
ISOBUTANE	CAR CNS LUN	NO	NO	NO
BUTANE	CAR CNS IRR	NO	NO	NO
DIACETONE ALCOHOL	CNS IRR KID	NO	NO	NO
Hydrocarbon resin	No Data	NO	NO	NO
Non-hazardous ingredients	No Data	NO	NO	NO
XYLENES	CAR CNS IRR KID LIV	NO	NO	NO

Abbreviations

CAR Cardiac
CNS Central nervous system
DEV Developmental
IRR Irritant
KID Kidney
LIV Liver
LUN Lung

4. FIRST AID MEASURES

Ingestion:	VOMTING
Inhalation:	DIFFICULTY IN BREATHING
Skin Contact:	Wash with large quanities of soap and water.
Eye Contact:	WASH EYE(S) WITH WATER FOR AT LEAST 15 MINUTES. CALL PHYSICIAN.

5. FIRE FIGHTING MEASURES

Flash Point:	-40°F (Propellant) Method: Tag Closed Cup
Recommended Extinguishing Agents:	Carbon dioxide, foam, dry chemical
Hazardous Products formed by Fire or Thermal Decomp	Irritating organic vapors; carbon dioxide
Unusual Fire or Explosion Hazards:	Heated cans may burst.

Explosive Limits:	
(% by volume in air)Lower	2.0%
(% by volume in air)Upper	12.0%

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak:	Ventilate area & remove sources of ignition. Take up with an inert absorbent. Store in a closed container until disposal.

7. HANDLING AND STORAGE

Safe Storage:	Store below 120°F.
(Contact Loctite Customer	Service 1-800-243-4874 for shelf Life information)
Handling:	Avoid prolonged skin contact. Keep away from eyes. Avoid prolonged breathing of vapors. Keep away from heat, sparks & open flame.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes:	Safety glasses or goggles.
Skin:	Rubber or plastic gloves.
Ventilation:	Sufficient to maintain vapor concentration below TLV.
	See Section 2 for Exposure Limits.

Product Name: BLAIR(TM) SUPER GLOSS DECO GLAZE
Prod., Part or Item No: 20216

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear Liquid
Odor:	Solvent
Boiling Point:	-40 Degree F to 284 Degree F
pH:	Does not apply
Solubility in Water:	Nil
Specific Gravity	0.8
Volatile Organic Compound (EPA Method 24)	Not available
Vapor Pressure:	60
Vapor Density:	4.0

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous Polymerization:	Will not occur
Incompatibility:	Strong oxidizers
Hazardous Decomposition Products (non-thermal):	None

11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal: Incinerate following EPA and local regulations. Do not incinerate pressurized cans.

14. TRANSPORT INFORMATION

DOT (49 CFR 172)
Domestic Ground Transport

Proper Shipping Name:	Consumer Commodity
Hazard Class or Division:	ORM-D
Identification Number:	None

Product Name: BLAIR(TM) SUPER GLOSS DECO GLAZE
Prod., Part or Item No: 20216

Marine Pollutant: None

IATA

Proper Shipping Name: Aerosols, Flammable, N.o.s.
Class or Division: 2.1
UN or ID Number: UN 1950

15. REGULATORY INFORMATION

CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
Toluene

16. OTHER INFORMATION

Estimated NFPA(R) Code:

Health Hazard: 2
Fire Hazard: 4
Reactivity Hazard: 0
Specific Hazard: Does not apply

Estimated HMIS(R) Code:

Health Hazard: 2
Flammability Hazard: 4
Reactivity Hazards: 0
Personal Protection: See Section 8.

Prepared By: Paula Kinney
Title: Environmental Health & Safety
Company: Loctite Corp., 1001 Tr Br Cr, Rocky Hill CT 06067
(24hr.) Phone: (860) 571-5100
Revision Date: January 22, 1996 Revision: 0003

P.O. Box 1092
Buffalo, NY 14240

DOT EMERGENCY CHEMTEL (800)255-3924 (24hrs)
INFORMATION PHONE NO. 716-856-4910 (M-F 8am-5pm ET)

CORPORATE CONTACT 716-856-4910 (M-F 8am-5pm ET)

FLAMMABILITY 3
REACTIVITY 0
These ratings should be used only as part of fully implemented H.M.I.S. program.

MATERIAL SAFETY DATA SHEET

SECTION I

PRODUCT CLASS ADHESIVES

DATE OF PREPARATION 10/02/96

TRADE NAME BARGE A.P. CEM.

MANUFACTURER CODE I.D. J9003D

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	% BY WGT	CAS NO.		ALLOWABLE EXPOSURE LEVEL PPM	MG/CU.M.	MPPCF	SARA 313	SKIN	VP mm Hg @ 20 DEG.C
TOLUENE	50	108-88-3	TLV-TWA	50	188			SKIN	22
			OSHA-PEL	200	752			X	
			OSHA-STEL	500	1880	10 MIN			
			OSHA-CEIL	300	1128				
			LFL 1.7		UFL 7.1				
ETHYL ACETATE		141-78-6	TLV-TWA	400	1400				73
			OSHA-PEL	400	1400				
			LFL 2.0		UFL 11.0				
ALIPHATIC HYDROCARBON		64742-89-8	MFR	400					12
SILICA, AMORPHOUS-HYDRATED		63231-67-4	TLV-TWA		10				
			OSHA-PEL		6				

LFL = LOWER FLAMMABILITY LIMIT PERCENT
UFL = UPPER FLAMMABILITY LIMIT PERCENT
SKIN = SKIN ABSORPTION MUST BE CONSIDERED AS A ROUTE OF EXPOSURE
CEILING= ALLOW. EXPOSURE LEVEL SHOULD NOT BE EXCEEDED FOR ANY TIME PERIOD
MFR = MANUFACTURER RECOMMENDED EXPOSURE LIMIT
STEL = SHORT TERM EXPOSURE LIMIT
Y-SARA 313 = CHEMICAL IS SUBJECT TO REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF S.A.R.A. 40 CFR PART 372

SECTION III - HEALTH INFORMATION

EFFECTS OF SHORT TERM OVEREXPOSURE

SWALLOWING
Can cause gastrointestinal irritation, nausea, and vomiting. Aspiration of material into lung may cause chemical pneumonitis which can be fatal.

INHALATION
May cause nose or throat irritation. High concentrations may cause acute central nervous system depression characterized by headaches, dizziness, nausea and confusion.

EYE
May cause eye irritation.

SKIN
May cause defatting and irritation of the skin.

EFFECTS OF REPEATED OVEREXPOSURE
The OSHA Permissible Exposure Limit for amorphous silica is 20 Mppcf or PEL=_____80mg/M3_____
xSiO2

Reports have associated prolonged and repeated occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH.
None currently known

SECTION IV - FIRST AID AND EMERGENCY PROCEDURES

SWALLOWING
If swallowed do not induce vomiting. Call poison control center, hospital emergency room or physician immediately.

INHALATION
Remove to fresh air immediately. If breathing has stopped, give artificial respiration. Keep warm and quiet. Get medical attention immediately.

EYE
Flush with large amounts of water, lifting upper and lower lids occasionally. Continue for at least 15 minutes. Get medical attention.

SKIN
Remove contaminated clothing, use waterless skin cleaner followed by soap and water wash. Obtain medical attention if irritation persists.
Remove contaminated clothing. Wash affected area with soap and water.

QUABAUG
39003D

SECTION IV - FIRST AID AND EMERGENCY PROCEDURES - (CONTINUED)

Obtain medical attention if irritation persists.

ES TO PHYSICIAN
Any treatment that might be required for overexposure should be directed at the control of symptoms and the clinical conditions.

SECTION V - PHYSICAL DATA

OILING RANGE 168 DEG.F. (76 DEG.C.) TO 359 DEG.F.(182 DEG.C.)

OR DENSITY Heavier than air. % VOLATILE BY VOLUME 81

APORATION RATE VOC 5.65 lb/gal less water & NEPS* 678 g/l less water CALCULATED
Slower than diethyl ether.

GHT LB./GAL. 7.6 VOC 31.20 lb/gal solids 3744 g/l solids CALCULATED
PECIFIC GRAVITY 0.9

ll Physical data determined at 68 DEG. F. (20 DEG. C.) 760 mm Hg
Negligibly Photochemically Reactive Materials

SECTION VI - FIRE AND EXPLOSION DATA

FPA FLAMMABILITY CLASSIFICATION FLAMMABLE LIQUID - CLASS IB

LASHPOINT 25 DEG.F, SFCC (-4 DEG.C,)

XTINGUISHING MEDIA
Use NFPA Class B Fire extinguishers (carbon dioxide, all purpose dry chemical or alcohol foam) designed to extinguish flammable liquid fires. Polymer foam is preferred for large fires.

NUSUAL FIRE AND EXPLOSION HAZARDS
During emergency conditions, overexposure to decompostion products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.
WARNING! FLAMMABLE.

SPECIAL FIRE FIGHTING PROCEDURES
Water may be ineffective, but may be used to cool exposed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

SECTION VII - REACTIVITY DATA

TABILITY
Normally stable.

CONDITIONS TO AVOID
Avoid excessive heat (>115 F (46 C) and sources of ignition.

INCOMPATABILITY (MATERIALS TO AVOID)
Strong acids or alkaline materials.

AZARDOUS DECOMPOSITION PRODUCTS
Burning, including when heated by welding or cutting, will produce smoke, carbon monoxide and carbon dioxide.In addition,hydrogen chloride,chlorine may be generated.

HAZARDOUS POLYMERIZATION
Will not occur

CONDITIONS TO AVOID
None known

SECTION VIII - ENVIRONMENTAL INFORMATION

TEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
Keep spectators away. Eliminate all ignition sources (flames, hot surfaces, and sources of electrical, static or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

WASTE DISPOSAL
Dispose in accordance with federal, state and local regulations.

RCRA CLASSIFICATION
This product, if discarded directly, would be classified a hazardous waste based on its ignitability characteristic, i.e. has a flash point of 140 deg. F.(60 deg.C) or less. The proper RCRA classification would be D001.

ENVIRONMENTAL HAZARDS
None known

SECTION IX - PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION
Proper selection of respiratory protection depends upon many factors including duration/level of exposure and conditions of use. In general exposure to organic chemicals such as those contained in this product may not require the use of respiratory protection if used in well ventilated areas. In restricted ventilation areas a NIOSH approved chemical cartridge respirator may be required. Under certain conditions, such as spraying, a mechanical prefilter may also be required. In confined areas use a NIOSH/MSHA approved air supplied respirator. If the TLV's listed in Section II

SECTION IX - PERSONAL PROTECTION INFORMATION (CONTINUED)

PIRATORY PROTECTION
are exceeded use a properly fitted NIOSH/MSHA approved respirator with an appropriate protection factor. Refer to OSHA 29 CFR 1910.134 "Respiratory Protection", and "Respiratory Protection A Manual And Guideline, American Industrial Hygiene Assoc."

TILATION
Provide local exhaust ventilation in sufficient volume and pattern so as to maintain exposures below nusiance dust limits and permissible exposure limits which may be listed in Section II. Refer to Industrial Ventilation - A Manual for Recommended Practice - American Conference Of Governmental Industrial Hygienists.

D PROTECTION
Solvent impermeable gloves are required for repeated or prolonged contact.

E PROTECTION
Wear safety spectacles.

THER PROTECTIVE EQUIPMENT
Not likely to be needed.

SECTION X - SPECIAL PRECAUTIONS

RECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Do not store above 115 deg.F (46 deg.C) store large quantities in compliance with OSHA 29CFR1910.106.

HER PRECAUTIONS
Do not take internally. Close container after each use.
Empty containers must not be washed and re-used for any purpose.
Containers should be grounded and bonded to the receiving container.
Do not weld, braze or cut on empty container.
Never use pressure to empty. Drum is not a pressure vessel.

SECTION XI - OTHER INFORMATION

TRANSPORTATION INFORMATION

MODE	PROPER SHIPPING NAME	CLASS	I.D.#	PKG GRP
IATA (AIR)	ADHESIVES PASS:305-5L;CARGO:307-60L LABEL:FLAMMABLE LIQUID	3	UN1133	II
OT (HM-181) (DOMESTIC SURFACE)	ADHESIVES ERG 26 CANUTEC 12	3	UN1133	II
IMDG CODE (OCEAN)	ADHESIVES, FLAMMABLE LIQUID LABEL CLASS:3 IMDG PAGE 3174;EMS 3-05	3.2	UN1133	II

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. WHILE THE INFORMATION IS BELIEVED TO BE RELIABLE, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SINCE THE USE OF THIS INFORMATION AND THE CONDITIONS AND USE OF THIS PRODUCT ARE CONTROLLED BY THE USER, IT IS THE USER'S OBLIGATION TO DETERMINE THE CONDITIONS OF SAFE USE OF THE PRODUCT.
The Corporate Safety and Environmental Affairs Department is responsible for the preparation of this Material Safety Data Sheet.

QUABAUG
LINDA GORDON
SHOE SERVICE PRODUCTS DIV.
18 SCHOOL ST.
NORTH BROOKFIELD MA
01535

spectrachem p 1 of 3

MATERIAL SAFETY DATA SHEET

HAZARD RATING	HMIS HAZARD RATING
4-EXTREME	HEALTH 1
3-HIGH	FLAME 1
2-MODERATE	REACTIVITY 0
1-SLIGHT	
0-INSIGNIFICANT	

N.A. NOT APPLICABLE
N.D. NOT DETERMINED
N.E. NOT ESTABLISHED

SECTION I - IDENTIFICATION

COMPANY NAME..... SpectraChem Corporation
ADDRESS (STREET,CITY,STATE,ZIP). 200 Sheridan Avenue Paterson, New Jersey 07502
PHONE NUMBER..... (201) 595-8181
DATE PREPARED..... December 7,1987
REVISED DATE..... MARCH 9 1991
TRADE NAME..... PLASTIQUE WHITE RQ710

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	%	(UNITS = PPM UNLESS SPECIFIED) TLV-STEL	OSHA PEL	CEILING PEAK	PROD.	CAS#
*Ammonium Hydroxide	1.0	26-35	50	N.E.		1336-21-6
Mineral Spirits	3.0	200-N.E.	500	N.E.		8030-30-6

VOC=0.47 LBS/GALLON

*DENOTES SARA 313 CHEMICAL

SECTION III - PHYBICAL DATA

BOILING Point(F)..... N.D.
VAPOR PRESSURE (mm Hg)... N.D.
VAPOR DENSITY (Air=1).... N.D.
SOLUBILITY IN H2O..... Dispersible
APPEARANCE/ODOR..... APPEARANCE: White Paste
ODOR: Aliphatic & Ammoniacal
WT./GAL. (LBS.)..... 11.85
EVAPORATION RATE..... SLOWER than Butyl Acetate
VOLATILITY/VOL(%)..... 32.0+1.0

Speeks

MATERIAL SAFETY DATA SHEET

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

HANDL

FLASH POINT..... N.A.
FLAMMABLE LIMITS..... N.A.
EXTINGUISH MEDIA..... Use National Fire Protection (NFPA) Cl
extinguishers (carbon dioxide, dry chem
designed to extinguish NFPA Class B f
fires.
FOR FIRE..... N.A.
UNUSUAL FIRE HAZARD..... N.A.

PRECA

SECTION V - HEALTH HAZARD DATA

RESPI

ROUTES OF ENTRY	INHALATION	SKIN
	Possible	Possible

VENTI
SPECI
MECHA
LOCAL
PROTE
EYE P

HEALTH HAZARDS (Acute & Chronic) Breathing ammonia vapors may p
irritation of the nasal passag
splashing on skin or eyes. Goo
practices dictate THAT CARE BE
AVOID SKIN AND EYE CONTACT AND
Washing after handling is advi

OTHER

SYMPTOMS OF EXPOSURE..... Nasal Irritation
OVER EXPOSURE EFFECTS.... None Known. (Mouth)

WORK/

FIRST AID PROCEDURES..... Fumes: Remove from exposure. Restore br
warm and quiet. Notify a physician. Spl
Flush immediately with copious quantiti
water for at least 15 min.. Take to a p
definitive medical treatment. Splash(sk
with soap.

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... Stable
CONDITIONS TO AVOID..... N.A.
INCOMPATIBLE MATERIALS... N.A.
DECOMPOSITION PRODUCTS... May produce toxic materials- carbon mon
dioxide, various hydrocarbons.
HAZARDOUS POLYMERIZATION. Will not occur.

SECTION VII - SPILL OR LEAK PROCEDURE

FOR SPILL..... Avoid breathing vapors. Ventilate area
spillage. Remove with inert absorbent.
with any natural bodies of water. Dispos
accordance with local, state and federal

WASTE DISPOSAL METHOD... Dispose of in accordance with local, sta
regulations.

MATERIAL SAFETY DATA SHEET

HANDLING AND STORAGE..... Do not store above 120F. Use with adequate ventilation. Avoid prolonged or repeated contact skin.

PRECAUTIONARY MEASURES... Do not take internally. All used drums should be disposed of according to local regulations. Used drums should not be given to individuals unless professionally cleaned.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION... If TLV of product is exceeded NIOSH/OSHA jointly approved air supplied respirator is advised for (level approved or according to ANSI guidelines.

VENTILATION..... LOCAL and MECHANICAL

SPECIAL..... /Other To maintain exposure below TLV(s)

MECHANICAL EXHAUST..... YES

LOCAL EXHAUST..... YES

PROTECTIVE GLOVES..... Resistant Gloves

EYE PROTECTION..... Chemical splash goggles in compliance with OSHA regulations are advised.

OTHER PROTECTIVE EQUIPMENT. Eye bath, safety shower, impervious clothing to prevent prolonged skin contact.

WORK/HYGIENIC PRACTICES.. Good work practices dictate that care be taken to avoid skin and eye contact and ingestion. Washing after handling Advised.

Product Code	MATERIAL SAFETY DATA SHEET	Number
HELMIFIX	Date Revised: MAR. 2, 1994 No Pages: 4	6

SECTION I - IDENTIFICATION OF PRODUCT

Manufacturer's Name
HELMITIN CANADA INC.

Emergency Tel No
(416) 239-3105

Address
99 SHORNCLIFFE ROAD, TORONTO, ONTARIO M8Z 5K7

Trade Name And Synonyms
HELMIFIX

Chemical Name And Synonyms
POLYCHLOROPRENE SOLVENT CEMENT

Chemical Family
SYNTHETIC RUBBERS, RESIN & SOLVENTS

Molecular Formula
PROPRIETARY ORGANIC SOLVENTS

SECTION II - HAZARDOUS COMPONENTS OF MIXTURE

Component	%%	Threshold Limit Value	Comments
METHYL ETHYL KETONE	3-7%	200 ppm	CAS #78-93-3 LD50 RATS 3.4g/Kg
ACETONE	7-13%	750 ppm	CAS #67-64-1 LD50 RATS 10.7/Kg
ETHYL ACETATE	5-10%	400 ppm	CAS #141-78-6
PETROLEUM NAPHTHA	30-60%	100 ppm	CAS #64742-48-9
TOLUOL	15-40%	50 ppm	CAS #108-88-3 LD50 RATS 3.0g/Kg
			TLVs published by ACGIH in 1993

SECTION III - PHYSICAL DATA

Appearance And Odour
LIGHT AMBER LIQUID - MILD AROMATIC ODOUR

Boiling Point / pH
60 DEGREES C

Specific Gravity (Water=1)
0.85

Percent Volatile (By Volume)
78.0%

Vapour Pressure (mm Of Mercury)
112 mm of Hg. at 20 DEGREES C

Vapour Density (Air = 1)
3.0

Evaporation Rate (Butyl Acetate = 1)
6.0

Evaporation Rate (Ethyl Ether = 1) **HELMIFIX**
SLOWER THAN ETHYL ETHER

Solubility In Water
NOT SOLUBLE

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Specify Method)
-17 DEG.C TAG OPEN CUP ASTM D1310

Flammable Limits (Percent By Volume)	**Lower**	**Upper**
	1%	6%

Fire-Extinguishing Media
DRY CHEMICAL OR CARBON DIOXIDE - WATER MAY BE INEFFECTIVE

Special Fire-Fighting Procedures
FIRE FIGHTERS CLOSE ENOUGH TO BE IN CONTACT WITH FUMES SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire And Explosion Hazards
TOXIC GASES MAY BE FORMED. VAPOURS MAY CAUSE FLASH FIRE OR IGNITI EXPLOSIVELY.

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value
90 ppm.

Effects Of Overexposure
IRRITATION OF EYES, NOSE & THROAT, DIZZINESS, IMPAIRMENT OF CO-ORDINATION. AVOID DIRECT CONTACT AS IT MAY CAUSE SKIN DERMATITIS IN SENSITIVE PERSONS.

Emergency And First Aid Procedures
PROVIDE ADEQUATE VENTILATION. REMOVE VICTIM FROM FURTHER EXPOSURE. FLUSH AFFECTED AREA WITH WATER OR MILD SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. FLUSH EYES WITH GENTLE STREAM OF WATER FOR AT LEAST 15 MINUTES. OBTAIN IMMEDIATE MEDICAL ATTENTION. WHEN INHALED, OXYGEN PROVIDES RELIEF FROM COUGHING.

SECTION VI - REACTIVITY DATA

Stability	**Stable**	/	**Unstable**
	X		

Conditions To Avoid
SPARKS, EXCESSIVE HEAT, OPEN FLAME

Incompatibility
STRONG OXIDIZING AGENTS

Hazardous Decomposition Products
ADHESIVE MAY EMIT CHLORINE, HYDROGEN CHLORIDE AND OTHER TOXIC FUMES AT DECOMPOSITION.

Hazardous Polymerization	**May Occur**	**Will Not Occur**
		X

Conditions To Avoid **HELMIFIX**
N/A

SECTION VII - PREVENTATIVE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled
REMOVE ALL IGNITION SOURCES. TURN OFF ALL ELECTRIC MOTORS. KEEP PEOPLE AWAY. RECOVER FREE LIQUID. WIPE UP IMMEDIATELY AND SAFELY DISCARD SATURATED ABSORBENT. AVOID PROLONGED BREATHING OF VAPOURS. KEEP SPILLS AWAY FROM MUNICIPAL SEWERS AND OPEN WASTES.

Waste Disposal Method
INCINERATE IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type)
SELF-CONTAINED RESPIRATOR IF VENTILATION IS INADEQUATE.

Ventilation - Local Exhaust
USE WITH ADEQUATE VENTILATION - EXPLOSION PROOF TYPE

Ventilation - Mechanical (General)
MAINTAIN SOLVENT CONCENTRATION BELOW TLV

Protective Gloves
IMPERMEABLE RUBBER OR PLASTIC GLOVES

Eye Protection
SAFETY GOGGLES, GLASSES OR FACE SHIELD

Other Protective Equipment
IMPERVIOUS APRON

SECTION IX - SPECIAL PRECAUTIONS

Precautions To Be Taken In Handling And Storing
EXTREMELY FLAMMABLE. VAPOURS MAY CAUSE FLASH FIRE. USE WITH ADEQUATE VENTILATION. AVOID PROLONGED BREATHING OF VAPOUR. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. KEEP VAPOUR CONCENTRATION BELOW TLV.

Other Precautions
KEEP AWAY FROM OPEN FLAME, SPARKS AND EXCESSIVE HEAT. PREVENT ACCUMULATION OF STATIC ELECTRICITY ON HANDLING EQUIPMENT. HARMFUL OR FATAL IF SWALLOWED.

SECTION X - DATE AND SOURCE OF INFORMATION

Date	Name And Title	Sheet Number
MAR. 2, 1994	GERARD YERETSIAN, CHEMIST (416) 239-3105	6

HAZARDOUS INFORMATION FOR TRANSPORTATION OF DANGEROUS GOODS
INFORMATION DE DANGER DU TRANSPORT MARCHANDISES DANGEREUSES HELMIFIX

In Case Of Emergency Call Collect: (613) 996-6666 Canutec
En Cas D'Urgence Appelez A Frais Virés: (613) 996-6666 Canutec

Product Produit	Shipping Name Appelation Reglementaire	Class Classe	UN Code Numero D'Identification	Packing Groupe	Flash Point Point D'Eclair
HELMIFIX	ADHESIVE	3.1	1133	II	

WHMIS INFORMATION --------- **INFORMATION SIMDUT**

CLASS B, DIVISION 2 - FLAMMABLE LIQUID
CLASS D, DIVISION 2 - SUBDIVISION B - TOXIC
EYE AND SKIN IRRITANT

BEST AVAILABLE COPY

COLLE'N NEOPRENE glue

INCORPORATED

Estimate
N/A-Not Applicab
N/R-Not Restricte
N/E-Not Establish

MATERIAL SAFETY DATA SHEET

NOTE: BLANK SPACES ARE NOT PERMITTED. IF ANY ITEM IS NOT APPLICABLE, THE SPACE MUST BE MARKED TO INDICATE THAT.

IDENTITY (As shown on Label or package) PLASTI [redacted]	PART NO. IF APPLICABLE

SECTION I

MANUFACTURER'S NAME [redacted]	EMERGENCY PHONE No. 1-800-424-9300
ADDRESS (NUMBER, STREET, CITY, STATE AND ZIP CODE) [redacted]	SIGNATURE OF PREPARER: (Optional)
[redacted]	MANUFACTURER'S PHONE No. FOR INFORMATION [redacted]
	DATE MSDS WAS PREPARED May 1, 1995

SECTION II - HAZARDOUS INGREDIENTS INFORMATION. All Health Hazards which comprise 1% or greater of the composition and all carcinogens if 0.1% of the composition or greater.

HAZARDOUS COMPONENTS CHEMICAL and IDENTITY AND COMMON NAME (S)	% Wt. (OPTIONAL)	CAS NO.	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMEND
VM & P Naphtha	37.0	8030-30-6	500ppm	300ppm	None
Hexane	18.5	110543	50ppm	50ppm	None
Toluene	14.8	108-88-3	100ppm	50ppm	None
Methyl Ethyl Ketone	9.7	78-93-3	200ppm	200ppm	None
Resins	26	N/A	N/A	N/A	N/A

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT 151-300°F	Specific Gravity (H20 =1) 0.92 - 0.94	APPROXIMATE WEIGHT PER GALLON (LBS) 6.86
VAPOR PRESSURE (MM HG)) 118mm/Hg (20C)	VAPOR DENSITY (AIR = 1) 2.5 up to 4.1	EVAPORATION RATE (BUTYL ACETATE =1) 6.8
SOLUBILITY IN WATER Insoluble	% VOLATILE 74% VOC LBS/GAL 5.1	OTHER (IF ANY) None

APPEARANCE AND ODOR Various Colors, Honey Like Substance - Characteristic Odor

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) <0F-ASTM D-93	FLAMMABLE LIMITS	LEL 1.0	U.E.L. 11.4

EXTINGUISHING MEDIA Carbon Dioxide, Dry Chemical, or Foam

SPECIAL FIRE FIGHTING PROCEDURES Self contained breathing apparatus with a full face piece, operated in pressure demand or other positive pressure mode

UNUSUAL FIRE AND EXPLOSION HAZARDS This material is flammable and may be ignited by heat, sparks, flame or static electricity.

HAZARDOUS PRODUCTS FORMED BY FIRE OR THERMAL DECOMPOSITION Carbon Dioxide and/or Carbon Monoxide

EXPLOSIVE LIMITS (% BY VOLUME IN AIR) 1.0 - 11.4

SECTION V - OPTIONAL HAZARD RATINGS IDENTIFICATION

HAZARD RATING	National Fire Protection Association (NFPA)
4-EXTREME 3-HIGH 2-MODERATE 1-SLIGHT 0-INSIGNIFICANT **SEE SECTION IV	FIRE 3 REACTIVITY 0 HEALTH 2 SPECIAL HAZARDS None

SECTION VI - REACTIVITY AND STABILITY DATA		
STABILITY	UNSTABLE STABLE X	CONDITIONS TO AVOID None
INCOMPATIBILITY (Materials to Avoid) Strong acids, bases, oxidizing agents, selected amines with alkali metals and halogens		
HAZARDOUS DECOMPOSITION OR BY PRODUCTS Carbon Monoxide, Carbon Dioxides		
HAZARDOUS POLYMERIZATION	MAY OCCUR / WILL NOT OCCUR X	CONDITIONS TO AVOID None
SECTION VII - HEALTH HAZARD DATA		
ROUTES OF ENTRY	INHALATION? Yes SKIN? Yes INGESTION? Yes EYES? Yes	
HEALTH HAZARDS	ACUTE X / CHRONIC X	See Signs and Symptoms of Exposure below. Brain and Nervous System Damage (Referred to as solvents or painters syndrome). Drying or Cracking skin.
CARCINOGENICITY: No	NTP? IARC Monographs? OSHA Regulated?	
SIGNS AND SYMPTOMS OF EXPOSURE	Headache, Dizziness, Drowsiness, Fatigue, Irregular Heartbeat, Skin and Eye Irritation. Target Organs: CNS, CVS, PNS, Liver, Kidneys, Lungs, Respiratory System, Skin.	
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE Pre-existing Heart, Liver, Kidney and Lung disorders.		
EMERGENCY AND FIRST AID PROCEDURES	Ingestion: Contact Physician or Poison Control Immediately. Inhalation: Remove to fresh air. Administer Oxygen or Artificial Respiration if Necessary. Eye Contact: Flush with large amounts of water. If irritation persists, contact Physician. Skin: Wash with soap and water.	
SECTION VIII - PRECAUTIONS FOR SAFE HANDLING AND USE		
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Wipe up with floor absorbent. Transfer to hood. Prevent run-off to sewers. Eliminate all sources of ignition. Ventilate to maintain exposure below P.E.L.'s. Use sand or other material to dam or contain spills. If large spill, notify appropriate state and local agencies.	
WASTE DISPOSAL METHODS Dispose of product in accordance with local, county, state and federal regulations.		
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE	Keep away from sparks, flame and heat sources. Do not store above 120°F and use adequate ventilation. Avoid inhalation of vapors and contact with liquid product. Use good personal hygiene.	
OTHER PRECAUTIONS	Keep Container Closed When Not In Use. Containers should be disposed of in an environmentally safe manner in accordance with Governmental Regulations.	
SECTION IX - CONTROL MEASURES		
RESPIRATORY PROTECTION (SPECIFY TYPE) Depending on the Airborne concentration, use a Respirator or Gas Mask with appropriate NIOSH approved cartridge and canister, or supplied air equipment.		PROTECTIVE GLOVES Impervious
VENTILATION Maintain P.E.L.'s	LOCAL EXHAUST Supplemental (if needed)	SPECIAL None
	MECHANICAL (GENERAL) To maintain exposure below P.E.L.'s	OTHER None
EYE PROTECTION Chemical splash goggles or approved eye protection.	OTHER PROTECTIVE CLOTHING OR EQUIPMENT Impervious Clothing/Boots as needed.	
WORK HYGIENIC PRACTICES Wash thoroughly after handling.		
SECTION X - TRANSPORTATION INFORMATION (Optional)		
D.O.T. PROPER SHIPPING NAME Coating Solution		D.O.T. HAZARD CLASS 3, PG II
IF A "CONSUMER COMMODITY ORM-D", WHAT IS THE HAZARD CLASS 3, PG II		
D.O.T. I.D. No. (NA OR NA) UN1139		
IATA PROPER SHIPPING NAME Coating Solution	IATA HAZARD CLASS 3, PG II	IMO No. N/A
SECTION XI - 313 SUPPLIER NOTIFICATION		
THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986, 40 CFR 372, (see table on page 1 for CAS # and percent by weight). Hexane, Toluene and Methyl Ethyl Ketone		
WARNING: THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. Toluene		

This is the "back" when printed in duplex. Page 2 of 2 pages if not duplex.

Prepared By: Thomas Mullen

Approved By:

Date: May 3, 1993

3M Canada Company
Post Office Box 5757
London, Ontario N6A 4T1
Medical Emergency Telephone: (519)451-2500, Ext. 2222

Material Safety Data Sheet

Document id	: 11-6490-4	Issue date	: 11/14/96
Version	: 5.00	Supersedes date	: 06/13/96

Prepared by: Corporate Loss Prevention Department, 3M Canada Company.
Telephone: (519) 452-6102, Fax: (519) 452-6015.

1 Product Identification

Tradename:
CATALOG 6065 "SPRAY-MOUNT" (TM) ARTIST ADHESIVE
Product ID:
CS-0406-2155-2 62-4953-4825-2 62-4953-3730-5 62-4953-4827-8
62-4953-2930-2 62-4953-4826-0 CS-0406-6990-8
Intended Use of Product:
ADHESIVE
Division:
INDUSTRIAL TAPE AND SPECIALTIES DIVISION

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
ISOBUTANE	75-28-5	20.0 - 30.0
PENTANE	109-66-0	20.0 - 30.0
HEPTANE	142-82-5	10.0 - 20.0
NON-VOLATILE COMPONENTS	Trade Secret	10.0 - 20.0
PROPANE	74-98-6	10.0 - 20.0
ACETONE	67-64-1	7.0 - 13.0

NOTE:
NON-VOLATILE COMPONENTS is a non-hazardous Trade Secret material according to WHMIS criteria.

3 Hazards Identification

Critical Hazards
Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.
Intentional concentration and inhalation may be harmful or fatal.
Inhalation may cause: Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.
Aerosol container contains flammable gas under pressure.
Extremely flammable liquid and vapour.
See Sections 7 and 11 for further information.

4 First Aid Measures

Instructions for Eye Contact:
Immediately flush eyes with large amounts of water. Get immediate medical attention.
Instructions for Skin Contact:
Flush skin with large amounts of water. If irritation persists, get medical attention.
Instructions for Inhalation:
Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Instructions for Ingestion:
Do not induce vomiting. Drink two glasses of water. Call a physician.

5 Fire Fighting Measures

Flash point:	-45.5 C TCC Propellent
Lower Explosive Limit (%):	Not applicable
Upper Explosive Limit (%):	Flammable Gas
Autoignition temperature:	Unknown

Suitable Extinguishing Media:
Carbon dioxide; Dry chemical; Foam;
Exposure Hazards during Fire:
Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.
Combustion Products from Fire:
None known.
Fire Fighting Procedures:
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

NFPA Aerosol Classification: Level 3

6 Accidental Release Measures

Personal Precautions:
Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Spill Response:
Ventilate area. Extinguish all ignition sources. Cover with absorbent material. Collect using non-sparking tools. Place in an approved container and seal.

Methods for Disposal:
Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. Facility must be capable of handling aerosol cans. Dispose of empty cans in a sanitary landfill. Dispose of waste product in a facility permitted to accept chemical waste.

7 Handling and Storage

Storage Requirements:
Store at temperatures below 120 degrees F (49 degrees C).

Incompatible Materials:
Store out of direct sunlight.

Fire Prevention:
Aerosol container contains flammable gas under pressure. Extremely flammable liquid and vapour. No smoking while handling this material.

Explosion Prevention:
Keep away from heat, sparks, open flame, and other sources of ignition.

Static Prevention:
Avoid static discharge.

Use Instructions:
Do not pierce or burn container, even after use.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:
Avoid eye contact with vapour, spray, or mist. Wear safety glasses with side shields.

Skin Protection:
Avoid prolonged or repeated skin contact.

Respiratory Protection:
Avoid breathing of vapours, mists or spray. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants: half-mask organic vapour respirator;
Ingestion (Prevention):
Do not ingest. Keep out of the reach of children.
Recommended Ventilation:
Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

Ingredient Exposure Data

ISOBUTANE (75-28-5)
LC50(rat,inhalation): 570,000 ppm 15 minutes
PIN (Product Identification Number): UN 1969

PENTANE (109-66-0)
PIN (Product Identification Number): 1265
Ontario TWAEV: 600 ppm 1770 mg/m3
Ontario STEV: 750 ppm 2210 mg/m3
ACGIH TLV-TWA: 600 ppm 1770 mg/m3
ACGIH TLV-STEL: 750 ppm 2270 mg/m3

HEPTANE (142-82-5)
LD50 (rat, oral): > 15000 mg/kg
PIN (Product Identification Number): UN 2831
Ontario TWAEV: 400 ppm 1635 mg/m3
Ontario STEV: 500 ppm 2045 mg/m3
ACGIH TLV-TWA: 400 ppm 1640 mg/m3
ACGIH TLV-STEL: 500 ppm 2050 mg/m3

NON-VOLATILE COMPONENTS (Trade Secret)
Specific Ingredient Data: No data available.

PROPANE (74-98-6)
PIN (Product Identification Number): UN 1978
Specific Ingredient Data: No data available.

ACETONE (67-64-1)
LD50 (rat, oral): 5800 mg/kg
LC50 (rat, inhalation/4 hours): > 16000 ppm
PIN (Product Identification Number): UN 1090
Ontario TWAEV: 750 ppm 1780 mg/m3
Ontario STEV: 1000 ppm 2375 mg/m3
ACGIH TLV-TWA: 750 ppm 1780 mg/m3
ACGIH TLV-STEL: 1000 ppm 2380 mg/m3

9 Physical and Chemical Properties

Physical form,Color,Odour:	Liquid in aerosol; clear; sweet/fruity odour;
Odour Threshold:	No data available.
pH:	Not applicable
Boiling point/boiling range:	Compressed Gas
Melting point/melting range:	Unknown
Vapour pressure:	Compressed Gas
Water Solubility:	Nil
Partition coefficient (K o/w):	No data available.
Specific gravity:	0.640 Water=1
Vapour density:	2.97 Air=1
Volatile organic compounds:	Approximately 81.6 %
Evaporation rate:	1.90 Water=1
Viscosity:	Not applicable.

10 Stability and Reactivity

Conditions to Avoid:
None known.
Materials to Avoid:
Heat;
Hazardous Decomposition:
Carbon monoxide and carbon dioxide; Toxic vapours, gases or particulates;
Stability and Reactivity:
Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:
Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.
Effects from Skin Contact:
Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.
Effects from Inhalation:
Intentional concentration and inhalation may be harmful or fatal. Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Effects from Ingestion:
Ingestion is not a likely route of exposure to this product.
Sensitization Information:
No data available.
Carcinogenicity:
No data available.
Mutagenicity:
No data available.
Reproductive Effects:
No data available.

12 Ecological Information

Ecotoxicity Data:
No data available.

13 Disposal Considerations

Product as Sold:
No data available.
Product Packaging:
No data available.
Special Instructions:
Recycle empty aerosol containers where available.

14 Transportation Information

Transportation of Dangerous Goods

TDG Classification:	Consumer Commodity

International Dangerous Goods Classification

IMO Class:	No data available.
ICAO Class:	No data available.

15 Regulatory Information

WHMIS Classification:	Exempt (Consumer Product)

NOTE:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Product Certifications:
The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:
AICS - Australian Inventory of Chemical Substances
TSCA - Toxic Substances Control Act (USA)
DSL - Domestic Substances List (Canada)

16 Other Information

Reason for Reissue:
The following Sections and topics have been updated or revised:
Section 7 - Handling and Storage; Section 8 - Exposure Controls/Personal Protection;

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.

3M Canada Company
Post Office Box 5757
London, Ontario N6A 4T1
Medical Emergency Telephone: (519)451-2500, Ext. 2222

Material Safety Data Sheet

Document id	: 11-4257-9	Issue date	: 11/15/96
Version	: 9.00	Supersedes date	: 06/13/96

Prepared by: Corporate Loss Prevention Department, 3M Canada Company.
Telephone: (519) 452-6102, Fax: (519) 452-6015.

1 Product Identification

Tradename:
3M SUPER 77 SPRAY ADHESIVE

Product ID:

CS-0406-2131-3	62-4437-4030-3	62-4437-4830-6	62-4437-4925-4
62-4437-4930-4	62-4437-4933-8	62-4437-4935-3	62-4437-4936-1
CS-0406-6984-1	CS-0406-7003-9	62-4437-0921-7	62-4437-0926-6
62-4437-0928-2	62-4437-0929-0	62-4437-0930-8	62-4437-0931-6
62-4437-9999-4			

Intended Use of Product:
ADHESIVE

Division:
INDUSTRIAL TAPE AND SPECIALTIES DIVISION

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
NON-VOLATILE COMPONENTS	Trade Secret	20.0 - 30.0
CYCLOHEXANE	110-82-7	10.0 - 20.0
DIMETHYL ETHER	115-10-6	5.0 - 15.0
2-METHYLPENTANE	107-83-5	5.0 - 15.0
ISOBUTANE	75-28-5	5.0 - 15.0
PROPANE	74-98-6	5.0 - 15.0
HEXANE (OTHER ISOMERS)	None	1.0 - 10.0
3-METHYLPENTANE	96-14-0	1.0 - 10.0
2,3-DIMETHYLBUTANE	79-29-8	1.0 - 10.0
2,2-DIMETHYLBUTANE	75-83-2	1.0 - 10.0
N-HEXANE	110-54-3	< 2.0

NOTE:
NON-VOLATILE COMPONENTS is a non-hazardous Trade Secret material according to WHMIS criteria.
HEXANE (OTHER ISOMERS) has no CAS number.

3 Hazards Identification

Critical Hazards
Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision. Intentional concentration and inhalation may be harmful or fatal. Inhalation may cause: Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Aerosol container contains flammable gas under pressure. Extremely flammable liquid and vapour.
See Sections 7 and 11 for further information.

4 First Aid Measures

Instructions for Eye Contact:
Immediately flush eyes with large amounts of water. Get immediate medical attention.
Instructions for Skin Contact:
Flush skin with large amounts of water. If irritation persists, get medical attention.
Instructions for Inhalation:
Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Instructions for Ingestion:
Do not induce vomiting. Drink two glasses of water. Call a physician.

5 Fire Fighting Measures

Flash point:	-41.1 C TCC
Lower Explosive Limit (%):	Not applicable
Upper Explosive Limit (%):	Flammable Gas
Autoignition temperature:	Unknown

Suitable Extinguishing Media:
Carbon dioxide; Dry chemical; Foam;
Exposure Hazards during Fire:
Closed containers exposed to heat from fire may build pressure and explode. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

Combustion Products from Fire:
None known.
Fire Fighting Procedures:
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.
NFPA Aerosol Classification: Level 3

6 Accidental Release Measures

Personal Precautions:
Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.
Spill Response:
Ventilate area. Extinguish all ignition sources. Collect using non-sparking tools. Cover with absorbent material. Place in an approved container and seal.
Methods for Disposal:
Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. Facility must be capable of handling aerosol cans. Dispose of empty cans in a sanitary landfill. Dispose of waste product in a facility permitted to accept chemical waste.

7 Handling and Storage

Storage Requirements:
Store at temperatures below 120 degrees F (49 degrees C).
Incompatible Materials:
Store out of direct sunlight.
Fire Prevention:
Aerosol container contains flammable gas under pressure. Extremely flammable liquid and vapour. No smoking while handling this material.
Explosion Prevention:
Keep away from heat, sparks, open flame, and other sources of ignition.
Static Prevention:
Avoid static discharge.
Use Instructions:
Do not pierce or burn container, even after use.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:
Avoid eye contact with vapour, spray, or mist. Wear safety glasses with side shields.

Skin Protection:
Avoid prolonged or repeated skin contact.

Respiratory Protection:
Avoid breathing of vapours, mists or spray. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants: half-mask organic vapour respirator;

Ingestion (Prevention):
Do not ingest. Keep out of the reach of children.

Recommended Ventilation:
Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

Ingredient Exposure Data

NON-VOLATILE COMPONENTS (Trade Secret)
Specific Ingredient Data: No data available.

CYCLOHEXANE (110-82-7)
LD50 (rat, oral): 12,705 mg/kg
PIN (Product Identification Number): 1145
Ontario TWAEV: 300 ppm 1030 mg/m3
ACGIH TLV-TWA: 300 ppm 1030 mg/m3

DIMETHYL ETHER (115-10-6)
LC50 (rat, inhalation/4 hours): 164000 ppm
PIN (Product Identification Number): UN 1033
Chemical Manufacturers' Recommended Guideline (CMRG) TWA Exposure Limit 1000 ppm

2-METHYLPENTANE (107-83-5)
PIN (Product Identification Number): UN 1208
ACGIH TLV-TWA: 500 ppm 1760 mg/m3
ACGIH TLV-STEL: 1000 ppm 3500 mg/m3

ISOBUTANE (75-28-5)
LC50(rat,inhalation): 570,000 ppm 15 minutes
PIN (Product Identification Number): UN 1969

PROPANE (74-98-6)
PIN (Product Identification Number): UN 1978
Specific Ingredient Data: No data available.

HEXANE (OTHER ISOMERS) (None)
Specific Ingredient Data: No data available.

3-METHYLPENTANE (96-14-0)
PIN (Product Identification Number): UN 1208

2,3-DIMETHYLBUTANE (79-29-8)
PIN (Product Identification Number): as A1

2,2-DIMETHYLBUTANE (75-83-2)
PIN (Product Identification Number): UN 2055

N-HEXANE (110-54-3)
LD50 (rat, oral): 28710 mg/kg
LC50 (rat, inhalation/4 hours): 48,000 ppm
PIN (Product Identification Number): 1208
Ontario TWAEV: 50 ppm 176 mg/m3
ACGIH TLV-TWA: 50 ppm 176 mg/m3

9 Physical and Chemical Properties

Physical form,Color,Odour:	Liquid in aerosol; light cream colour; sweet/fruity odour;
Odour Threshold:	No data available.
pH:	Approximately 6.7
Boiling point/boiling range:	Compressed Gas
Melting point/melting range:	Unknown
Vapour pressure:	Compressed Gas
Water Solubility:	Nil
Partition coefficient (K o/w):	No data available.
Specific gravity:	0.697 Water=1
Vapour density:	2.97 Air=1
Volatile organic compounds:	75 % calculated
Evaporation rate:	1.90 Ether=1
Viscosity:	Not applicable.

10 Stability and Reactivity

Conditions to Avoid:
None known.

Materials to Avoid:
Heat;
Hazardous Decomposition:
Carbon monoxide and carbon dioxide; Toxic vapours, gases or particulates;
Stability and Reactivity:
Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:
Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.
Effects from Skin Contact:
Mild Skin Irritation (after prolonged or repeated contact): signs/symptoms can include redness, swelling, and itching.
Effects from Inhalation:
Intentional concentration and inhalation may be harmful or fatal. Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.
Effects from Ingestion:
Ingestion is not a likely route of exposure to this product.
Sensitization Information:
No data available.
Carcinogenicity:
No data available.
Mutagenicity:
No data available.
Reproductive Effects:
No data available.

12 Ecological Information

Ecotoxicity Data:
No data available.

13 Disposal Considerations

Product as Sold:
No data available.

Product Packaging:
No data available.
Special Instructions:
Recycle empty aerosol containers where available.

14 Transportation Information

Transportation of Dangerous Goods

TDG Classification:	Consumer Commodity by ground. Do not ship by air.

International Dangerous Goods Classification

IMO Class:	No data available.
ICAO Class:	No data available.

15 Regulatory Information

WHMIS Classification:	CS-0406-2131-4, CS-0406-6984-1: Exempt (Consumer Product) 62-4337-4930-4: A, B5, D2B

NOTE:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
Product Certifications:
The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:
AICS - Australian Inventory of Chemical Substances
EINECS - European Inventory of Existing Commercial Chemical Substances
TSCA - Toxic Substances Control Act (USA)
DSL - Domestic Substances List (Canada)

16 Other Information

Reason for Reissue:
Added/changed product ids of MSDS. The following Sections and topics have been updated or revised: Section 3 - Hazards Identification - Critical Hazards; Section 7 - Handling and Storage; Section 8 - Exposure Controls/Personal Protection; Section 9 - Physical and Chemical Properties; Section 11 - Toxicological Information; Section

3M Canada Company
Post Office Box 5757
London, Ontario N6A 4T1
Medical Emergency Telephone: (519)451-2500, Ext. 2222

Material Safety Data Sheet

Document id	: 06-5392-3	Issue date	: 08/21/96
Version	: 5.00	Supersedes date	: 08/08/96

Prepared by: Corporate Loss Prevention Department, 3M Canada Company.
Telephone: (519) 452-6102, Fax: (519) 452-6015.

1 Product Identification

Tradename:
SCOTCHGARD(TM) PROTECTOR FOR FABRIC & UPHOLSTERY AEROSOL (WATER-BASED)

Product ID:

70-0705-4523-4	70-0705-4524-2	70-0705-8283-1	70-0705-8796-2
70-0706-4713-9	70-0706-4714-7	70-0706-4715-4	70-0706-7515-5
70-0706-7517-1	CT-0607-7095-6	CT-0607-7096-4	CT-0607-7097-2
70-0706-8442-1	70-0707-1331-1	70-0707-1540-7	70-0707-1900-3

Intended Use of Product:
PROTECTIVE CHEMICAL.

Division:
HOME AND COMMERCIAL CARE DIVISION

2 Composition/Information on Ingredients

Ingredient Name	CAS Number	Percentage
WATER	7732-18-5	60 - 90
ISOBUTANE (PROPELLANT)	75-28-5	5 - 10
FLUOROALKYL POLYMER	Trade Secret	1 - 5
1-(2-BUTOXYPROPOXY)-2-PROPANOL	29911-28-2	1 - 5

NOTE:
FLUOROALKYL POLYMER is a non-hazardous Trade Secret material according to WHMIS criteria.

3 Hazards Identification

Critical Hazards
None known.
See Sections 7 and 11 for further information.

4 First Aid Measures

Instructions for Eye Contact:
Immediately flush eyes with large amounts of water. Get immediate medical attention.
Instructions for Skin Contact:
Wash affected area with soap and water.
Instructions for Inhalation:
Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Instructions for Ingestion:
No need for first aid is anticipated.
Special Instructions:
NOTE TO PHYSICIANS: Exposure to high concentration may increase 'myocardial irritability.' Do not administer sympathomimetic drugs (i.e. adrenaline) unless absolutely necessary. No specific antidote. Supportive care and treatment based on the judgement of physician in response to the patient are recommended.

5 Fire Fighting Measures

Flash point:	Approximately 76.7 C (liquid)
Lower Explosive Limit (%):	Not applicable
Upper Explosive Limit (%):	Not applicable
Autoignition temperature:	Unknown

Suitable Extinguishing Media:
Water spray; Carbon dioxide; Dry chemical; Foam;
Exposure Hazards during Fire:
Closed containers exposed to heat from fire may build pressure and explode.
Combustion Products from Fire:
None known.
Fire Fighting Procedures:
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

6 Accidental Release Measures

Personal Precautions:
Observe precautions from other sections.

Spill Response:
Ventilate area. Contain spill. Cover with absorbent material. Collect spilled material. Clean up residue with water. Place in an approved metal container. Seal the container. Place leaking containers in a well-ventilated area, preferrably in an exhaust hood, if available, or outdoors.

Methods for Disposal:
Incinerate in an industrial or commercial facility. Facility must be capable of handling aerosol cans. Combustion products will include HF.

7 Handling and Storage

Storage Requirements:
Store at temperatures below 120 degrees F (49 degrees C).

Incompatible Materials:
None known.

Fire Prevention:
Aerosol container contains flammable gas under pressure.

Use Instructions:
Do not pierce or burn container, even after use. Keep children and pets off treated area until thoroughly dry.

8 Exposure Controls/Personal Protection

Personal Protection

Eye Protection:
Avoid eye contact. Do not spray in eyes, in mouth, or on skin.

Skin Protection:
Avoid prolonged or repeated skin contact.

Respiratory Protection:
Avoid breathing of vapours, mists or spray.

Ingestion (Prevention):
Not applicable. Keep out of the reach of children.

Recommended Ventilation:
Use in a well-ventilated area. Use with adequate dilution ventilation. Use only as directed and only in areas adequately ventilated to remove vapours and prevent vapour buildup. Maintain cross ventilation through use of fans and opening all doors and windows until the article is

dry. Do not use in small rooms, bathrooms or closets. Use outdoors if possible. If application requires more than one can, wait ninety (90) minutes between spraying each can.

Ingredient Exposure Data

WATER (7732-18-5)
Specific Ingredient Data: Not applicable.

ISOBUTANE (PROPELLANT) (75-28-5)
LC50(rat,inhalation): 570,000 ppm 15 minutes
PIN (Product Identification Number): UN 1969

FLUOROALKYL POLYMER (Trade Secret)
Specific Ingredient Data: No data available.

1-(2-BUTOXYPROPOXY)-2-PROPANOL (29911-28-2)
Specific Ingredient Data: No data available.

9 Physical and Chemical Properties

Physical form,Color,Odour:	liquid; milky white to translucent colour;
Odour Threshold:	No data available.
pH:	9 - 10
Boiling point/boiling range:	Approximately 93.3 C (liquid phase)
Melting point/melting range:	Not applicable
Vapour pressure:	Unknown
Water Solubility:	Complete
Partition coefficient (K o/w):	No data available.
Specific gravity:	Approximately 1 Water=1
Vapour density:	Unknown
Volatile organic compounds:	Approximately 12 %
Evaporation rate:	Unknown
Viscosity:	< 100 centipoise

10 Stability and Reactivity

Conditions to Avoid:
None known.
Materials to Avoid:
None known.

Hazardous Decomposition:
Carbon monoxide and carbon dioxide; hydrogen fluoride; Irritant vapours or gases;
Stability and Reactivity:
Stable. Hazardous polymerization will not occur.

11 Toxicological Information

Effects from Eye Contact:
Contact with the eyes during product use is not expected to result in significant irritation.
Effects from Skin Contact:
Contact with the skin during product use is not expected to result in significant irritation.
Effects from Inhalation:
Repeated or prolonged exposure may cause Central Nervous System drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.
Effects from Ingestion:
Ingestion is not a likely route of exposure to this product.
Sensitization Information:
No data available.
Carcinogenicity:
No data available.
Mutagenicity:
No data available.
Reproductive Effects:
No data available.

12 Ecological Information

Ecotoxicity Data:
No data available.
Other Effects and Information:
Not determined.

13 Disposal Considerations

Product as Sold:
No data available.

Product after Use:
Do not puncture or burn cans in a household incinerator.
Product Packaging:
No data available.
Special Instructions:
Since regulations vary, consult applicable regulations or authorities before disposal.

14 Transportation Information

Transportation of Dangerous Goods

TDG Classification:	Consumer Commodity by ground. Do not ship by air.

International Dangerous Goods Classification

IMO Class:	No data available.
ICAO Class:	No data available.

15 Regulatory Information

WHMIS Classification: Exempt (Consumer Product)
NOTE:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.
Product Certifications:
The product on this MSDS, or all its components, is included on the following countries' chemical inventories, as noted:
TSCA - Toxic Substances Control Act (USA)

16 Other Information

Reason for Reissue:
Added/changed product ids of MSDS. TDG information update.
The following Sections and topics have been updated or revised:
Section 15 - Regulatory Information: Product Certifications

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal

SLUYTER COMPANY LTD.
375 STEELCASE ROAD EAST
MARKHAM, ONTARIO CANADA L3R 1G3
TEL:905-475-6011

PRODUCT : 476 SPRAY ADHESIVE

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER.....SLUYTER COMPANY LTD.
375 STEELCASE ROAD EAST
MARKHAM, ONTARIO
CANADA ; L3R 1G3
TEL:905-475-6011
PREPARED BY.....PROCESS DEVELOPMENT
PREPARATION DATE.....AUG 28/96
MATERIAL USE.....REFER TO LABEL FOR INFORMATION.
PRODUCT USES.....ADHESIVES.
CHEMICAL FAMILY.....SOLVENT BASED PRESSURIZED BLEND

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	%	T.L.V.	C.A.S. #	LD/50, ROUTE, SPECIES	LC/50, ROUTE, SPECIES
ACETONE	10 - 30	750 PPM	67-64-1	9,750 mg/kg RAT ORAL	16,000 ppm 4 HOURS RAT INHALATION
CYCLOHEXANE	10 - 30	300 ppm	110-82-7		
HEXANE	10 - 30	50 PPM	110-54-3	28710 MG/KG RAT ORAL	120000 MG/M3 INHALATION MUS
ISO BUTANE	10 - 30	800 PPM	75-28-5	NOT INDICATED	NOT INDICATED
PROPANE	10 - 30	1000 ppm	74-98-6	NOT INDICATED	NOT INDICATED

SECTION 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY.....SKIN CONTACT. INHALATION. INGESTION. EYE CONTACT
SKIN CONTACT.....CAN CAUSE MODERATE IRRITATION, DEFATTING AND DERMATITIS.
SKIN ABSORPTION.....NOT AVAILABLE
INHALATION, CHRONIC.....SEE "EFFECTS OF CHRONIC EXPOSURE"
INHALATION.....BREATHING OF HIGH VAPOUR CONCENTRATIONS MAY HAVE RESULTS RANGING FROM DIZZINESS AND HEADACHE TO UNCONSCIOUSNESS. MAY BE ANAESTHETIC AND MAY CAUSE OTHER CENTRAL NERVOUS SYSTEM EFFECTS.
INGESTION.....CAN CAUSE GASTRO-INTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA. SMALL AMOUNTS OF LIQUID ASPIRATED INTO RESPIRATORY SYSTEM CAN CAUSE SEVERE HEALTH EFFECTS. (E.G. BRONCHOPNEUMONIA OR PULMONARY EDEMA).
EYE CONTACT.....CONTAINS MATERIALS THAT ARE MODERATELY IRRITATING TO THE EYES
EFFECTS OF ACUTE EXPOSURE.....AS DESCRIBED ABOVE
EFFECTS OF CHRONIC EXPOSURE.....PROLONGED OR REPEATED EXPOSURE TO N-HEXANE MAY DAMAGE PERIPHERAL NERVE TISSUE OF THE ARMS AND LEGS AND MAY RESULT IN MUSCULAR WEAKNESS OR LOSS OF SENSATION IN THE EXTREMITIES. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING OR CRACKING OF SKIN.

SECTION 04: FIRST AID MEASURES

EYE CONTACT.....IMMEDIATELY FLUSH WITH WATER FOR A MINIMUM OF 20 MINUTES. GET MEDICAL ATTENTION.
SKIN CONTACT.....REMOVE CONTAMINATED CLOTHING. WASH AFFECTED AREA WITH WATER AND SOAP. SEEK MEDICAL ATTENTION IF IRRITATION OCCURS OR PERSISTS.
INHALATION.....REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING QUALIFIED PERSONNEL SHOULD ADMINISTER ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION.
INGESTION.....DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION
ADDITIONAL INFORMATION.....GET IN CONTACT WITH YOUR LOCAL POISON CONTROL CENTRE.

SECTION 05: FIRE FIGHTING MEASURES

FLAMMABLE ?.....YES
IF YES UNDER WHICH CONDITIONS?...FLAMMABLE AEROSOL. DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT, FLAMES, OR SPARKS. CAUTION: CONTENTS UNDER PRESSURE. EXPOSURE TO TEMPERATURES ABOVE 50 C MAY CAUSE CONTAINER TO EXPLODE.
SPECIAL PROCEDURES.....A SELF CONTAINED BREATHING APPARATUS IS REQUIRED FOR FIRE FIGHTING PERSONNEL. USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES AND TO PROTECT PERSONNEL. USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES AND TO PROTECT PERSONNEL.
FLASH POINT (C), METHOD.....- 27 C TAG CLOSED CUP (CONCENTRATE)
AUTO IGNITION TEMPERATURE.....NOT AVAILABLE
UPPER FLAMMABLE LIMIT (% VOL)....7.0

PRODUCT : 476 SPRAY ADHESIVE

SECTION 05: FIRE FIGHTING MEASURES

LOWER FLAMMABLE LIMIT (% VOL)....0.6
EXTINGUISHING MEDIA.....“ALCOHOL” FOAM, CO2, DRY CHEMICAL.
HAZARDOUS COMBUSTION PRODUCTS....OXIDES OF CARBON (CO,CO2). TOXIC FUMES
SENSITIVITY TO MECHANICAL.....NOT AVAILABLE
IMPACT
SENSITIVITY TO STATIC.....NOT AVAILABLE
DISCHARGE

SECTION 06: ACCIDENTAL REALEASE MEASURES

LEAK/SPILL.....VENTILATE. REMOVE ALL SOURCES OF IGNITION, OPEN FLAMES, SPARKS, ETC. WEAR PROTECTIVE GEAR.(SEE SECTION 8). SMALL SPILLS MAY BE WIPED. LARGE SPILLS SHOULD BE COLLECTED FOR DISPOSAL. USE A NON-COMBUSTIBLE ABSORBANT INORGANIC MATERIAL. PREVENT RUNOFF INTO DRAINS, SEWERS, AND OTHER WATERWAYS. CAUTION: SURFACES MAY BE SLIPPERY. CLEAN THOROUGHLY WITH MINERAL SPIRITS BASED CLEANER.

SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES.....AVOID SKIN AND EYE CONTACT. AVOID BREATHING VAPOURS. USE ADEQUATE VENTILATION. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.
STORAGE NEEDS.....STORE IN A COOL AREA, AWAY FROM ALL SOURCES OF HEAT AND IGNITION. STORE IN A DRY AND WELL-VENTILATED AREA. DO NOT STORE ABOVE 49 deg C.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT
- EYE/TYPE.....SAFETY GLASSES
- RESPIRATORY/TYPE.....IF USED INDOORS ON A CONTINUOUS BASIS, OR IF THE TLV IS EXCEEDED, USE OF A CARTRIDGE TYPE RESPIRATOR (NIOSH /MSHATC 23 C OR EQUIVALENT) IS RECOMMENDED.
- GLOVES/ TYPE.....NOT APPLICABLE.
- CLOTHING/TYPE.....WEAR ADEQUATE PROTECTIVE CLOTHES.
- FOOTWEAR/TYPE.....SAFETY BOOTS PER LOCAL REGULATIONS
- OTHER/TYPE.....EYE BATH AND SAFETY SHOWER.

VENTILATION REQUIREMENTS.....NATURAL OR MECHANICAL (EXPLOSION PROOF) VENTILATION TO KEEP VAPOUR CONCENTRATION WELL BELOW TLV.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE.....AEROSOL
ODOR.....MILD ODOR
SPECIFIC GRAVITY.....0.75 - 0.85 (CONCENTRATE)
ODOR THRESHOLD (ppm).....NOT AVAILABLE
VAPOR PRESSURE (mm Hg).....90 PSIG @ 20 C
VAPOUR DENSITY (AIR=1).....> 1
EVAPORATION RATE.....NOT AVAILABLE
BOILING POINT (deg C).....65 C
pH.....NOT APPLICABLE
SOLUBILITY IN WATER (% W/W).....NEGLIGIBLE
COEFFICIENT OF WATER\OIL.....NOT AVAILABLE
DISTRIBUTION
FREEZING POINT.....< 0 C
MELTING POINT (deg C).....NOT APPLICABLE
MOLECULAR WEIGHT.....NOT APPLICABLE

SECTION 10: STABILITY AND REACTIVITY

INCOMPATIBILITY.....STRONG ACIDS AND STRONG BASES. OXIDIZING AGENTS
REACTIVITY CONDITIONS ?.....EXCESSIVE HEAT, SPARKS AND OPEN FLAME
HAZARDOUS PRODUCTS OF.....OXIDES OF CARBON (CO,CO2). TOXIC FUMES. SMOKE
DECOMPOSITION

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMIT OF MATERIAL.....SEE HAZARDOUS INGREDIENTS SECTION (2)
IRRITANCY OF MATERIAL.....MODERATE
SENSITIZING CAPABILITY OF.....NOT AVAILABLE.
MATERIAL

PRODUCT : 476 SPRAY ADHESIVE

SECTION 11: TOXICOLOGICAL INFORMATION

CARCINOGENICITY OF MATERIAL.....NO INFORMATION IS AVAILABLE AND NO ADVERSE CARCINOGENIC EFFECTS ARE ANTICIPATED.
TERATOGENICITY.....NO INFORMATION IS AVAILABLE AND NO ADVERSE TERATOGENICITY EFFECTS ARE ANTICIPATED.
MUTAGENICITY.....NO INFORMATION IS AVAILABLE AND NO ADVERSE MUTAGENICITY EFFECTS ARE ANTICIPATED.
REPRODUCTIVE EFFECTS.....NO INFORMATION IS AVAILABLE AND NO ADVERSE REPRODUCTIVE EFFECTS ARE ANTICIPATED.
SYNERGISTIC MATERIALS.....NOT AVAILABLE.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL.....NOT AVAILABLE
BIODEGRADABILITY.....NOT AVAILABLE

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL.....CONTENTS UNDER PRESSURE. DO NOT PUNCTURE, INCINERATE OR EXPOSE TO HEAT, EVEN WHEN EMPTY. SPILLED MATERIAL AND WATER RINSES ARE CLASSIFIED AS CHEMICAL WASTE. DISPOSE OF IN ACCORDANCE WITH CURRENT LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

T.D.G. CLASSIFICATION.....CONSUMER COMMODITY

SECTION 15: REGULATORY INFORMATION

CPR COMPLIANCE.....THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.
WHMIS CLASSIFICATION.....CLASS A CLASS B DIV.5 FLAMMABLE AEROSOL,CLASS D DIV.2 SUBDIV B. CLASS B DIV.5 FLAMMABLE AEROSOL CLASS D DIV.2 SUBDIV.B

SECTION 16: OTHER INFORMATION

NOTICE FROM THE MANUFACTURER:....THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY THE MANUFACTURER FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. THE MANUFACTURER ASSUMES NO RESPONSIBILITY FOR EVENTS RESULTING OR DAMAGES INCURRED FROM IT'S USE. THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET RELATES ONLY TO SPECIFIC MATERIAL DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS.

CANUTEC EMERGENCY (613) 996-6666

HETRON® 670 P POLYESTER RESIN

FIRE RETARDANT • PROMOTED • THIXOTROPIC

hand layup

THE PRODUCT

HETRON 670P polyester resin is recommended for product applications where Class I or Class II flame spread ratings are required. Typical applications include:

- Modular structures including RP/foam composites.
- Curtain walls, facings and spandrel panels. Single skin and RP/foam composites.
- Decorative architectural applications.
- Sanitaryware products.
- Automotive, truck and bus components.

SHIPMENT AND STORAGE

Standard containers for HETRON 670P polyester resin are 55-gallon non-returnable steel drums. Bulk quantities are available on request. Drums are marked with product information, lot numbers, and net weights.

When stored at temperatures below 77°F uncatalyzed resin is stable for a minimum of three months after delivery. ***Stratification of the thixotropic agent may occur during storage.*** Stirring the resin prior to use is recommended for uniform distribution of the thixotropic agent.

COMPOSITE LAMINATES

FILLERS: Aluminum trihydrates, glass spheres, micro-balloons and other similar fillers can be used as extenders to improve the economics of HETRON 670P polyester resin. All filler systems tend to detract from wet-out and rollability; however, cost considerations will, in some instances, outweigh minor processing problems. Tunnel test values on such systems are not available; however, aluminum trihydrate fillers with antimony trioxide used as a synergist will enhance flame spread and smoke emission values.

COMPOSITES: Flame spread and smoke emission ratings on composite reinforced plastic/foam sandwich panels are unpredictable, when tested according to the ASTM E-84 tunnel test. Laminate thickness is critical in preventing burnthrough to the inner foam core, which usually gives rise to high smoke emissions. In RP laminate foam composites, skin thickness should be at least 125 mils. The use of aluminum trihydrate in this laminate will enhance its barrier performance, giving good flame spread and smoke emission characteristics.

FIRE RETARDANCY

HETRON 670P polyester resin offers a unique combination of sprayability and good fire retardancy. Class II flame spread values[1] of less than 75 have been obtained without adding antimony trioxide. Class I flame spread values of less than 25 have been obtained by adding three percent antimony trioxide to the resin.

[1] ASTM E-84 Tunnel Test

Armkem INC
PRODUITS DE QUALITÉ POUR COMPOSITES
QUALITY PRODUCTS FOR COMPOSITES
C.P. 126
2400, rue Canadien
Drummondville, Qué.
J2B 6V6 CANADA
Sortie 175 Transcanadienne
Tél.: (819) 477-1146
Fax: (819) 474-5000
Watts: 1 (800) 567-1417

Ashland Chemicals

TYPICAL LIQUID PROPERTIES @ 77°F

Brookfield Viscosity (#2 Spindle)	
6 rpm	1,250 cps
60 rpm	600 cps
Index of Thixotropy	2.0 min.
Gel Time, 1.25% MEK Peroxide, 9% Active (Minutes)	16
Weight Per Gallon (lb)	10.2
Flash Point Range, °F	73 - 100

TYPICAL PHYSICAL PROPERTIES OF 3 PLY LAMINATE

(125 mils thickness)

Flexural Strength, psi	23,000
Flexural Modulus, x 10^6 psi	1.0
Tensile Strength, psi	12,000
Tensile Modulus, x 10^6 psi	1.1
Compressive Strength, psi	23,000
Glass Content, percent	30 - 32

TYPICAL FLAMMABILITY CHARACTERISTICS OF FLAT LAMINATES

(125 mils thickness)

	HETRON 670P	HETRON 670P With 3% Antimony Trioxide
ASTM D-2863 (Oxygen Index)	27%	35%
ASTM E-84 (Tunnel Test)		
Flame Spread	< 75	< 25
Smoke Development	>450	>450
HLT-15 Rating (Intermittent Flame Test)	100	100
Underwriters Laboratory UL 94	V1	V0

SECTION 1 - PRODUCT IDENTIFICATION

TRADE/PRODUCT	AK 1000 TO 4000 RESINS	IDENTIFICATION NUMBER (WHMIS)	1866
MATERIAL USE	RESIN		

NAME OF MANUFACTURER ARMKEM INC.		NAME OF SUPPLIER ARMKEM INC.	
ADDRESS 2400 CANADIEN STREET, PO BOX 126		ADDRESS 2400 CANADIEN STREET, PO BOX 126	
CITY DRUMMONDVILLE	PROVINCE QUEBEC	CITY DRUMMONDVILLE	PROVINCE QUEBEC
POSTAL CODE J2B 6V6	EMERGENCY PHONE NUMBER (819) 477-1146	POSTAL CODE J2B 6V6	EMERGENCY PHONE NUMBER (819) 477-1146

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	CONCENTRATION %	CAS NUMBER	LD_{50} TOXICITY DATA	LC_{50} TOXICITY DATA
			(RAT) ORAL	
STYRENE	43 to 47%	000-100-42-5	4.37 G/KG	5000 G/H

SECTION 3 - PHYSICAL CHARACTERISTICS

PHYSICAL STATE LIQUID		ODOR AND APPEARANCE PUNGENT, PENETRATING ODOR		ODOR THRESHOLD 0.1 PPM
VAPOUR PRESSURE (MM HG) 4.5	SPECIFIC GRAVITY (AIR = 1) 3.6	EVAPORATION RATE LESS THEN ETHER	BOILING POINT (°C) 146°	FREEZING POINT (°C) NON-ESTABLISHED
PH NON-ESTABLISHED	DENSITY 0.907	COEFFICIENT OF WATER/OIL DISTRIBUTION < 1.00		SOLUBILITY IN WATER (20°C) 0.3003 G/LITRE

SECTION 4 - FIRE AND EXPLOSION HAZARDS

FLAMMABILITY YES X NO ___ IF YES, UNDER WHICH CONDITIONS?

IF HEATED MODERATELY OR IF NEAR IGNITING SOURCE.

MEANS OF EXTINCTION	SPECIAL PRECAUTIONS	
FOAM, WATER FOG, CARBON DIOXIDE, DRY CHEMICAL	SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATED IN POSITIVE PRESSURE. COOL CONTAINER WITH WATER.	
FLASHPOINT (°C) METHOD USED	UPPER FLAMMABILITY LIMIT (% PER VOLUME)	LOWER FLAMMABILITY LIMIT (% PER VOLUME)
32.2°	6.1%	1.1%
AUTO IGNITION TEMPERATURE (°C)	HAZARDOUS COMBUSTION PRODUCTS	
490°	CARBON MONOXIDE (CO) CARBON DIOXIDE (CO_2)	
EXPLOSIBILITY DATA	MECHANICAL IMPACT SENSITIVITY	STATIC DISCHARGE SENSITIVITY
NON APPLICABLE	NON APPLICABLE	PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY YES X NO ___ IF NO, UNDER WHICH CONDITIONS?

: UNDER NORMAL CONDITIONS 20°C TO 760 MM HG
: IF HEATED MODERATELY OR STORED BEYOND SHELF LIFE

INCOMPATIBILITY WITH OTHER SUBSTANCES YES X NO ___ IF YES, WHICH ONE?

OXIDANTS, PEROXIDES, STRONG ACIDS, ALUMINUM CHLORIDE.

REACTIVITY CONDITIONS EXPOSED TO DIRECT SUNLIGHT, AVOID EXPOSURE TO EXCESSIVE HEAT.

HAZARDOUS DECOMPOSITION PRODUCTS CARBON MONOXIDE (CO) CARBON DIOXIDE (CO_2)

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY
SKIN ABSORBTION X INHALATION X INGESTION ___
SKIN CONTACT X
EYE CONTACT ___

EFFECTS OF ACUTE EXPOSURE

POSSIBLE DERMATITIS, EYE AND SKIN IRRITATION.
DEPRESSION OF THE CENTRAL NERVOUS SYSTEM.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

MODERATE IRRITATIONS, DEFATTING, DERMATITIS, ATTACK OF THE CENTRAL NERVOUS SYSTEM.

EXPOSURE LIMIT	IRRITANCY OF MATERIAL	SENSIBILIZATION TO PRODUCT	CARCINOGENICITY
100 PPM / 8 HRS	YES	NON APPLICABLE	POSSIBLY CANCERIGINOUS
TERATOGENICITY STYRENE CAN TRAVEL THROUGH THE PLACENTA MEMBRANE	REPRODUCTIVE EFFECTS BIRTH DEFECTS, GROWTHS LETHALITY ON ANIMAL FOETUS	MUTAGENICITY POSSIBLE ON ANIMALS	SYNERGISTIC PRODUCTS NON APPLICABLE

LD_{50} OF PRODUCT DATA	LC_{50} OF PRODUCT DATA
4.37 G/KG (RAT) ORAL	5000 PPM / 8 HRS (RAT)

SECTION 7 - PREVENTIVES MEASURES

PERSONAL PROTECTIVE EQUIPMENT	PROTECTIVE GLOVES, PROTECTIVE SHOES AND CHEMICAL SPLASH GOGGLES.

GLOVES (TYPE) NEOPRENE OR RUBBER	**RESPIRATORY APPARATUS (TYPE)** SELF-CONTAINED BREATHING APPARATUS > 100 PPM / 8 HRS	**EYE PROTECTION (TYPE)** CHEMICAL SPLASH GOGGLES
SHOES (TYPE) APPROVED ACNOR STEEL CAPS, METAL SOLE	**CLOTHING (TYPE)** SHIRTS AND PANTS, REDUCE EXPOSURE TO MINIMUM	**OTHER (TYPE)** COVER MAXIMUM SURFACE. AVOID LARGE CLOTHING.

TECHNICAL CONTROL	HIGHER LEVELS OF STYRENE VAPOR CONCENTRATION ARE FOUND NEAR GROUND LEVEL. ADEQUATE VENTILATION IS REQUIRED.
LEAK AND SPILL PROCEDURE	VENTILATE, ELIMINATE ALL SOURCES OF IGNITION. SMALL PIPE: WIPE, USE ABSORBENT MATERIAL LARGE PIPE: DIKE THE BORDER OF SPILL, USE ABSORBENT MATERIAL (VERMICULITE), CALL THE ENVIRONMENTAL DEPARTMENT.
WASTE DISPOSAL	AS PER DANGEROUS WASTE REGULATIONS
STORAGE AND HANDLING PROCEDURE	ADEQUATE VENTILATION, EXPLOSION PROOF ELECTRICAL EQUIPMENT, WHEN TRANSFERRING INTO A METAL CONTAINER, GROUND CONTAINER AND DRUM. EYE SHOWER AVAILABLE AT ALL TIMES.
SPECIAL STORAGE REQUIREMENTS	STORE IN A WELL VENTILATED STORAGE AREA AWAY FROM ANY IGNITING SOURCE. PROTECTED AGAINST ANY COLLISION.
SPECIAL SHIPPING REQUIREMENTS	PROTECT FROM PHYSICAL DAMAGE.

SECTION 8 - FIRST AID

SPECIFIC FIRST AID MEASURES	
SKIN	WASH WITH WATER AND SOAP FOR 15 MINUTES. TAKE OFF DIRTY CLOTHES.
EYES	FLUSH IMMEDIATELY WITH LARGE AMOUNT OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET MEDICAL ATTENTION AS SOON AS POSSIBLE.
INHALATION	REMOVE INDIVIDUAL TO FRESH AIR, IF BREATHING IS DIFFICULT ADMINISTER OXYGEN, IF BREATHING HAS STOPPED ADMINISTER ARTIFICIAL RESPIRATION, GET MEDICAL ATTENTION AS SOON AS POSSIBLE.
INGESTION	DO NOT INDUCE VOMITING, DRINK A LOT OF WATER. GET MEDICAL ATTENTION AND TRANSPORT PATIENT TO NEAREST HOSPITAL.
OTHERS	ON SKIN, REMOVE IT WITH ACETONE, THAN WASH WITH WATER.

SECTION 9 - PREPARATION INFORMATION

PREPARED BY (GROUP, SERVICE, PERSON, ETC.)	**PHONE NUMBER**	**DATE**
ARMKEM INC.	819) 477-1146	AUGUST 1996.

CLASS - B, D2

MATERIAL SAFETY DATA SHEET

DATE 3/16/93 | ISSUE 2

MFGR ☐ DSTBR ☒	ADDRESS	EMERGENCY PHONE
GC Electronics	1801 Morgan St., Rockford, IL 61105-1209	(815) 968-9661 71

PRODUCT NUMBER	PRODUCT NAME
10-1762, 10-1766	LIQUID TAPE - electrical connection

CHEMICAL FAMILY

SECTION II - INGREDIENTS

C.A.S. REGISTRY NO.	CHEMICAL NAME	% (WT)	TLV PEL	STEL		CARCINOGENIC YES	CARCINOGENIC NO	AUTHORITY NTP	AUTHORITY IARC	AUTHORITY OSHA
108-88-3	TOLUENE	58	100	150			X			
64-17-5	DENATURED ETHANOL	12	1000	NE						
84-74-2	DIBUTYL PHTHALATE	5	5 MG/M3	10 MG/M3						
NE	RESIN-MODIFIED CELLULOSE	25	NE	NE			X			

SECTION III - PHYSICAL DATA

BOILING POINT 168-232 °C ____ °F	SPECIFIC GRAVITY 0.930	
VAPOR PRESSURE 38 ☐ P.S.I ☒ MMHg	% VOLATILE BY VOLUME 70	
VAPOR DENSITY 3.9	EVAPORATION RATE (Butyl Acetate = 1) 1.7	
SOLUBILITY IN H_2O 20%	FORM ___X___ LIQUID _____ PASTE _____ SOLID _____ GAS	

APPEARANCE AND ODOR
BLACK-ALCOHOL ODOR

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT 45 °C ____ °F ☐ OPEN CUP ☒ CLOSED CUP	FLAMMABLE LIMITS (% In Air) LOWER 1.2 UPPER 9.0	

EXTINGUISHING MEDIA
FOAM, CO_2, DRY CHEMICAL, WATER SPRAY OR FOG

SPECIAL FIRE FIGHTING PROCEDURES
TOXIC FUMES MAY RESULT FROM COMBUSTION - USE SCBA

VENTILATE AREA WELL

UNUSUAL FIRE & EXPLOSION HAZARDS
EMPTY CONTAINERS MAY CONTAIN EXPLOSIVE VAPORS

HMIS/NFPA RATINGS	HEALTH	FLAMMABILITY	REACTIVITY
	3	3	1

10-1762, 10-1766

SECTION V - HEALTH HAZARD INFORMATION

TLV (Threshold Limit Value)	PEL (Permissible Exposure Limit)	OTHER LIMIT
100	NE	NE

EFFECTS OF OVEREXPOSURE
INHALATION OF HIGH CONCENTRATIONS MAY CAUSE MILD DEPRESSION, CONVULSIONS, LOSS OF CONSCIOUSNESS. DERMATITIS, EYE IRRITATION MAY RESULT FROM CONTACT

PRIMARY ROUTES OF ENTRY — XXINHALATION XXSKIN CONTACT XXEYE CONTACT ☐INGESTION

EMERGENCY/FIRST AID PROCEDURES
EYES FLUSH WITH WATER AT LEAST 15 MINUTES. SEE PHYSICIAN
SKIN WASH WITH SOAP AND WATER
INHALATION FRESH AIR, OXYGEN, ARTIFICIAL RESPIRATION. CALL PHYSICIAN
INGESTION DO NOT INDUCE VOMITING. CALL PHYSICIAN

SECTION VI - REACTIVITY DATA

XXSTABLE ☐UNSTABLE	CONDITIONS TO AVOID - HIGH TEMPERATURES OR OPEN FLAMES
INCOMPATIBILITY (Mat'ls to Avoid) NONE	
HAZARDOUS DECOMPOSITION PRODUCTS CO, CO_2	
HAZARDOUS POLYMERIZATION ☐MAY OCCUR XXWILL NOT OCCUR	

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES
PICK UP WITH INERT ABSORBENT. STORE IN SEALED METAL CONTAINERS

WASTE DISPOSAL
LICENSED INCINERATOR OR PER LOCAL, STATE AND FEDERAL REGULATIONS

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY	EYEWEAR
CARTRIDGE RESPIRATOR OR SCBA	CHEMICAL GOGGLES

VENTILATION ☐LOCAL EXHAUST XXMECHANICAL AS NECESSARY TO MEET TLV's

CLOTHING GLOVES RUBBER OR PLASTIC AS NECESSARY TO PREVENT SKIN CONTACT

SECTION IX - SPECIAL PRECAUTIONS

HANDLING & STORING
COOL DRY AREA, AWAY FROM IGNITION SOURCES

OTHER
USE WITH ADEQUATE VENTILATION

CLASS - D1, D2

MATERIAL SAFETY DATA SHEET

3/16/93 | ISSUE 2

MFGR ☒ DSTBR ☐	ADDRESS	EMERGENCY PHONE
GC Electronics	1801 Morgan St., Rockford, IL 61105-1209	(815) 968-9661 79

PRODUCT NUMBER	PRODUCT NAME
10-4002, 10-4008	ACRYLIC CEMENT

CHEMICAL FAMILY
MIXTURE

SECTION II - INGREDIENTS

C.A.S. REGISTRY NO.	CHEMICAL NAME	% (WT)	TLV PEL	STEL		CARCINOGENIC YES	CARCINOGENIC NO	AUTHORITY NTP	AUTHORITY IARC	AUTHORITY OSHA
75-09-2	METHYLENE CHLORIDE	89	100	500			X			
9011-15-8	ACRYLIC RESIN	11	NE	NE			X			

SECTION III - PHYSICAL DATA

BOILING POINT 104 °C ____ °F	SPECIFIC GRAVITY 1.4	
VAPOR PRESSURE (1 P.S.I 61.6 ☒ MMHg	% VOLATILE BY VOLUME 89	
VAPOR DENSITY 1	EVAPORATION RATE (Butyl Acetate = 1)	
SOLUBILITY IN H_2O NOT	FORM ___X___ LIQUID ____ PASTE ____ SOLID ____ GAS	

APPEARANCE AND ODOR
CLEAR, COLORLESS, METHYLNE CHLORIDE ODOR

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT		FLAMMABLE LIMITS (% In Air)	LOWER	UPPER	
____ °C NONE °F	☒ OPEN CUP ☒ CLOSED CUP		NE	NE	NON FLAMMABLE

EXTINGUISHING MEDIA
CO_2, FOAM

SPECIAL FIRE FIGHTING PROCEDURES
VENTILATE AREA WELL. TOXIC GASES EMITTED IF SUBJECTED TO FLAME. WEAR SELF CONTAINED BREATHING APPARATUS

UNUSUAL FIRE & EXPLOSION HAZARDS
SEE ABOVE

	HMIS/NFPA RATINGS	HEALTH	FLAMMABILITY	REACTIVITY
		3	1	1

SECTION V - HEALTH HAZARD INFORMATION

TLV (Threshold Limit Value) 100 PPM	PEL (Permissible Exposure Limit) 500 PPM	OTHER LIMIT NE

EFFECTS OF OVEREXPOSURE
EYE IRRITAITON, CORNEAL INJURY, SKIN IRRITATION OR BURN, ANESTHESIA, DIZZINESS, NAUSEA, UNCONSCIOUSNESS, DEATH. CARDIAC ARRYTHMIAS, UPPER RESPIRATORY IRRITATION, CARBOXYHEMOGLOBINEMIA. AVOID EXPOSURE OF THOSE WITH LIVER OR KIDNEY DISEASES

PRIMARY ROUTES OF ENTRY — XX INHALATION XX SKIN CONTACT XX EYE CONTACT ☐ INGESTION

EMERGENCY/FIRST AID PROCEDURES
EYES FLUSH WITH WATER AT LEAST 15 MINUTES. CALL PHYSICIAN

SKIN WASH WITH SOAP AND WATER

INHALATION FRESH AIR, OXYGEN, ARTIFICIAL RESPIRATION. CALL PHYSICIAN

INGESTION DO NOT INDUCE VOMITING. CALL PHYSICIAN IMMEDIATELY

SECTION VI - REACTIVITY DATA

XX STABLE ☐ UNSTABLE	CONDITIONS TO AVOID —

INCOMPATIBILITY (Materials to Avoid)

HAZARDOUS DECOMPOSITION PRODUCTS TOXIC GASES EMITTED WHEN EXPOSED TO FLAME

HAZARDOUS POLYMERIZATION
☐ MAY OCCUR XX WILL NOT OCCUR

SECTION VII - SPILL OR LEAK PROCEDURES

PROCEDURES
PICK UP WITH INERT ABSORBENT. STORE IN SEALED METAL CONTAINERS FOR DISPOSAL.
AVOID BREATHING VAPORS.

WASTE DISPOSAL
LICENSED INCINERATION OR RECLAIMER, KEEP OUT OF WATER SUPPLY

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY	EYEWEAR CHEMICAL GOGGLES

VENTILATION XX LOCAL EXHAUST XX MECHANICAL AS NECESSARY TO MEET TLV

CLOTHING/GLOVES RUBBER GLOVES AND/OR APRON AS NECESSARY TO AVOID REPEATED OR PROLONGED SKIN CONTACT

SECTION IX - SPECIAL PRECAUTIONS

HANDLING & STORING
STORE AWAY FROM HEAT OR FLAME

OTHER
USE WITH ADEQUATE VENTILATION

*******MATERIAL SAFETY DATA SHEET*******
For Coatings, Resins and Related Materials

SECTION I-PRODUCT AND PREPARATION INFORMATION

MANUFACTURER:	RUST-OLEUM (CANADA) LTD	TELEPHONE:	(416) 661-3380
ADDRESS:	590 Supertest Road	EMERGENCY:	(708) 367-7700
	Downsview, Ontario	DATE:	December 4, 1992
	M3J 2M5	Preparer:	rmb

PRODUCT CLASS: Acrylic Latex Coating
MANUFACTURERS CODE: 5222, 5225, 5227, 5233, 5237, 5244, 5248
5255, 5256, 5264, 5265, 5271, 5277, 5278
5279, 5282, 5286, 5290 and 5292
TRADE NAME: High Performance Acrylic Coatings

SECTION II-HAZARDOUS INGREDIENTS

INGREDIENT/CAS No	WT %	EXPOSURE LIMIT ACGIH-TLV	ACUTE HEALTH HAZARDS (unless otherwise noted)
Texanol/ester alcohol/25265774	5%*	NE	oral LD50->3.2g/kg-rat dermal LD50->20ml/kg-g.pig
Methyl Carbitol/111-77-3	1-3%	30ppm	oral LD50 5.5-7g/kg-rat dermal LD50-20g/kg-rabbit
Propylene glycol/57-55-6	3%	400ppm	oral LD50-21g/kg-rat

** Suppliers recommendation
* Nearest 5%
NE-not established NA-not applicable

SECTION III-PHYSICAL DATA

Boiling range: 150-196 C (302-385 F) Vapor density- heavier than air pH: 8.0-8.5

Evaporation Rate: faster slower (Ether=1) % Volatile: 60-70% (by volume) Specific gravity 1.02-1.32

Odor and Appearance: liquid, ammonia odor

SECTION IV-FIRE AND EXPLOSION HAZARDS

Flashpoint: >100 C (Seta)
Extinguishing Media: Not applicable
Special Fire Fighting Procedures:
Water may be used to cool closed containers to prevent build-up of steam. If water is used, fog nozzles are preferred.

Unusual Fire and Explosion Hazards:
Closed containers may explode when exposed to extreme heat due to build-up of steam.

SECTION V-HEALTH HAZARD DATA

TOXICOLOGICAL PROPERTIES:
Acute(Inhalation)- Vapor or mist may cause headache, nausea and irritation of the nose, throat and lungs.
Acute(Skin or Eye Contact)- Possible primary irritant with repeated or prolonged contact.
Ingestion- May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic- Overexposure to Methyl carbitol has been associated with liver abnormalities, kidney and testis damage in lab animals.

Emergency and First Aid Procedures:
Fumes: Remove from exposure.
Spray(eyes): Flush immediately with large amounts of water for at least 15 minutes. Notify a physician.
Splash(skin): Wash affected area with soap and water and remove contaminated clothing and wash before reuse.
Ingestion: Drink 2 glasses of water and induce vomiting by either giving Ipecac syrup or by placing 2 fingers at back of throat. NEVER give anything by mouth to an unconscious person. Notify a physician

SECTION VI-REACTIVITY DATA

Stability: Unstable Stable Incompatible: with strong oxidizing agents
Hazardous Decomposition Products: By open flame- Carbon monoxide and Carbon dioxide.
Hazardous Polymerization: Will Not Occur

SECTION VII-SPILL OR LEAK PROCEDURES

Release or Spill Procedures: Soak up liquid with absorbent and shovel into waste container. Wash spill area with water and flush to sewer serviced by wastewater treatment facility.
Waste Disposal Method: Dispose of according to local, provincial and federal regulations.

SECTION VIII-SPECIAL PROTECTION AND PREVENTIVE MEASURES

Respiratory Protection: Use NIOSH approved chemical cartridge respirator (TX23C) to remove solid airborne particles of overspray during spray application.
Eye Protection: Use safety eyewear designed to protect against splash of liquids.
Other Protective Equipment: Use gloves to prevent prolonged contact with skin.
Ventilation: Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits.

SECTION IX-SPECIAL PRECAUTIONS

Handling and Storage Precautions: KEEP FROM FREEZING.
Other Precautions: DO NOT take internally.

MATERIAL SAFETY DATA SHEET

DATE OF PRINTING: 01/12/94

SECTION I

MANUFACTURER: THE CONTINENTAL PRODUCTS COMPANY
1150 EAST 222 STREET
EUCLID, OH 44117
TELEPHONE: (216) 531-0710
PRODUCT CLASS: VINYL PAINT REVISION: I-94
CODE IDENTIFICATION: 88-0181
TRADE NAME: FLEXIBOND LOW LUSTRE COATING, CLEAR HMIS: 201B

EMERGENCY CONTACT NUMBER: 1-800-255-3924

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT BY WEIGHT	ACGIH TLV PPM	ACGIH TLV mg/cu.m.	OSHA PEL PPM	OSHA PEL mg/cu.m.
N-METHYL-2-PYRROLIDONE CAS NUMBER 872-50-4	6.2	NOT ESTB		NOT ESTB	

PARTICULATES not otherwise regulated have TLV and PEL Values of 15 mg/M3 for TOTAL DUST and 5 mg/M3 for the RESPIRABLE FRACTION.
THIS MATERIAL MAY CONTAIN INGREDIENTS COVERED BY THE CALIFORNIA "SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986" (PROPOSITION 65).
* THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 (TITLE III, SARA) AND OF 40 CFR 372.
N/A MEANS "NOT APPLICABLE" CEIL MEANS "CEILING"
NOT ESTB MEANS "NOT ESTABLISHED"

SECTION III - PHYSICAL DATA

BOILING RANGE: 212.0 TO 364.0 F VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
PERCENT VOLATILE BY VOLUME: 63.9 VOC (less water): 1.61 LBS/GAL.
WEIGHT PER GALLON: 8.97 POUNDS
VAPOR PRESSURE: NOT DETERMINED MELTING POINT: NOT APPLICABLE
SOLUBILITY IN WATER: READILY SOLUBLE
APPEARANCE AND ODOR: CLEAR LIQUID WITH CHARACTERISTIC PAINT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

OSHA CATEGORY: NOT REGULATED

FLASH POINT : DOES NOT FLASH LEL: N/A UEL: N/A
EXTINGUISHING MEDIA:
Carbon dioxide, dry chemical or foam. If water, fog nozzles preferred.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may explode (due to the build-up of steam pressure) when exposed to extreme heat.
SPECIAL FIRE FIGHTING PROCEDURES:
Water may be used to cool closed containers to prevent pressure build-up when exposed to extreme heat. Firefighting personnel should wear

self-contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II

PRIMARY ROUTE(S) OF ENTRY:

Inhalation and skin contact.

EFFECTS OF OVEREXPOSURE:

May cause headache, nausea, eye or skin irritation. (Material is slightly alkaline.)

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Repeated exposure to emitted vapors may cause irritation to the upper respiratory tract. Preexisting skin sensitization may be aggravated.

CARCINOGENICITY:

None of the components of this product are reported carcinogens.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air. Administer artificial respiration or oxygen if breathing is difficult.

SKIN: Wash affected area with soap and water. Remove and launder contaminated clothing. Consult a physician if irritation persists.

EYES: Flush immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment.

INGESTION: Do not induce vomiting. Call a physician immediately.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE

CONDITIONS TO AVOID:

None known.

INCOMPATIBILITY (Materials to avoid)

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:

BY FIRE: Normal products of incomplete combustion.

May produce fumes when heated to decomposition, as in welding. Fumes may contain carbon monoxide/dioxide or oxides of nitrogen.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:

Heat, sparks, open flame and fire. Material is subject to freezing. Do not store above 120 Degrees Fahrenheit.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Dike spill area. Ventilate area if necessary. Recover free liquid by addition of inert absorbent to spill area. Sweep up and place material in a suitable disposal container. Wash down spill area with copious quantities of water.

WASTE DISPOSAL METHOD:

Disposal must be made in accordance with Local, State and Federal regulations. Incineration or landfilling must be in an approved facility. Do not incinerate closed containers.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

In outdoor or open areas, use MSHA/NIOSH approved mechanical filter respirator to remove solid airborne particulates or overspray. Indoors, where ventilation is inadequate, use MSHA/NIOSH approved chemical-mechanical respirators designed to remove both particulate matter and vapor.

VENTILATION:

All applications areas should be ventilated in accordance with the applicable regulations found in 29 CFR, Part 1910.

PROTECTIVE GLOVES:

Recommended if skin contact is likely.

EYE PROTECTION:

Chemical goggles or safety eyewear with splash shields is recommended.

OTHER PROTECTIVE EQUIPMENT:

Suitable barrier creams, impervious clothing and boots are recommended to reduce repeated contact with material and limit contamination.

HYGIENIC PRACTICES:

Wash hands with soap and water before eating or using the washroom. Smoke in smoking areas only. Remove and wash contaminated clothing before re-use.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING OR STORING:

Store out of the sun and away from heat, sparks and open flame. Keep containers closed and upright to prevent leakage. Do not store below 40 Degrees Fahrenheit or above 120 Degrees Fahrenheit for extended periods. Do not reuse product container for any purpose.

OTHER PRECAUTIONS:

Do not get in eyes. Avoid skin contact. Do not take internally. Prevent prolonged or repeated breathing of vapor or spray mist. Keep out of the reach of children.

PREPARED BY: ROBERT W. COOK
REGULATORY AFFAIRS
REFERENCE DATE: JANUARY 11, 1994

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

REF	HAZARDOUS INGREDIENTS	PERCENT	CAS NUMBER	CARCINOGEN*
	ACETYLACETONE S.g = 0.976	90- 100	123-54-6	
02	DIBUTYL TIN DILAURATE	5 - <10	77-58-7	

* Carcinogens: O = OSHA; A = ACGIH; N = NTP; I = IARC

SARA TITLE III & CERCLA CLASSIFICATIONS

REF	SARA 102 RQ (LBS)	SARA 302 TPQ (LBS)	SARA 313	SARA 311/312 AC	CH	FL	PR	RE
01	NOT ESTAB	NOT ESTAB	N	Y	N	Y	N	N
02	NOT ESTAB	NOT ESTAB	N	Y	N	N	N	N

SARA 311/312 CATEGORIES FOR THIS PRODUCT: ACUTE = Y, CHRONIC = N, FLAMMABILITY = Y, PRESSURE = N, REACTIVITY = N

OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THE FOLLOWING MATERIALS:

REF	ACGIH TLV-TWA	ACGIH TLV-STEL	U.S. OSHA PEL-TWA	U.S. OSHA PEL-STEL
01	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.
02	S- 0.1 mg/m3	NOT ESTAB.	S- 0.1 mg/m3	NOT ESTAB.

[C- Ceiling Limit; S- Potential Skin Absorption; R- Respirable Dust] [NOT ESTAB. = NOT ESTABLISHED = NOT APPLICABLE]

PRODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES CONTROL ACT

All chemical substances in this product are listed on the U.S. TSCA Inventory or are otherwise exempt from TSCA Inventory reporting requirements.

SECTION 3 - HAZARDS IDENTIFICATION

ECTS OF OVEREXPOSURE FROM:

- INGESTION: Harmful or fatal if swallowed.
- EYE CONTACT: Causes severe eye irritation.
- SKIN CONTACT: May cause skin burns. May be harmful if absorbed through the skin.
- INHALATION: Vapor and/or spray mist harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage.
- CHRONIC OVEREXPOSURE: Avoid long-term and repeated contact. This product contains 2,4-pentadione. Animals repeatedly inhaling high concentrations (up to 650 ppm) had the following toxic effects: decreased body weight, nasal lining thickening, anemia, brain/thymus degeneration and death (650 ppm level only). The low odor threshold, unpleasant odor and nauseating effects at levels of a few ppm should provide adequate warning to prevent overexposure in the wokplace.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eye watering, headaches, nausea, dizziness, and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

SECTION 4 - FIRST AID MEASURES

- INGESTION: If swallowed, give one to two eight ounce glasses of water, but do not induce vomiting. Gently wipe out inside mouth to remove any residual material.
- EYE CONTACT: In case of eye contact, remove contact lenses and flush eyes immediately with a gentle stream of luke warm water for at least 15 minutes.
- SKIN CONTACT: In case of skin contact, flush immediately with plenty of water for at least 15 minutes, followed by waterless hand cleaner and soap and water if the material appears to adhere to skin.
- INHALATION: If affected by inhalation of vapor or spray mist, remove to fresh air. Apply artificial respiration and other support measures as required.
- OTHER: If ingestion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison control center, emergency room or physician immediately; have Material Safety Data Sheet information available.

SECTION 5 - FIRE FIGHTING MEASURES

- **FLASHPOINT:** 96 Degrees F (35 Degrees C) (PENSKY-MARTENS CLOSED CUP)

MATERIAL SAFETY DATA SHEET
MATTHEWS PAINT COMPANY

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY:	**274686SP**
REVISION DATE:	07/26/96 (000) 0808
CUSTOMER PART #/NAME:	Not applicable
PRODUCT TRADE NAME:	URETHANE CATALYST
CHEMICAL FAMILY:	ISOCYANATE
EMERGENCY MEDICAL/SPILL INFO:	(800) 424-9300 CHEMTREC (U.S.) 91-800-00-214 (MEXICO) (514) 645-1320 (CANADA)
TECHNICAL INFORMATION:	(800) 323-6593
PRODUCT SAFETY/MSDS INFORMATION:	8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739 (414) 947-0700
DATE OF MSDS PREPARATION:	12/11/96

PRIMARY HAZARD WARNING

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. Harmful if swallowed. May cause moderate skin irritation. Causes severe eye irritation. May be absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction. Vapor and/or spray mist may be harmful if inhaled. May cause irritation and/or allergic respiratory reaction in lungs. Vapor irritates eyes, nose, and throat.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

REF	HAZARDOUS INGREDIENTS	PERCENT	CAS NUMBER	CARCINOGEN*
01	N-BUTYL ACETATE	10- <20	123-86-4	
02	XYLENES	10- <20	1330-20-7	
03	HEXANE-1.6-DI-ISOCYANATE POLYMER	70- <80	28182-81-2	
04	HEXAMETHYLENE-DI-ISOCYANATE	0.1- <1	822-06-0	

* Carcinogens: O = OSHA; A = ACGIH; N = NTP; I = IARC

SARA TITLE III & CERCLA CLASSIFICATIONS

REF	SARA 102 RQ (LBS)	SARA 302 TPQ (LBS)	SARA 313	SARA 311/312 AC	CH	FL	PR	RE
01	5000	NOT ESTAB	N	Y	N	Y	N	N
02	100	NOT ESTAB	Y	Y	N	Y	N	N
03	NOT ESTAB	NOT ESTAB	N	Y	Y	N	N	N
04	100	NOT ESTAB	Y	Y	Y	N	N	N

SARA 311/312 CATEGORIES FOR THIS PRODUCT: ACUTE = Y, CHRONIC = Y, FLAMMABILITY = Y, PRESSURE = N, REACTIVITY = N

OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THE FOLLOWING MATERIALS:

REF	ACGIH TLV-TWA	ACGIH TLV-STEL	U.S. OSHA PEL-TWA	U.S. OSHA PEL-STEL
01	150 ppm	200 ppm	150 ppm	200 ppm
02	100 ppm	150 ppm	100 ppm	150 ppm
03	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.
03	IPEL-TWA: 0.5 mg/m3		IPEL-STEL: 1 mg/m3	
04	0.005 ppm	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.
04	IPEL-TWA: NOT ESTAB		IPEL-STEL: 1.0 mg/m3	

[C- Ceiling Limit; S- Potential Skin Absorption; R- Respirable Dust] [NOT ESTAB. = NOT ESTABLISHED = NOT APPLICABLE]

PRODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES CONTROL ACT

All chemical substances in this product are listed on the U.S. TSCA Inventory or are otherwise exempt from TSCA Inventory reporting requirements.

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE FROM:

▸INGESTION: Harmful if swallowed.

▸EYE CONTACT: Causes severe eye irritation.

▸SKIN CONTACT: May cause moderate skin irritation. May be absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction.

▸INHALATION: Vapor and/or spray mist may be harmful if inhaled. May cause irritation and/or allergic respiratory reaction in lungs. Vapor irritates eyes, nose, and throat. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Do not use if you have chronic (long-term) lung or breathing problems, or if you have ever had a reaction to isocyanates.

▸CHRONIC OVEREXPOSURE: Avoid long-term and repeated contact. Prolonged inhalation of an ingredient(s) in this product may cause lung sensitivity leading to pneumonitis. This product contains isocyanates. Inhalation may cause a burning sensation of the nose, throat and lungs. Allergic respiratory reactions to these materials are characterized by asthma-like symptoms such as chest tightness, wheezing, shortness of breath and coughing. These symptoms may follow repeated exposure or a single massive exposure and may be delayed.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eye watering, headaches, nausea, dizziness, and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Do not use if you have chronic (long-term) lung or breathing problems, or if you have ever had a reaction to isocyanates.

SECTION 4 - FIRST AID MEASURES

▸INGESTION: If swallowed, do not induce vomiting. Gently wipe out inside mouth to remove any residual material.

▸EYE CONTACT: In case of eye contact, remove contact lenses, flush eye immediately with a gentle stream of warm water for at least 30 minutes.

►SKIN CONTACT: In case of skin contact, flush immediately with plenty of water for at least 15 minutes followed by washing with soap and water.
►INHALATION: If affected by inhalation of vapor or spray mist, remove to fresh air. Apply artificial respiration and other support measures as required.
►OTHER: If ingestion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison ntrol center, emergency room or physician immediately; have Material Safety Data Sheet information available.

SECTION 5 - FIRE FIGHTING MEASURES

►**FLASHPOINT:** 80 Degrees F (26 Degrees C) (PENSKY-MARTENS CLOSED CUP)
►FLAMMABLE LIMITS: Lower explosion limit (LEL): 1.4
►Upper explosion limit (UEL): Not available
►EXTINGUISHING MEDIA: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IC flammable liquid fires.
►UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat.
►SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable. Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

►STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.
►WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 7 - HANDLING AND STORAGE

ANDLING AND STORAGE PRECAUTIONS: Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IC flammable liquids.
►OTHER PRECAUTIONS: Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT FOR:

►EYE PROTECTION: Wear chemical-type splash goggles or full face shield when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.
►SKIN PROTECTION: Wear protective clothing sufficient to cover exposed skin surfaces. For applications where skin contact is likely and impermeable clothing is necessary, select clothing constructed of: impermeable material. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.
►RESPIRATORY PROTECTION: Where vapors or overspray are present, use a positive-pressure, air-supplied respirator for the entire time of spraying and until all vapors and mists are gone. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.
►OTHER EQUIPMENT: Do not reuse contaminated clothing, shoes, or gloves.

VENTILATION REQUIREMENTS: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

[FORMULA VALUES, NOT SALES SPECIFICATIONS]

LING RANGE: 255- 293Degrees F
VAPOR PRESSURE: 6.3 mmHg
VAPOR DENSITY: Heavier than air
SOLUBILITY IN WATER: .1 %
WEIGHT/GALLON : 8.85 (LBS/U.S. GAL.)
pH: Not applicable

Manufactured and Supplied by:
MATTHEWS PAINT COMPANY
LAKE VIEW CORPORATE PARK 8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739

% VOLATILE/VOLUME: 29.900
% SOLIDS BY WEIGHT: 75.00
SPECIFIC GRAVITY: 1.062 EVAPORATION RATE(BuOAc = 100): 82
ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the solvents listed in Section 2.

SECTION 10 - STABILITY AND REACTIVITY

▸This product is normally stable but may undergo hazardous reactions at extremely high temperatures and pressures.

▸INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID): Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents. Avoid water and alcohols.

▸HAZARDOUS DECOMPOSITION PRODUCTS: May produce the following hazardous decomposition products when exposed to extreme heat: carbon monoxide ; carbon dioxide ; hydrogen cyanide ; lower molecular weight polymer fractions; traces of isocyanate ; oxides of nitrogen ; . Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

THIS IS THE END OF THE MSDS FOR: 274686SP (00056735.005AF685CSP)

MATERIAL SAFETY DATA SHEET
MATTHEWS PAINT COMPANY

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY:	274685SP
REVISION DATE:	02/05/97 (000) 0808
CUSTOMER PART #/NAME:	
PRODUCT TRADE NAME:	VOC U-PRIME
CHEMICAL FAMILY:	Acrylic
EMERGENCY MEDICAL/SPILL INFO:	(800) 424-9300 CHEMTREC (U.S.) 91-800-00-214 (MEXICO) (514) 645-1320 (CANADA)
TECHNICAL INFORMATION:	(800) 323-6593
PRODUCT SAFETY/MSDS INFORMATION:	8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739 (414) 947-0700
DATE OF MSDS PREPARATION:	02/06/97

PRIMARY HAZARD WARNING

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. Harmful if swallowed. May cause moderate skin irritation. Causes severe eye irritation. Prolonged or repeated contact may cause an allergic skin reaction. Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

REF	HAZARDOUS INGREDIENTS	PERCENT	CAS NUMBER	CARCINOGEN*
01	METHYL ISOBUTYL KETONE	1 - <5	108-10-1	
02	METHYL (N-AMYL) KETONE	5 - <10	110-43-0	
03	MAGNESIUM OXIDE	1 - <5	1309-48-4	
04	CALCIUM CARBONATE	10- <20	1317-65-3	
05	XYLENES	1 - <5	1330-20-7	
06	TITANIUM DIOXIDE	10- <20	13463-67-7	
07	N.J. TRADE SECRET #80100337-5008	5 - <10	PROPRIETARY	
08	QUARTZ	0.1- <1	14808-60-7	I N
09	BPA POLYMER REACTED WITH BPA	1 - <5	25036-25-3	
10	BARIUM SULFATE	20- <30	7727-43-7	
11	METHYL ETHYL KETONE	1 - <5	78-93-3	

* Carcinogens: O = OSHA; A = ACGIH; N = NTP; I = IARC

SARA TITLE III & CERCLA CLASSIFICATIONS

REF	SARA 102 RQ (LBS)	SARA 302 TPQ (LBS)	SARA 313	SARA 311/312 AC	CH	FL	PR	RE
01	5000	NOT ESTAB	Y	Y	N	Y	N	N
02	NOT ESTAB	NOT ESTAB	N	Y	N	Y	N	N
03	NOT ESTAB	NOT ESTAB	N	N	N	N	N	N
04	NOT ESTAB	NOT ESTAB	N	N	N	N	N	N
05	100	NOT ESTAB	Y	Y	N	Y	N	N
06	NOT ESTAB	NOT ESTAB	N	N	N	N	N	N
07	NOT ESTAB	NOT ESTAB	N	N	N	N	N	N
08	NOT ESTAB	NOT ESTAB	N	N	Y	N	N	N
09	NOT ESTAB	NOT ESTAB	N	Y	N	N	N	N
10	NOT ESTAB	NOT ESTAB	N	N	N	N	N	N
11	5000	NOT ESTAB	Y	Y	N	Y	N	N

SARA 311/312 CATEGORIES FOR THIS PRODUCT: ACUTE = Y, CHRONIC = Y, FLAMMABILITY = Y, PRESSURE = N, REACTIVITY = N

OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THE FOLLOWING MATERIALS:

REF	ACGIH TLV-TWA	ACGIH TLV-STEL	U.S. OSHA PEL-TWA	U.S. OSHA PEL-STEL
01	50 ppm	75 ppm	50 ppm	75 ppm
02	50 ppm	NOT ESTAB.	100 ppm	NOT ESTAB.
03	10 mg/m3	NOT ESTAB.	10 mg/m3	NOT ESTAB.
04	10 mg/m3	NOT ESTAB.	R- 5 mg/m3	NOT ESTAB.
05	100 ppm	150 ppm	100 ppm	150 ppm
06	10 mg/m3	NOT ESTAB.	10 mg/m3	NOT ESTAB.
07	2 mg/m3	NOT ESTAB.	R- 5 mg/m3	NOT ESTAB.
08	R- 0.1 mg/m3	NOT ESTAB.	R- 0.1 mg/m3	NOT ESTAB.
09	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.
10	10 mg/m3	NOT ESTAB.	R- 5 mg/m3	NOT ESTAB.
11	200 ppm	300 ppm	200 ppm	300 ppm
11	[PEL-TWA: NOT ESTAB.		[PEL-STEL: 250 ppm	

[C- Ceiling Limit; S- Potential Skin Absorption; R- Respirable Dust] [NOT ESTAB. = NOT ESTABLISHED = NOT APPLICABLE]

PRODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES CONTROL ACT

All chemical substances in this product are listed on the U.S. TSCA Inventory or are otherwise exempt from TSCA Inventory reporting requirements.

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE FROM:

▸INGESTION: Harmful if swallowed.

▸EYE CONTACT: Causes severe eye irritation.

Continued on Page 3

▸SKIN CONTACT: May cause moderate skin irritation. Prolonged or repeated contact may cause an allergic skin reaction.

▸INHALATION: Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage.

IONIC OVEREXPOSURE: Avoid long-term and repeated contact. Possible mutagenic hazard. Predictive laboratory tests with cultured media on an ingredient(s) contained in this product indicate potential damage to genetic material. This product contains a form of crystalline silica/quartz which IARC associates with an increased risk of cancer in laboratory animals. Long-term exposures to crystalline silica/quartz may also lead to a disabling injury known as silicosis. These effects are associated with breathing excessive amounts of silica dust. Application of this product is not expected to generate excessive amounts of respirable silica/quartz. This product contains titanium dioxide. Animals inhaling massive quantities of titanium dioxide dust in a long-term study developed lung tumors. Studies with humans involved in manufacture of this pigment indicate no increased risk of cancer from exposure. Potential for inhalation of titanium dioxide dusts from coatings is very limited. Since overexposures are not expected, there is no significant hazard for man. This product contains methyl ethyl ketone (MEK). MEK has been shown to cause minor embryotoxic/fetotoxic effects in laboratory animals exposed for prolonged periods at high concentrations via inhalation. The potential for human exposure to high concentrations is expected to be low due to the irritating effects of MEK at low concentrations.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eye watering, headaches, nausea, dizziness, and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

WARNING: This product contains a chemical known to the State of California to cause cancer.

SECTION 4 - FIRST AID MEASURES

▸INGESTION: If swallowed, give one to two eight ounce glasses of water, but do not induce vomiting. Gently wipe out inside mouth to remove any residual material.

▸EYE CONTACT: In case of eye contact, remove contact lenses and flush eyes immediately with a gentle stream of luke warm water for at least 15 minutes.

▸SKIN CONTACT: In case of skin contact, flush immediately with plenty of water for at least 15 minutes followed by washing with soap and water.

▸INHALATION: If affected by inhalation of vapor or spray mist, remove to fresh air. Apply artificial respiration and other support measures as required.

▸OTHER: If ingestion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison trol center, emergency room or physician immediately; have Material Safety Data Sheet information available.

SECTION 5 - FIRE FIGHTING MEASURES

▸**FLASHPOINT:** 50 Degrees F (10 Degrees C) (PENSKY-MARTENS CLOSED CUP)

▸FLAMMABLE LIMITS: Lower explosion limit (LEL): 1.5

▸Upper explosion limit (UEL): Not available

▸EXTINGUISHING MEDIA: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IB flammable liquid fires.

▸UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat.

▸SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable. Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

▸STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

▸WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 7 - HANDLING AND STORAGE

▸HANDLING AND STORAGE PRECAUTIONS: Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IB flammable liquids.

▸OTHER PRECAUTIONS: Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT FOR:

▸EYE PROTECTION: Wear chemical-type splash goggles when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

▸SKIN PROTECTION: Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of: butyl rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

▸RESPIRATORY PROTECTION: Overexposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH- approved air purifying respirator with the appropriate chemical cartridges or a positive-pressure, air-supplied respirator may also reduce exposure. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

▸OTHER EQUIPMENT: Clean contaminated clothing and shoes.

VENTILATION REQUIREMENTS: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

[FORMULA VALUES, NOT SALES SPECIFICATIONS]

BOILING RANGE: 172- 388Degrees F.
VAPOR PRESSURE: 13.8 mmHg
VAPOR DENSITY: Heavier than air
% VOLATILE/VOLUME: 36.900
SPECIFIC GRAVITY: 1.802
SOLUBILITY IN WATER: .8 %
WEIGHT/GALLON : 15.02 (LBS/U.S. GAL.)
pH: Not applicable
% SOLIDS BY WEIGHT: 83.17
EVAPORATION RATE(BuOAc = 100): 123

ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the solvents listed in Section 2.

SECTION 10 - STABILITY AND REACTIVITY

▸This product is normally stable and will not undergo hazardous reactions.

▸INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID): Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.

▸HAZARDOUS DECOMPOSITION PRODUCTS: May produce the following hazardous decomposition products when exposed to extreme heat: carbon monoxide ; carbon dioxide ; oxides of phosphorus ; lower molecular weight polymer fractions; oxides of barium ; oxides of sulfur ; . Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

THIS IS THE END OF THE MSDS FOR: 274685SP (00062475.001274685SP)

MATERIAL SAFETY DATA SHEET
MATTHEWS PAINT COMPANY

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY:	**74760SP**
REVISION DATE:	04/15/96
CUSTOMER PART #/NAME:	
PRODUCT TRADE NAME:	PT FILLER
CHEMICAL FAMILY:	Vinyl
EMERGENCY MEDICAL/SPILL INFO:	(800) 424-9300 CHEMTREC (U.S.) 91-800-00-214 (MEXICO) (514) 645-1320 (CANADA)
TECHNICAL INFORMATION:	(800) 323-6593
PRODUCT SAFETY/MSDS INFORMATION:	8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739 (414) 947-0700
DATE OF MSDS PREPARATION:	04/15/96

PRIMARY HAZARD WARNING

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. Harmful if swallowed. May cause moderate skin irritation. Causes eye irritation. Prolonged or repeated contact may cause an allergic skin reaction. Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

REF	HAZARDOUS INGREDIENTS	PERCENT	CAS NUMBER	CARCINOGEN*
01	1-METHOXY-2-PROPYL ACETATE	10- <20	108-65-6	
02	XYLENES	1 - <5	1330-20-7	
03	ZINC TETRA-OXYCHROMATES	5 - <10	13530-65-9	I N O A
04	ISOPROPYL ALCOHOL	50- <60	67-63-0	
05	BARIUM SULFATE	5 - <10	7727-43-7	

* Carcinogens: O = OSHA; A = ACGIH; N = NTP; I = IARC

SARA TITLE III & CERCLA CLASSIFICATIONS

REF	SARA 102 RQ (LBS)	SARA 302 TPQ (LBS)	SARA 313	SARA 311/312 AC	CH	FL	PR	RE
01	NOT ESTAB	NOT ESTAB	N	Y	N	Y	N	N
02	100	NOT ESTAB	Y	Y	N	Y	N	N
03	NOT ESTAB	NOT ESTAB	Y	Y	Y	N	N	N
04	NOT ESTAB	NOT ESTAB	Y	Y	N	Y	N	N
05	NOT ESTAB	NOT ESTAB	N	N	N	N	N	N

SARA 311/312 CATEGORIES FOR THIS PRODUCT: ACUTE = Y, CHRONIC = Y, FLAMMABILITY = Y, PRESSURE = N, REACTIVITY = N

OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THE FOLLOWING MATERIALS:

REF	ACGIH TLV-TWA	ACGIH TLV-STEL		U.S. OSHA PEL-TWA	U.S. OSHA PEL-STEL
01	NOT ESTAB.	NOT ESTAB.		NOT ESTAB.	NOT ESTAB.
01	IPEL-TWA: 100 ppm			IPEL-STEL: NOT ESTAB.	
02	100 ppm	150 ppm		100 ppm	150 ppm
03	0.01 mg/m3	NOT ESTAB.	C-	C 0.1 mg/m3	NOT ESTAB.
04	400 ppm	500 ppm		400 ppm	500 ppm
05	10 mg/m3	NOT ESTAB.	R-	5 mg/m3	NOT ESTAB.

[C- Ceiling Limit; S- Potential Skin Absorption; R- Respirable Dust] [NOT ESTAB. = NOT ESTABLISHED = NOT APPLICABLE]

PRODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES CONTROL ACT

All chemical substances in this product are listed on the U. S. TSCA inventory or are otherwise approved for unrestricted commercial use under TSCA.

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE FROM:

- INGESTION: Harmful if swallowed.
- EYE CONTACT: Causes eye irritation.
- SKIN CONTACT: May cause moderate skin irritation. Prolonged or repeated contact may cause an allergic skin reaction.
- INHALATION: Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage.
- CHRONIC OVEREXPOSURE: Avoid long-term and repeated contact. This product contains an insoluble form of a chromium (6+) compound. NTP and IARC associate these materials with an increased risk of cancer. This product either contains formaldehyde or is capable of releasing formaldehyde above 0.5 ppm under certain conditions. Formaldehyde is a potential cancer hazard, a skin sensitizer and a respiratory sensitizer.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eye watering, headaches, nausea, dizziness, and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

WARNING: This product contains a chemical known to the State of California to cause cancer.

SECTION 4 - FIRST AID MEASURES

- INGESTION: If swallowed, give one to two eight ounce glasses of water, but do not induce vomiting. Gently wipe out inside mouth to remove residual material.

Continued on Page 3

▸EYE CONTACT: In case of eye contact, remove contact lenses and flush eyes immediately with a gentle stream of luke warm water for at least 15 minutes.

▸SKIN CONTACT: In case of skin contact, flush immediately with plenty of water for at least 15 minutes followed by washing with soap and water.

▸INHALATION: If affected by inhalation of vapor or spray mist, remove to fresh air. Apply artificial respiration and other support measures as required

▸OTHER: If ingestion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison control center, emergency room or physician immediately; have Material Safety Data Sheet information available.

SECTION 5 - FIRE FIGHTING MEASURES

▸**FLASHPOINT:** 53 Degrees F (12 Degrees C) (PENSKY-MARTENS CLOSED CUP)

▸FLAMMABLE LIMITS: Lower explosion limit (LEL): 2.0

▸Upper explosion limit (UEL): Not available

▸EXTINGUISHING MEDIA: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IB flammable liquid fires.

▸UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat.

▸SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable. Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

▸STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

▸WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 7 - HANDLING AND STORAGE

▸HANDLING AND STORAGE PRECAUTIONS: Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IB flammable liquids.

▸OTHER PRECAUTIONS: Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT FOR:

▸EYE PROTECTION: Wear chemical-type splash goggles when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, o vapors.

▸SKIN PROTECTION: Wear protective clothing sufficient to cover exposed skin surfaces. For applications where skin contact is likely and impermeable clothing is necessary, select clothing constructed of: butyl rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

▸RESPIRATORY PROTECTION: Overexposure to vapors may be prevented by ensuring ventilation controls, vapor exhaust or fresh air entry. NIOSH/MSHA-approved (TC-23C-) air purifying or air supplied (TC-19C-) respirators may also reduce exposure. Read respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective and how it is to be properly fitted.

▸OTHER EQUIPMENT: Clean contaminated clothing and shoes.

VENTILATION REQUIREMENTS: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

[FORMULA VALUES, NOT SALES SPECIFICATIONS]

BOILING RANGE: 180- 351Degrees F
SOLUBILITY IN WATER: 57.8 %
VAPOR PRESSURE: 28.9 mmHg
VAPOR DENSITY: Heavier than air
% VOLATILE/VOLUME: 87.060
SPECIFIC GRAVITY: .991
WEIGHT/GALLON (LBS): 8.26 (U.S.)
pH: Not applicable
% SOLIDS BY WEIGHT: 28.12
EVAPORATION RATE(BuOAc = 100): 237
ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the solvents listed in Section 2.

SECTION 10 - STABILITY AND REACTIVITY

▸This product is normally stable and will not undergo hazardous reactions.

▸INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID): Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.

▸HAZARDOUS DECOMPOSITION PRODUCTS: May produce the following hazardous decomposition products when exposed to extreme heat: carbon monoxide ; carbon dioxide ; lower molecular weight polymer fractions; oxides of barium ; oxides of sulfur ; . . Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

THIS IS THE END OF THE MSDS FOR: 74760SP (00034084.00174760SP)

MATERIAL SAFETY DATA SHEET
MATTHEWS PAINT COMPANY

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY:	74766SP
REVISION DATE:	04/10/96
CUSTOMER PART #/NAME:	
PRODUCT TRADE NAME:	PT ACTIVATOR
CHEMICAL FAMILY:	ACID/SOLVENT SOLUTION
EMERGENCY MEDICAL/SPILL INFO:	(800) 424-9300 CHEMTREC (U.S.) 91-800-00-214 (MEXICO) (514) 645-1320 (CANADA)
TECHNICAL INFORMATION:	(800) 323-6593
PRODUCT SAFETY/MSDS INFORMATION:	8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739 (414) 947-0700
DATE OF MSDS PREPARATION:	04/16/96

PRIMARY HAZARD WARNING

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. Harmful if swallowed. May be corrosive. This product contains a material which causes skin burns. This product contains a material which causes irreversible eye damage. May be absorbed through the skin. Vapor irritates eyes, nose, and throat. Vapor generated at elevated temperatures irritates eyes, nose and throat.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

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SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

REF	HAZARDOUS INGREDIENTS	PERCENT	CAS NUMBER	CARCINOGEN*
01	1-METHOXY-2-PROPYL ACETATE	10- <20	108-65-6	
02	2-BUTOXYETHYL ACETATE	5 - <10	112-07-2	
03	2-PROPOXYETHANOL	10- <20	2807-30-9	
04	ISOPROPYL ALCOHOL	30- <40	67-63-0	
05	PHOSPHORIC ACID	1 - <5	7664-38-2	
06	ISOBUTYL ALCOHOL	20- <30	78-83-1	

* Carcinogens: O = OSHA; A = ACGIH; N = NTP; I = IARC

SARA TITLE III & CERCLA CLASSIFICATIONS

REF	SARA 102 RQ (LBS)	SARA 302 TPQ (LBS)	SARA 313	SARA 311/312 AC	CH	FL	PR	RE
01	NOT ESTAB	NOT ESTAB	N	Y	N	Y	N	N
02	NOT ESTAB	NOT ESTAB	Y	Y	N	Y	N	N
03	NOT ESTAB	NOT ESTAB	Y	Y	Y	Y	N	N
04	NOT ESTAB	NOT ESTAB	Y	Y	N	Y	N	N
05	5000	NOT ESTAB	Y	Y	N	N	N	N
06	5000	NOT ESTAB	N	Y	N	Y	N	N

SARA 311/312 CATEGORIES FOR THIS PRODUCT: ACUTE = Y, CHRONIC = Y, FLAMMABILITY = Y, PRESSURE = N, REACTIVITY = N

OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THE FOLLOWING MATERIALS:

REF	ACGIH TLV-TWA	ACGIH TLV-STEL	U.S. OSHA PEL-TWA	U.S. OSHA PEL-STEL
01	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.
01	IPEL-TWA: 100 ppm		IPEL-STEL: NOT ESTAB.	
02	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.
03	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.	NOT ESTAB.
04	400 ppm	500 ppm	400 ppm	500 ppm
05	1 mg/m3	3 mg/m3	1 mg/m3	3 mg/m3
06	50 ppm	NOT ESTAB.	50 ppm	NOT ESTAB.

(C- Ceiling Limit; S- Potential Skin Absorption; R- Respirable Dust) (NOT ESTAB. = NOT ESTABLISHED = NOT APPLICABLE)

PRODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES CONTROL ACT

All chemical substances in this product are listed on the U. S. TSCA inventory or are otherwise approved for unrestricted commercial use under TSCA.

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE FROM:

▸INGESTION: Harmful if swallowed.

▸EYE CONTACT: This product contains a material which causes irreversible eye damage.

▸SKIN CONTACT: May be corrosive. This product contains a material which causes skin burns. May be absorbed through the skin.

▸INHALATION: Vapor irritates eyes, nose, and throat. Vapor generated at elevated temperatures irritates eyes, nose and throat. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage.

▸CHRONIC OVEREXPOSURE: Avoid long-term and repeated contact. This product contains an ethylene series glycol ether and/or acetate which has been shown to cause adverse effects on the kidneys, liver, blood and/or blood-forming tissue.

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eye watering, headaches, nausea, dizziness, and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

SECTION 4 - FIRST AID MEASURES

▸INGESTION: If swallowed, give one to two eight ounce glasses of water, but do not induce vomiting. Gently wipe out inside mouth to remove any

Continued on Page 3

residual material.

▸EYE CONTACT: In case of eye contact, remove contact lenses, flush eye immediately with a gentle stream of warm water for at least 30 minutes.

▸SKIN CONTACT: In case of skin contact, flush immediately with plenty of water for at least 15 minutes, followed by waterless hand cleaner and soap and water if the material appears to adhere to skin.

INHALATION: If affected by inhalation of vapor or spray mist, remove to fresh air. Apply artificial respiration and other support measures as required.

▸OTHER: If ingestion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison control center, emergency room or physician immediately; have Material Safety Data Sheet information available.

SECTION 5 - FIRE FIGHTING MEASURES

▸**FLASHPOINT:** 53 Degrees F (12 Degrees C) (PENSKY-MARTENS CLOSED CUP)

▸FLAMMABLE LIMITS: Lower explosion limit (LEL): 2.0

▸Upper explosion limit (UEL): Not available

▸EXTINGUISHING MEDIA: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IB flammable liquid fires.

▸UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat.

▸SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable. Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

▸STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

▸WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 7 - HANDLING AND STORAGE

▸HANDLING AND STORAGE PRECAUTIONS: Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IB flammable liquids.

▸OTHER PRECAUTIONS: Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT FOR:

▸EYE PROTECTION: Wear chemical-type splash goggles or full face shield when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

▸SKIN PROTECTION: Wear protective clothing sufficient to cover exposed skin surfaces. For applications where skin contact is likely and impermeable clothing is necessary, select clothing constructed of: butyl rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

▸RESPIRATORY PROTECTION: Overexposure to vapors may be prevented by ensuring ventilation controls, vapor exhaust or fresh air entry. NIOSH/MSHA-approved (TC-23C-) air purifying or air supplied (TC-19C-) respirators may also reduce exposure. Read respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective and how it is to be properly fitted.

▸OTHER EQUIPMENT: Clean contaminated clothing and shoes.

VENTILATION REQUIREMENTS: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Continued on Page 4

[FORMULA VALUES, NOT SALES SPECIFICATIONS]

BOILING RANGE: 180- 378Degrees F
VAPOR PRESSURE: 20.1 mmHg
VAPOR DENSITY: Heavier than air
% VOLATILE/VOLUME: 99.120
SPECIFIC GRAVITY: .845
SOLUBILITY IN WATER: 60.3 %
WEIGHT/GALLON (LBS): 7.04 (U.S.)
pH: Not applicable
% SOLIDS BY WEIGHT: 2.03
EVAPORATION RATE(BuOAc=100): 152
ODOR/APPEARANCE: Non-viscous liquid with an odor characteristic of the ingredients listed in Section 2.

SECTION 10 - STABILITY AND REACTIVITY

▸This product is normally stable and will not undergo hazardous reactions.

▸INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID): Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.

▸HAZARDOUS DECOMPOSITION PRODUCTS: May produce the following hazardous decomposition products when exposed to extreme heat: carbon monoxide ; carbon dioxide ; phosphorus pentoxide ; . . . . Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

THIS IS THE END OF THE MSDS FOR: 74766SP (00034230.00174766SP)

MATERIAL SAFETY DATA SHEET
MATTHEWS PAINT COMPANY

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY:	**287437SP**
REVISION DATE:	07/26/96 (000) 0808
CUSTOMER PART #/NAME:	
PRODUCT TRADE NAME:	HIGH SOLIDS ACCELERATOR
CHEMICAL FAMILY:	CATALYST
EMERGENCY MEDICAL/SPILL INFO:	(800) 424-9300 CHEMTREC (U.S.) 91-800-00-214 (MEXICO) (514) 645-1320 (CANADA)
TECHNICAL INFORMATION:	(800) 323-6593
PRODUCT SAFETY/MSDS INFORMATION:	8201 - 100TH STREET KENOSHA, WISCONSIN 53142-7739 (414) 947-0700
DATE OF MSDS PREPARATION:	12/03/96

PRIMARY HAZARD WARNING

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. Harmful or fatal if swallowed. May cause skin burns. Causes severe eye irritation. May be harmful if absorbed through the skin. Vapor and/or spray mist harmful if inhaled.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE III, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REGULATIONS.

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▸FLAMMABLE LIMITS: Lower explosion limit (LEL): Not available

▸Upper explosion limit (UEL): Not available

▸EXTINGUISHING MEDIA: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IC flammable liquid fires.

▸UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat.

▸SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable. Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

▸STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

▸WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION 7 - HANDLING AND STORAGE

▸HANDLING AND STORAGE PRECAUTIONS: Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IC flammable liquids.

▸OTHER PRECAUTIONS: Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT FOR:

▸EYE PROTECTION: Wear chemical-type splash goggles when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

▸SKIN PROTECTION: Wear protective clothing sufficient to cover exposed skin surfaces. For applications where skin contact is likely and impermeable clothing is necessary, select clothing constructed of: impermeable material. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

▸RESPIRATORY PROTECTION: Overexposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH- approved air purifying respirator with the appropriate chemical cartridges or a positive-pressure, air-supplied respirator may also reduce exposure. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.

▸OTHER EQUIPMENT: Clean contaminated clothing and shoes.

VENTILATION REQUIREMENTS: Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

[FORMULA VALUES, NOT SALES SPECIFICATIONS]

BOILING RANGE: 284- 284Degrees F
VAPOR PRESSURE: N.A. mmHg
VAPOR DENSITY: Heavier than air
% VOLATILE/VOLUME: 98.430
SPECIFIC GRAVITY: .978
SOLUBILITY IN WATER: 16.3 %
WEIGHT/GALLON : 8.15 (LBS/U.S. GAL.)
pH: Not applicable
% SOLIDS BY WEIGHT: 1.68
EVAPORATION RATE(BuOAc=100): 75

ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the solvents listed in Section 2.

SECTION 10 - STABILITY AND REACTIVITY

▸This product is normally stable and will not undergo hazardous reactions.

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MATERIAL SAFETY DATA SHEET	BJB ENTERPRISES, INC. 14791 FRANKLIN AVENUE TUSTIN, CA 92780 (714)734-8450
Emergency Phone: 1(800)424-9300 *** CHEMTREC ***	

TC-960 PART A

REVISION DATE:.....09/01/95 PRINT DATE:.....02/04/97

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME.. TC-960 PART A
PRODUCT CLASS. POLYURETHANE (RESIN)
CHEMICAL TYPE. POLYPROPYLENE GLYCOL, DIISOCYANATOMETHYLBENZENE TERMINATED

SECTION 2 HAZARDOUS INGREDIENTS

SUBSTANCE NAME/CAS NUMBER	OSHA TWA	ACGIH TWA	OTHER LIMITS	% (OPTIONAL)
Aromatic diisocyanate terminated polyoxypropylene glycol CAS# 9057-91-4	N/E	N/E	0.02 ppm	(100)
(2,4)(2,6) Toluene Diisocyanate CAS#'s 584-84-9, 91-08-7	.005 ppm	.005 ppm	OSHA STEL	1-2

SECTION 3 U.S. REGULATORY INFORMATION

TSCA..... All compents of this product are registered under the regulations of the Toxic Substance Control Act
SARA TITLE III, SECTION 313. Applicable Sec.313, (2,4)(2,6) Toluene Diisocyanate CAS#'s 584-84-9, 91-08-7, (TDI) 1-2%

SECTION 4 PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE/ODOR..... Clear viscous liquid/Slight pungent
SPECIFIC GRAVITY (DENSITY). 1.04
BOILING POINT..... >400° F
VAPOR PRESSURE..... <0.025 @ 25° C
% VOLATILE..... Trace
SOLUBILITY IN WATER..... Slightly soluble reacts and foams
V.O.C..... None per EPA Ref Meth 24

SECTION 5 EMERGENCY AND FIRST AID PROCEDURES

IF IN EYE..... Flush eyes with running water for 15 minutes, seek medical attention.
IF ON SKIN..... Wash immediately with soap and water, remove and launder clothing before re-use
INHALATION..... Remove to fresh air, administer oxygen ifdifficulty breathing
INGESTION..... Induce vomiting or gastric suction
IN CASE OF FIRE..... Wear self contained breathing apparatus
SPILL OR LEAK..... Provide adequate ventilation-neutralize with decontamination solution in water. Absorb in sand and dispose of in unsealed drums. Washarea with strong detergent
DECONTAMINATION SOLUTION. Solution 1 -5% ammonia 10% isopropyl alcohol in water

SECTION 6 OCCUPATIONAL CONTROL RECOMMENDATIONS

EYE PROTECTION..... Splash goggles or chemical safety glasses
SKIN PROTECTION..... Rubber or neoprene gloves. Approved barrier cream.

SECTION 6 OCCUPATIONAL CONTROL RECOMMENDATIONS CONT'D

RESPIRATORY PROTECTION. Self contained breathing apparatus in closed room or area. NIOSH approved cartridge face masks for chemical vapors

VENTILATION..... Mechanical preferred

SECTION 7 FIRE HAZARD AND PROTECTION DATA

FLASH POINT..... >350° F (closed cup)

EXTINGUISHING MEDIA..... Water, CO2, or dry chemical

SPECIAL FIRE FIGHTING PROCEDUR. Wear self-contained breathing apparatus

UNUSUAL FIRE/EXPLOSION HAZARD.. Avoid contact with strong oxidizers, strong acids, as sudden reaction may result in fire and toxic fumes, containing reduced oxides of carbon and nitrogen

SECTION 8 REACTIVITY DATA

STABILITY..... Stable

INCOMPATIBILITY-MATRLS TO AVOID... Moisture, acids, and amines. Moisture contamination, excessive heating, heavy metal catalysts.

POLYMERIZATION..... May occur

SECTION 9 HEALTH AND HAZARD DATA

EYES..... May cause irritation, redness, soreness,tearing

SKIN..... May cause irritation and possible allergic sensitivity with repeated contact

INHALATION/INGESTION..... Excessive vapors caused by heat or spray mist may cause respiratory problems and asthma like sensitization in some individuals

EXISTING MEDICAL CONDITIONS. Asthma or respiratory

SECTION 10 SPECIAL PRECAUTIONS, HANDLING, AND STORAGE DATA

HANDLING PRECAUTIONS..... Avoid skin contact. Keep containers tightly closed

STORAGE TEMPERATURE(MIN/MAX). (Not Applicable)

SHELF LIFE..... 6 months under mfg. recommended storage conditions

STORAGE..... Store indoors and preferably in a dry place. Keep containers tightly closed. Purge with inert gas before reclosing

SECTION 11 SPILL, LEAK, AND DISPOSAL PROCEDURES

SPILL OR LEAK PROCEDURES. Provide adequate ventilation-neutralize with solution 1-5% ammonia 10% isopropyl alcohol and the rest water. Absorb in sand and dispose of in unsealed drums. Wash area wth strong detergent and water

WASTE DISPOSAL..... Landfill burial unless prohibited

SECTION 12 SHIPPING INFORMATION

DOT SHIPPING NAME..... Non-restricted, N.O.I

TECHNICAL SHIPPING NAME... Plastic Material

DOT HAZARD CLASSIFICATION. Non-restricted

UN/NA NUMBER..... None

IATA CLASSIFICATION..... Non-restricted

DOT LABELS REQUIRED..... None

SECTION 13 EMERGENCY NOTICE

Contact CHEMTREC only in event of chemical emergencies of spills, leaks, fires, exposures, or accidents involving chemicals.

ATTACHMENT F

EMISSIONS CALCULATIONS

Cirque du Soleil Spray Booth

							Potential VOC Emissions		
Class	Manufacturer	Material Name	Maximum Annual Usage, gal	density, lb/gal	lb VOC/gal	% VOC	Annual lb	Annual tons	Hourly, lb/hr
Acrylic Enamel	Seymour	Flat White	10	7.82	5.5	70%	54.7	0.03	13.7
Acrylic Polyurethane	Matthews	Acrythane- Typical	150	8.8	3.4	39%	511.5	0.26	8.5
Adhesive	3M Canada	Spray Mount Artist Adhesive	10	5.4	3.9	73%	39.4	0.02	9.8
Adhesive	3M Canada	Super 77 Spray Adhesive	10	5.9	4.1	70%	41.1	0.02	10.3
Adhesive	DDI	Plasti	10	7.9	5.5	69%	54.7	0.03	13.7
Adhesive	GC Electronics	Acrylic Cement	10	11.8	10.5	89%	105.0	0.05	26.3
Adhesive	GC Electronics	Liquid Tape	10	7.8	5.9	75%	58.8	0.03	14.7
Adhesive	Helmitin	Helmifix	10	7.2	6.7	93%	66.6	0.03	16.7
Adhesive	Quabaugh	Barge AP Cement	10	7.6	5.7	74%	56.5	0.03	14.1
Adhesive	Sluyter Co. Ltd.	476 Spray Adhesive	10	7.2	6.4	90%	64.5	0.03	16.1
Adhesive	Unknown	Foam Adhesive	10	10.4	8.3	80%	83.4	0.04	20.9
Aerosol Acrylic Latex	Rust-oleum	Rust-oleum	10	11.1	7.8	70%	77.9	0.04	19.5
Aerosol Spray Enamel	Krylon	Krylon Spray Paint	10	8.4	7.8	92%	77.6	0.04	19.4
Aerosol Spray Enamel	Loctite	Blair Super Gloss Deco Glaze	10	6.7	6.1	90%	60.7	0.03	15.2
Aerosol Spray Enam	Rust-oleum	Rust-oleum	10	11.0	7.3	66%	72.6	0.04	18.2
Body filler	Dynatron/Bondo	Bondo	10	11.3	2.0	18%	20.3	0.01	5.1
Glazing Putty	Dynatron/Bondo	Spot Putty	10	14.6	5.1	35%	51.1	0.03	12.8
Polyester Resin	Ashland	Hetron 670 P	10	10.2	4.8	47%	47.9	0.02	12.0
Protective Chemical	3M Canada	Scotchgard	10	8.4	1.3	15%	12.6	0.01	3.2
Protective Chemical	Alberto-Culver	Anti-Static Spray	10	8.4	8.4	100%	84.3	0.04	21.1
Solvent	Matthews	43-270 Universal Catalyst	75	7.9	5.3	67%	399.8	0.20	13.3
Solvent	Matthews	Accelerator	75	7.3	7.1	98%	535.5	0.27	17.9
Solvent	Matthews	Retarder Reducer	75	7.5	7.5	100%	561.0	0.28	18.7
Vinyl Paint	Continental	Flexibond Black	10	9.8	1.5	15%	14.6	0.01	3.7
Vinyl Paint	Continental	Flexibond Clear	10	9.0	1.6	18%	16.1	0.01	4.0
Vinyl Paint	Continental	Flexibond Red	10	9.3	1.5	16%	15.0	0.01	3.8
		Totals	**595**				**3,183**	**1.6**	**26.3**

Application Rates - based on production capacity

Typical Application Rate	**10**	gal/yr
Maximum usage rate:	**10**	gal/hr
Maximum usage rate:	**595**	gal/yr

Emissions factor calculations:

Annual pounds VOC applied:	3,183
Annual gallons Applied:	595

New Character Heads Spray Booth

Class	Manufacturer	Material Name	Maximum Annual Usage, gal	density, lb/gal	lb VOC/gal	% VOC	Potential VOC Emissions: Annual lb	Annual tons	Hourly, lb/hr
Acrylic Polyurethane	Amer-flint	Amerflint	125	8.3	4.81	58%	602	0.30	12.0
Acrylic Polyurethane	Gilman	Semi-gloss	25	7.5	5.24	70%	131	0.07	13.1
Acrylic Polyurethane	Matthews	Acrythane- Typical	375	8.8	3.41	39%	1,279	0.64	8.5
Acrylic Polyurethane	Matthews	VOC U-prime	25	15.0	2.53	17%	63	0.03	6.3
Aerosol Acrylic Latex	Rust-oleum	Rust-oleum	25	11.1	7.79	70%	195	0.10	19.5
Aerosol Spray Enamel	Borden	Krylon Spray Paint	25	8.4	7.76	92%	194	0.10	19.4
Aerosol Spray Enamel	Rust-oleum	Rust-oleum	25	11.0	7.26	66%	182	0.09	18.2
Ink	Crown	Blue Toolmaker's Ink	25	8.4	8.32	99%	208	0.10	20.8
Latex	Various	Latex Paint -typical	25	10.0	0.50	5%	13	0.01	1.3
Polyester Gelcoat	American Colors	Gelcoat	100	10.8	4.34	40%	434	0.22	10.8
Polyester Gelcoat	Fibre Glass Overcoat Co.	Featherfill	25	10.4	4.16	40%	104	0.05	10.4
Polyester Paste	UPOL	Fibral	25	15.6	3.90	25%	97	0.05	9.7
Polyester Paste	UPOL	Topstop	25	15.6	3.90	25%	97	0.05	9.7
Solvent	AKZO	MEKP	12.5	9.9	9.86	100%	123	0.06	24.7
Solvent	Ashland	Disney Thinner 500	12.5	8.4	7.98	95%	100	0.05	20.0
Solvent	Ashland	Methylene Chloride	100	11.1	11.14	100%	1,114	0.56	27.9
Solvent	Gilman	Lacquer Thinner	12.5	6.9	6.94	100%	87	0.04	17.4
Solvent	Matthews	43-270 Universal Catalyst	187.5	7.9	5.33	67%	999	0.50	13.3
Solvent	Matthews	Accelerator	100	7.3	7.14	98%	714	0.36	17.9
Solvent	Matthews	H/S Catalyst	100	9.4	0.94	10%	94	0.05	2.4
Solvent	Matthews	High Solids Accelerator	100	8.2	8.01	98%	801	0.40	20.0
Solvent	Matthews	HS Turbo Enhancer	100	8.2	8.23	100%	823	0.41	20.6
Solvent	Matthews	PT Activator	100	7.0	6.55	93%	655	0.33	16.4
Solvent	Matthews	Retarder Reducer	12.5	7.5	7.48	100%	94	0.05	18.7
Solvent	Rexco	Partall Film #10	12.5	7.7	2.70	35%	34	0.02	6.8
Solvent	Sigma Chemical	PVA	12.5	16.7	2.34	14%	29	0.01	5.8
Solvent	Various	MEK	12.5	6.7	6.70	100%	84	0.04	16.8
Urethane Curing Agent	BJB	TC-960 B	100	8.6	0.08	1%	8	0.00	0.2
Urethane Resin	BJB	TC-960 A	200	8.7	0.00	0%	0	0.00	0.0
Vinyl	Matthews	PT Filler	25	8.3	5.94	72%	148	0.07	14.8
		Totals	**2050**				**9,505**	**4.8**	**27.9**

Application Rates - based on production capacity

Typical Application Rate	**25**	gal/yr
Maximum usage rate:	**10**	gal/hr
Maximum usage rate:	**2050**	gal/yr

Emissions factor calculations:

Annual pounds VOC applied:	9,505	
Annual gallons Applied:	2,050	
Average VOC content:	4.64	lb VOC/gal

Existing emissions points' VOC emissions limits:

NSACSB Emissions Unit (E.U.)

(E.U.) ID No.	*Description*	*Permitted VOC Limit, tpy*
-007 (NSA-1)	NSA Paint Spray Booth (PSB) #1	2.82
-008 (NSA-2)	NSA PSB #2	5.65
-009 (NSA-3)	NSA PSB #3	5.65
-010 (NSA-5)	NSA Staff Shop PSB #1	0.08
-011 (NSA-6)	NSA Staff Shop PSB #2	0.63
-012 (NSA-7)	NSA Water Wash Plastisol PSB #1; includes a natural gas fired curing oven	0.53
-017 (NSA-11)	NSA Character Head Spray Box	0.94
-019 (NSA-12)	NSA Artist's Preparation Shop PSB	1.02
-025 (NSA-14)	NSA Paint Shop PSB #6	2.20
-027 (NSA-15)	NSA Central Shop Paint Mixing Stations (7)	1.19
Unknown	Methylene Chloride Stations (4)	5.52
Total existing VOC tpy		**26.2 tpy from existion E.U.**
		+ 4.8 tpy from new booth

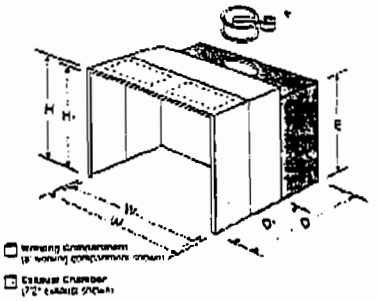
New limit with Character heads booth #2 operation: **31.0** **tpy VOC**

ATTACHMENT G

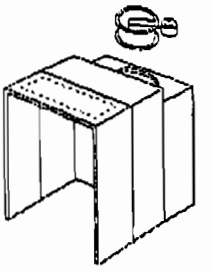
CIRQUE DU SOLEIL SPRAY BOOTH SPECIFICATIONS

PROCLEAN™

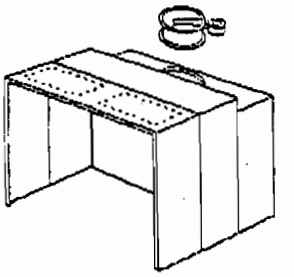
125 FPM Specifications



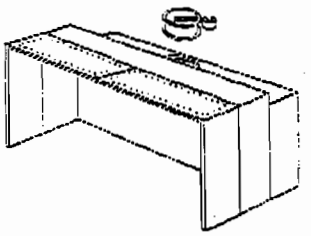
Typical Dimensions



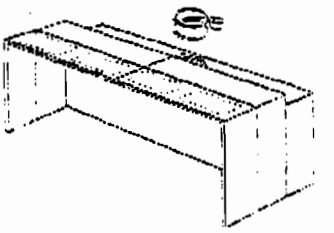
6' & 8' Wide



10' & 12' Wide

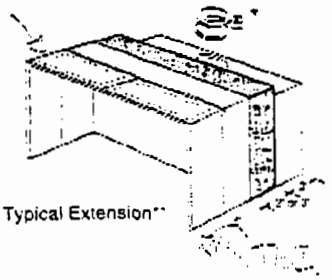


14', 16' & 18' Wide



20' Wide

Working Compartment Extensions



Typical Extension**

Example of optional booth extensions:

Available extensions:

2' extensions without lights

3' extensions without lights and light openings

3' extensions with lights

* Fans should not be mounted directly on exhaust chamber. This will affect the sound level in the booth.

Multiple working compartments available for additional depth.

125 FPM Air Velocity

Model Number	Working Comp.			Booth Overall (Highest Point)			Exhaust Chamber	Lights		Air Flow @.25" WC SCFM	Fan Dia.	Fan HP	Sound Avg. DBA*
								Working Comp.	Ext.				
	W_1	H_1	D_1	W	H	D	E	Std.	Ceiling Only				
PCL-876	6'	7'	6'	6'4"	7'4"	9'2"	7'2"	1	0-1	5,558	24	1	67
PCL-886	6'	8'	6'	6'4"	8'4"	9'2"	7'2"	1	0-1	5,558	24	1	67
PCL-8106	6'	10'	6'	6'4"	10'4"	9'2"	10'2"	1	0-1	8,500	24	1½	70
PCL-876	8'	7'	6'	8'4"	7'4"	9'2"	7'2"	1	0-1	8,500	24	1½	70
PCL-886	8'	8'	6'	8'4"	8'4"	9'2"	7'2"	1	0-1	9,127	24	2	71
PCL-8106	8'	10'	6'	8'4"	10'4"	9'2"	10'2"	1	0-1	10,953	24	3	72
PCL-1076	10'	7'	6'	10'4"	7'4"	9'2"	7'2"	2	0-2	9,728	24	3	72
PCL-1086	10'	8'	6'	10'4"	8'4"	9'2"	7'2"	2	0-2	10,953	24	3	74
PCL-10106	10'	10'	6'	10'4"	10'4"	9'2"	10'2"	2	0-2	13,150	34	2	70
PCL-1276	12'	7'	6'	12'4"	7'4"	9'2"	7'2"	2	0-2	12,138	34	1½	69
PCL-1286	12'	8'	6'	12'4"	8'4"	9'2"	7'2"	2	0-2	13,150	34	2	70
PCL-12106	12'	10'	6'	12'4"	10'4"	9'2"	10'2"	2	0-2	16,111	34	3	76
PCL-1476	14'	7'	6'	14'4"	7'8"	9'2"	7'2"	2	0-2	13,150	34	2	70
PCL-1486	14'	8'	6'	14'4"	8'8"	9'2"	7'2"	2	0-2	14,852	34	3	73
PCL-14106	14'	10'	6'	14'4"	10'8"	9'2"	10'2"	2	0-2	18,924	34	5	78
PCL-1676	16'	7'	6'	16'4"	7'8"	9'2"	7'2"	2	0-2	14,852	34	3	73
PCL-1686	16'	8'	6'	16'4"	8'8"	9'2"	7'2"	2	0-2	18,015	34	5	77
PCL-16106	16'	10'	6'	16'4"	10'8"	9'2"	10'2"	2	0-2	21,205	34	5	80
PCL-1876	18'	7'	6'	18'4"	7'8"	9'2"	7'2"	2	0-2	18,015	34	5	77
PCL-1886	18'	8'	6'	18'4"	8'8"	9'2"	7'2"	2	0-2	20,203	34	5	79
PCL-18106	18'	10'	6'	18'4"	10'8"	9'8"	10'2"	2	0-2	26,000	40	5	80
PCL-2076	20'	7'	6'	20'4"	7'8"	9'2"	7'2"	4	0-4	18,015	34	5	77
PCL-2086	20'	8'	6'	20'4"	8'8"	9'2"	7'2"	4	0-4	21,205	34	5	80
PCL-20106	20'	10'	6'	20'4"	10'8"	9'8"	10'2"	4	0-4	26,814	40	7½	82

Conforming with codes, ProClean spray booths use fluorescent Class I, Division 2 or general purpose light fixtures.

NOTE: Exhaust section panels can be interchanged for either top or back outlet.

In some areas, a velocity cone is required on the exhaust stack outlet requiring a change in the exhaust fan size and/or fan motor horsepower. Contact your nearest DeVilbiss representative for specific details.

*Sound levels are dependent on the application, configuration of the air duct, characteristic of material used and acoustical condition. See back cover for further information.

PROCLEAN™ Spray Booth Selection Guidelines

Your ProClean spray booth is an investment that pays many dividends by providing a cleaner painting environment for a better quality finish. In addition, it also provides a means of increasing productivity and provides a superior working environment for your finisher.

Many factors contribute to the selection of the proper spray booth for your needs. Here are some guidelines that may help you in your spray booth selection.

Size
As the finisher needs ample room in which to work, the size of a spray booth is critical to the successful performance of the finishers and the spray finishing equipment.

Width
To determine the necessary width you need to measure the diagonal dimension of the largest article, including fixture or pallet, and add two feet minimum clearance on each end. In multiple-operator booths include a minimum of 6 to 8 feet for each finisher. In conveyorized processes the width must be sufficient to allow finishers to complete the finishing operation within the allotted time, and spraying should not be closer than two feet from the conveyor opening.

Height
The height of the booth is determined by the overall height of the largest item plus the height of its holding fixture – plus two feet clearance. Ample room should be allowed for the finisher to spray the top and bottom of the object.

Depth
Working depth should be sufficient for the object to be within the enclosure – plus one foot clearance at the rear (from the filters). The finisher should work within front line of booth, except on bench or leg type booths.

Product Handing Methods
If conveyors are to be used requiring openings in side walls, order the proper size booth to accommodate these openings. Models are available "with provision for conveyor opening". These booths have the extra depth and exhaust capacity to allow for the openings and are adaptable to most types of conveyors.

Lights
Proper uniformity and intensity of lighting is necessary to produce good working conditions.

Final selection of your lighting should be based on your finishing operation. The standard lighting in all DeVilbiss spray booths is excellent for general operations. For situations requiring the illumination of vertical surfaces, it may be beneficial to add supplementary lighting.

Air Velocity
The air velocity or ventilation rate must be sufficient to insure that the solid particles and flammable vapors are confined to the inside of the spray booth. The configuration of the object being sprayed plays an important role in determining velocity requirements.

For example: Manually finishing the interior of file cabinets at higher air velocities would be required to insure that the overspray is removed from the area between the finisher and the cabinet interior. This "capture" velocity can often be as high as 150 FPM with a conveyorized production system.

Another example could be the finishing of large flat sheets. A high velocity spray booth would be necessary to insure that the air movement around the edges of the large sheets would be adequate to prevent the overspray from rebounding and escaping from the inside of the booth.

But the finishing of small objects with a lot of open spaces will allow the overspray to be captured with velocities of 125 FPM or sometimes less. Manual electrostatic spray guns, which are used to coat objects with open areas and objects that do not block the air flow, will allow overspray to be captured at velocities as low as 100 FPM.

Exhaust Stack
Exhaust stacks are required to ventilate the booth to the outside. DeVilbiss stacks should be the same size and diameter as the fan. The stack should discharge vertically for adequate exhaust air flow and DeVilbiss recommends that it extend a minimum of 6' above the roofline or as required by local codes.

Air Replacement
In order to ensure proper air balance, DeVilbiss air replacement systems are designed to deliver fresh, filtered and heated air into a building or booth.

To determine your air replacement needs, multiply the exhaust fan rated capacity (CFM) by 20 (based on three changes per hour: 60 min./3=20). The calculation using a 10' wide x 8' high spray booth rated at 125 FPM (with total CFM exhausted 10,000) would be 20 times 10,000 - or 200,000 cubic feet of air. If your shop area (width x length x height) is less than this amount, you should install an air replacement system.

Code Requirements
As fire, electrical and building codes vary from one area to another, you should consult local inspection authorities before purchasing a spray booth. They often can help determine what equipment is necessary to meet the local codes. They can also provide guidance on electrical work, fire protection systems and the location of the spray booth in the paint shop and in relation to property lines.

DeVilbiss spray booths are designed to help you comply with the requirements of the National Fire Protection Association (NFPA-33) and the Occupational Safety and Health Act (OSHA).

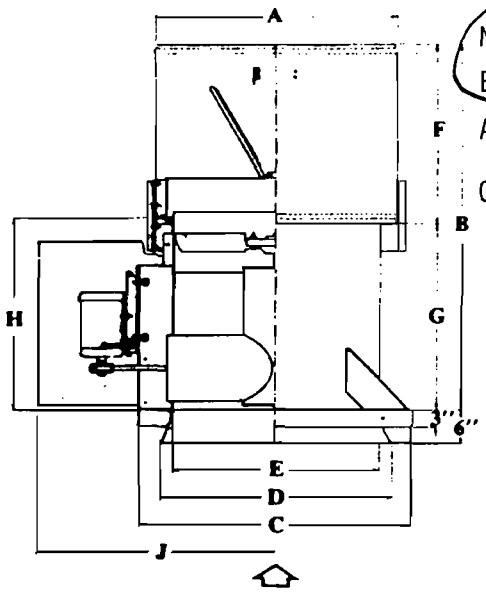
Use of the booth requires a regular schedule of filter replacement. Codes require that the filters be inspected after each period of use and that clogged filters be discarded and replaced immediately.

SHEET 1 OF 1

Type JTBC and JTBY

Belt Drive, Upblast Power Roof Ventilator

- Operates Reliably in Hostile Environments
- Motor, Belts and Bearings Isolated from Air Stream
- All-Weather Performance
- Constructed of Extra Heavy Gauge Steel
- Adjustable Pitch Cast Aluminum Airfoil Blades—JTBC
- Die Formed Heavy Gauge Steel Blades—JTBY
- Variable Pitch Pulleys (Most Models)
- Heavy Duty Pillow Block Ball Bearings
- External Re-Lubrication Fan Bearing Fittings
- Motor Cover • CSA Listed



Non Sparking Construction.
Explosion Proof Motor

Access Door

Curb is 12" high.

AMERICAN Coolair®

P.O. Box 2300 Jacksonville, Florida 32203
Phone (904) 389-3646

Abbreviations for Accessories

DS	—Safety disconnect switch (specify voltage)
PFCI	—Surface mount prefabricated roof curb
ML	—Magnetic latches
AHS	—Automatic heat and smoke venting
2P	—2 mil polyester (exterior only)
6P	—6 mil polyester (entire unit)
6E	—6 mil epoxy (entire unit)
HDG	—Hot dip galvanized
CA	—Cork-impregnated asphalt
IG	—Intlct guard
OG	—Outlet guard
DC	—Duct connector

AMCA CERTIFIED RATINGS — AIR PERFORMANCE — AIR MOVEMENT AND CONTROL ASSOCIATION, INC.

Certified ratings authorized by AMCA (Air Movement and Control Association, Inc.). Refer to performance ratings in catalog.

Dimensions

Dimension "A" is diameter of circular wind shroud.

Dimension "B" is overall height above curb.

Dimension "C" is square and is inside flange.

Dimension "D" is inside curb minimum. (Inlet orifice is not furnished with 18" size.)

Dimension "E" is inside diameter of fan housing.

Dimension "F" is height of wind shroud.

Dimension "G" is height of unit from curb to wind shroud.

Dimension "H" is height of unit above curb less wind shroud and damper assembly.

Dimension "J" is distance from center of PRV to outside edge of motor cover.

	DIMENSIONS IN INCHES										METAL GAUGE		
	BLD. DIA.	A	B	C	D	E	F	G	H	J	FAN HSG.	WIND SHRD	CURB CAP	FAN BLD.
JTBC	18	X	X	X	X	X	X	X	X	X	X	X	X	X
	24	X	X	X	X	X	X	X	X	X	X	X	X	X
	30	38	58⅛	44	36¼	31¼	32½	25⅛	28	37	1/8	22	14	
	36	X	X	X	X	X	X	X	X	X	X	X	X	X (1)
	42	X	X	X	X	X	X	X	X	X	X	X	X	X
	48	X	X	X	X	X	X	X	X	X	X	X	X	X
	54	X	X	X	X	X	X	X	X	X	X	X	X	X
	60	X	X	X	X	X	X	X	X	X	X	X	X	X
JTBY	72	80	83⅛	89	77⅛	73⅛	50⅛	33⅛	36	59½	1/4	16	10	7
	84	92	92⅛	101	89⅛	85⅛	59⅛	33⅛	36	65½	1/4	16	10	7

(1) Blades are airfoil shaped cast aluminum

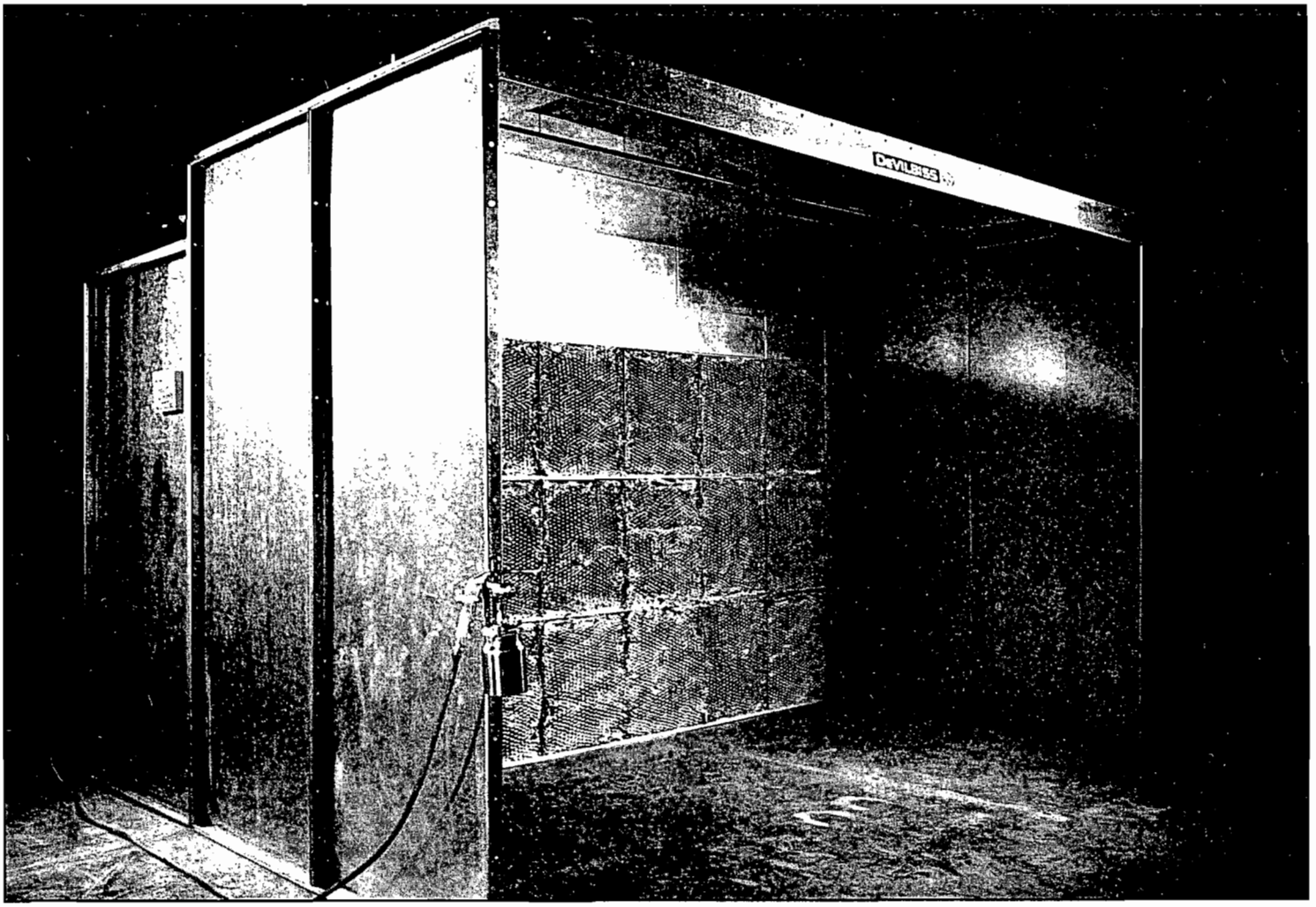
SPECIFICATIONS

		FAN DATA						MOTOR DATA						
FAN NO.	QTY	MODEL NO.	CFM	SP	RPM		bhp	HP	RPM	VOLTS	PH	HZ	ENCLOSURE	ACCESSORIES AND REMARKS
EF-6	1	JTBC30P11	8000	1.0	1675		2.55	3	1750	460	3	60	Explosion	proof, Alum Blades
														Disconnect Switch, Curb
														Curb is 12" high

PROJECT Le Cirque du Soliel ENGINEER Spillas-Candela Partsh SUBMITTED BY Superior Fan Co DATE 3-21-97

LOCATION Walt Disney World CONTRACTOR S.I. Goldman APPROVED BY _____ DATE _____

PROCLEAN™



The DeVilbiss ProClean paint arrestor spray booth line introduces a new standard in air filtration systems. The ProClean system is specifically designed for your production needs, capable of handling larger volumes of paint than the conventional paint arrestor booths. ProClean is the first spray booth line to offer filter media with both MAXIMUM EFFICIENCY and SUPERIOR HOLDING CAPACITY.

The ProClean Difference

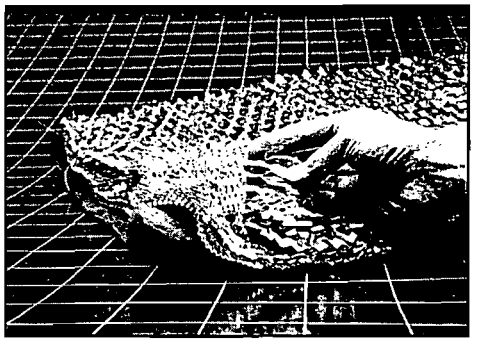
Offering maximum efficiency of up to 99.5%, ProClean adds up to flawless finishes and long-term economy. By dramatically reducing overspray buildup on fan blades and ductwork, ProClean booths maximize airflow — for a consistent, high-quality finish. Less overspray buildup also means reduced maintenance costs, a cleaner working environment and greater operator comfort.

The superior holding capacity of its nine-layered filter greatly contributes to ProClean's cost effectiveness because of fewer filter changes. Fewer changes mean increased productivity, less downtime, reduced placement and disposal costs.

ProClean booths meet the toughest emission standards on a broad range of coatings to help you comply with all OSHA and NFPA requirements. Appropriate components are UL approved. ProClean booths minimize overspray build up on equipment.

DeVilbiss ProClean booths are available at 100, 125 and 150 FPM without conveyor openings and 150 FPM with conveyor openings. 100 FPM booths are not detailed in this catalog. Filter media is now available in 20" x 25" or 20" x 20" pads or rolls.

DEVILBISS
SPRAY BOOTH PRODUCTS



Paint Arrestor Filters

A Revolutionary New Design

The key to ProClean filter performance is its unique, nine-layer, even-loading design. The eight layers of slit and expanded kraft paper are cut in diamond shapes which become increasingly smaller to promote even depth loading. The diamond shapes also act as tiny baffles to create a turbulent air flow through the filter, so particles are thrust upon the surface of each baffle in each layer. The polyester layer is the final stage of filtration and captures microscopic particles.

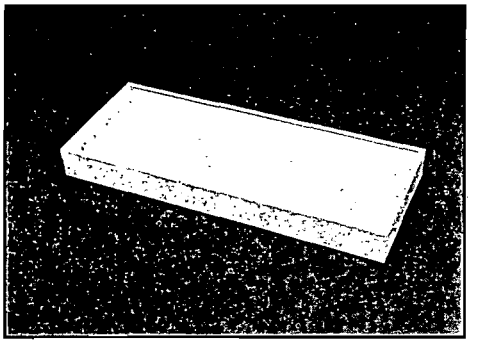
The result is a highly efficient system that insures top-quality finishes, increased productivity and long-term economy.

Increased Productivity

ProClean filters offered in rolls for high production and convenience: Simple to install, ProClean rolls are hung in the spray booth on special, heavy-duty grids equipped with impaling pins. Then secured with channels at the top and bottom. Filter changeouts take only minutes. Longer and wider rolls, in four sizes, are available for complete booth coverage.

ProClean filters are also available in 20" x 25" or 20" x 20" pads. No more "dual filtration" is required. One ProClean filter pad does a better job than other two-filter systems.

DeVilbiss ProClean filters are made of fire retardant Kraft fiber which has been expanded and sewn into a multilayer pad. The specially treated material complies with all requirements of commercial standard CS203-56 as issued by the United States Department of Commerce and conforms to standards listed in the National Fire Protection Association Bulletin No. 33.



Lights

Save On Energy Costs

DeVilbiss high efficiency fluorescent fixtures provide excellent illumination at less operating cost than comparable incandescent light sources.

All models have a white baked-enamel finish for lighting efficiency and easy cleaning. Rapid start, high efficiency ballasts provide instant operation of lamps — no starters are required. With rapid start lamps, every DeVilbiss ballast saves a full 10 watts compared to standard ballasts. (Tubes are not included.)

Conforming with codes, DeVilbiss spray booths use fluorescent Class I, Division 2 or general purpose light fixtures.

New Energy Standards

DeVilbiss lights meet the new National energy standards with the DeVilbiss ballasts which can translate to a 25% reduction in power costs.

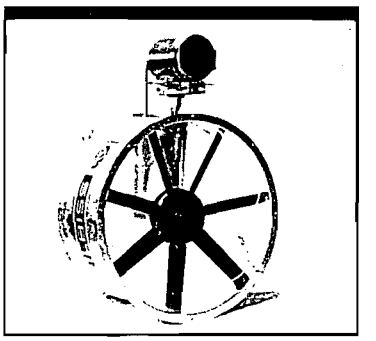
DeVilbiss Rapid Start Ballasts when used with energy saving lamps provide a total energy savings of 24 watts or 25%.

Quality Galvanex Panels

Galvanex panels – standard on all DeVilbiss industrial spray booths – offer easy installation and quality, tight fitting construction.

The tough 18-gauge corrosion-resistant steel construction is designed for durability and less booth maintenance.

DeVilbiss panels have uniform 13/32" pre-punched bolt holes spaced every 6" for a fast, easy fit and mitered and formed corners for accurate tight fitting seams. Two-inch, rolled edge flanges on all four sides provide easy handling and strong, rigid structures (see photo at right).



Fans

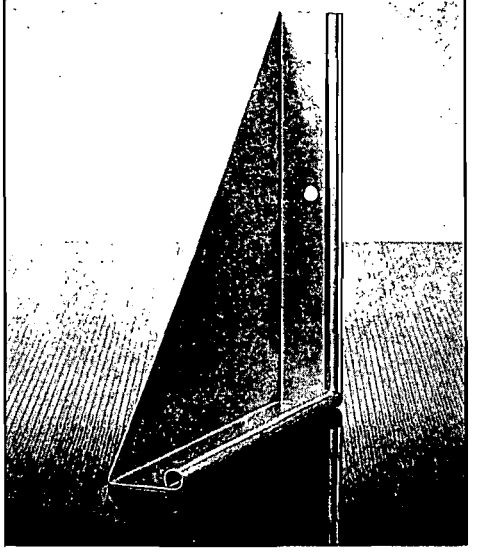
DeVilbiss fans are specially designed for spray booth exhaust. High efficiency air-foil type blades are non-sparking and balanced to move large amounts of air with little horsepower for peak efficiency and economy.

The vapor-proof belt housing keeps belts clean for safe, smooth operation and long service.

Belts are easily changed without disassembly of the fan. All models have standard temperature permanently lubricated ball bearings.

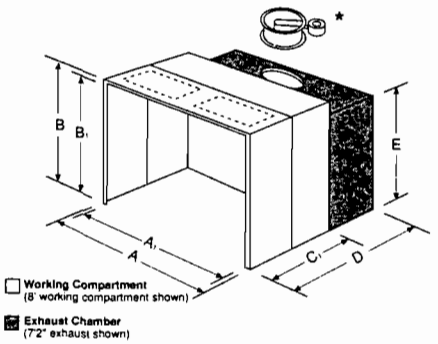
Fan models range from 2,000-33,000 CFM capacity and are available in 17 1/2, 24, 34, 40 and 48 inch diameters. Fans are built to mount in horizontal or vertical stacks. Two fan rings are provided with each fan for attachment to the stack.

GALVANEX™ The Tough One

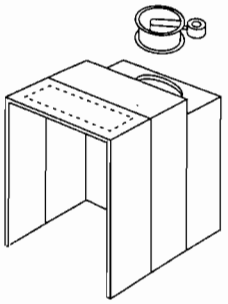


PROCLEAN™

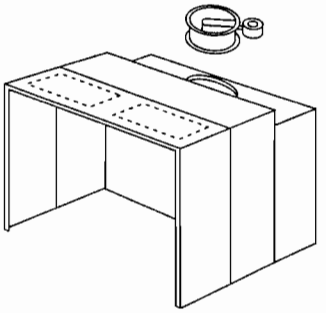
125 FPM Specifications



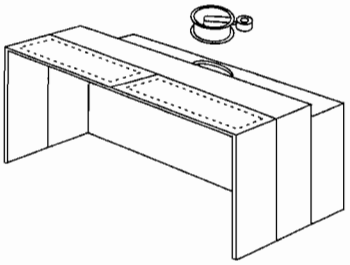
Typical Dimensions



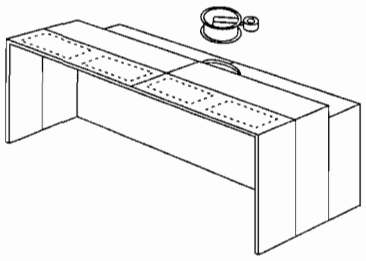
6' & 8' Wide



10' & 12' Wide

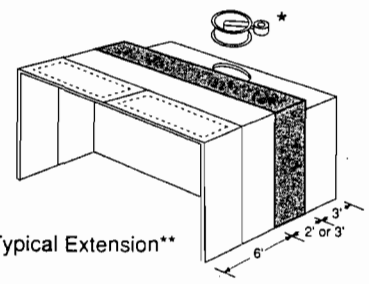


14', 16' & 18' Wide



20' Wide

Working Compartment Extensions



Typical Extension**

Example of optional booth extensions:

Available extensions:

2' extensions without lights

3' extensions without lights and light openings

3' extensions with lights

* Fans should not be mounted directly on exhaust chamber. Use universal stack between fan and exhaust section (see exhaust stack sheet).

Multiple working compartments available for additional depth.

125 FPM Air Velocity

Model Number	Working Comp.			Booth Overall (Height Includes Lights)			Exhaust Chamber	Lights			Air Flow @.25" WC SCFM	Fan Dia.	Fan HP	Sound Avg. DBA*
								Working Comp.		Ext.				
	W	H	D	W	H	D								
	A_1	B_1	C_1	A	B	D	E	Std.	Optional	Ceiling Only				
PCL-676	6'	7'	6'	6'4"	7'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	6,558	24	1	67
PCL-686	6'	8'	6'	6'4"	8'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	6,558	24	1	67
PCL-6106	6'	10'	6'	6'4"	10'6"	9'2"	10'2"	1	0-1-2-4-6	0-1	8,550	24	1½	70
PCL-876	8'	7'	6'	8'4"	7'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	8,550	24	1½	70
PCL-886	8'	8'	6'	8'4"	8'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	9,127	24	2	71
PCL-8106	8'	10'	6'	8'4"	10'6"	9'2"	10'2"	1	0-1-2-4-6	0-1	10,953	24	3	74
PCL-1076	10'	7'	6'	10'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	9,738	24	3	72
PCL-1086	10'	8'	6'	10'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	10,953	24	3	74
PCL-10106	10'	10'	6'	10'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	13,150	34	2	70
PCL-1276	12'	7'	6'	12'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	12,138	34	1½	69
PCL-1286	12'	8'	6'	12'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	13,150	34	2	70
PCL-12106	12'	10'	6'	12'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	16,111	34	3	76
PCL-1476	14'	7'	6'	14'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	13,150	34	2	70
PCL-1486	14'	8'	6'	14'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	14,852	34	3	73
PCL-14106	14'	10'	6'	14'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	18,924	34	5	78
PCL-1676	16'	7'	6'	16'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	14,852	34	3	73
PCL-1686	16'	8'	6'	16'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	18,015	34	5	77
PCL-16106	16'	10'	6'	16'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	21,205	34	5	80
PCL-1876	18'	7'	6'	18'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	18,015	34	3	77
PCL-1886	18'	8'	6'	18'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	20,203	34	5	79
PCL-18106	18'	10'	6'	18'4"	10'6"	9'2"	10"2"	2	0-2-4-6-8	0-2	26,000	40	5	80
PCL-2076	20'	7'	6'	20'4"	7'6"	9'2"	7'2"	4	0-4-8-10-12	0-4	18,015	34	5	77
PCL-2086	20'	8'	6'	20'4"	8'6"	9'2"	7'2"	4	0-4-8-10-12	0-4	21,205	34	5	80
PCL-20106	20'	10'	6'	20'4"	10'6"	9'8"	10'2"	4	0-4-8-10-12	0-4	28,814	40	7½	82

Conforming with codes, ProClean spray booths use fluorescent Class I, Division 2 or general purpose light fixtures.

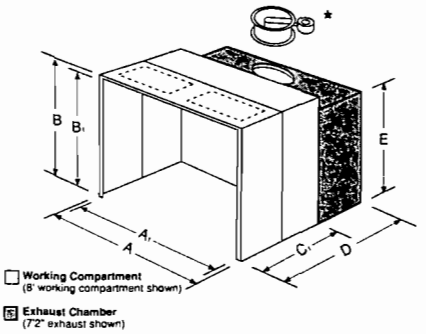
NOTE: Exhaust section panels can be interchanged for either top or back outlet.

In some areas, a velocity cone is required on the exhaust stack outlet requiring a change in the exhaust fan size and/or fan motor horsepower. Contact your nearest DeVilbiss representative for specific details.

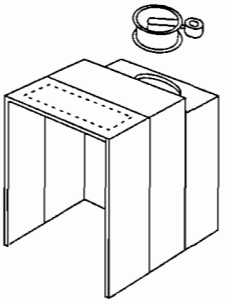
*Sound levels are dependent on the application, configuration of the air duct, characteristic of material used and acoustical condition. See DSBP-IC-006 for further information.

PROCLEAN™

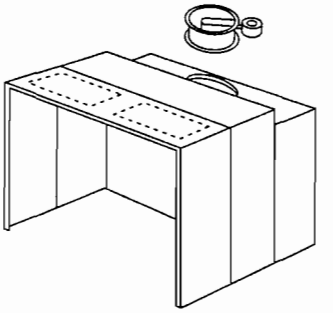
150 FPM Specifications



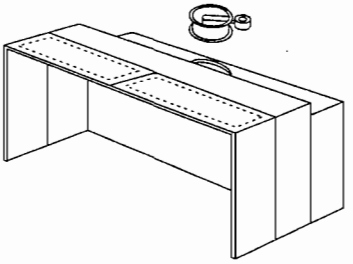
Typical Dimensions



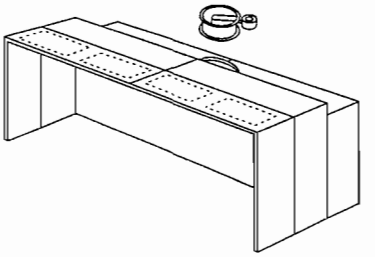
6' & 8' Wide



10' & 12' Wide



14', 16' & 18' Wide

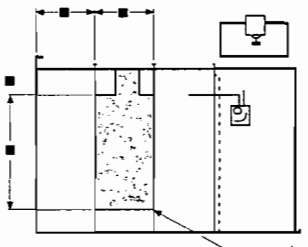


20' Wide

Conveyor Opening

Standard conveyor openings are available within the 3-foot panel of the work compartment or extension. For any opening that exceeds this limit, consult your DeVilbiss Representative. (Note: leave 1" clearance around conveyor opening and panel edge.)

If conveyor opening exceeds 20% of booth frontal opening, consult your DeVilbiss representative for assistance in fan selection.



Side Opening Conveyor Booth Only

■ Please provide opening dimension requirements

* Fans should not be mounted directly on exhaust chamber. Use universal stack between fan and exhaust section (see exhaust stack sheet).

150 FPM Air Velocity

Model Number	Working Comp.			Booth Overall (Height Includes Lights)			Exhaust Chamber	Lights			Air Flow @.25" WC SCFM	Fan Dia.	Fan HP	Sound Ave. DBA*
								Working Comp.		Ext.				
	W A_1	H B_1	D C_1	W A	H B	D D	E	Std.	Optional	Ceiling Only				
PCL-676	6'	7'	6'	6'4"	7'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	7,869	24	1½	69
PCL-686	6'	8'	6'	6'4"	8'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	8,560	24	1½	70
PCL-6106	6'	10'	6'	6'4"	10'6"	9'2"	10'2"	1	0-1-2-4-6	0-1	10,531	24	3	73
PCL-876	8'	7'	6'	8'4"	7'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	9,738	24	3	72
PCL-886	8'	8'	6'	8'4"	8'6"	9'2"	7'2"	1	0-1-2-4-6	0-1	10,953	24	3	74
PCL-8106	8'	10'	6'	8'4"	10'6"	9'2"	10'2"	1	0-1-2-4-6	0-1	13,150	34	2	70
PCL-1076	10'	7'	6'	10'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	13,150	34	2	70
PCL-1086	10'	8'	6'	10'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	13,150	34	2	70
PCL-10106	10'	10'	6'	10'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	16,111	34	3	76
PCL-1276	12'	7'	6'	12'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	13,150	34	2	70
PCL-1286	12'	8'	6'	12'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	16,111	34	3	76
PCL-12106	12'	10'	6'	12'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	20,203	34	5	79
PCL-1476	14'	7'	6'	14'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	16,111	34	3	76
PCL-1486	14'	8'	6'	14'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	18,015	34	5	77
PCL-14106	14'	10'	6'	14'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	23,420	34	7½	82
PCL-1676	16'	7'	6'	16'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	18,015	34	5	77
PCL-1686	16'	8'	6'	16'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	21,205	34	5	80
PCL-16106	16'	10'	6'	16'4"	10'6"	9'2"	10'2"	2	0-2-4-6-8	0-2	26,000	40	5	80
PCL-1876	18'	7'	6'	18'4"	7'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	20,203	34	5	79
PCL-1886	18'	8'	6'	18'4"	8'6"	9'2"	7'2"	2	0-2-4-6-8	0-2	23,420	34	7½	82
PCL-18106	18'	10'	6'	18'4"	10'6"	9'8"	10"2"	2	0-2-4-6-8	0-2	31,591	40	10	84
PCL-2076	20'	7'	6'	20'4"	7'6"	9'2"	7'2"	4	0-4-8-10-12	0-4	23,420	34	7½	82
PCL-2086	20'	8'	6'	20'4"	8'6"	9'8"	7'2"	4	0-4-8-10-12	0-4	26,000	40	5	80
PCL-20106	20'	10'	6'	20'4"	10'6"	9'8"	10'2"	4	0-4-8-10-12	0-4	32,525	40	10	84

Conforming with codes, ProClean spray booths use fluorescent Class I, Division 2 or general purpose fluorescent light fixtures.

NOTE: Exhaust section panels can be interchanged for either top or back outlet.

In some areas, a velocity cone is required on the exhaust stack outlet requiring a change in the exhaust fan size and/or fan motor horsepower. Contact your nearest DeVilbiss representative for specific details.

*Sound levels are dependent on the application, configuration of the air duct, characteristic of material used and acoustical condition. See DSBP-IC-006 for further information.

PROCLEAN™ Spray Booth Selection Guidelines

Your ProClean spray booth is an investment that pays many dividends by providing a cleaner painting environment for a better quality finish. In addition, it also provides a means of increasing productivity and provides a superior working environment for your finisher.

Many factors contribute to the selection of the proper spray booth for your needs. Here are some guidelines that may help you in your spray booth selection.

Size
As the finisher needs ample room in which to work, the size of a spray booth is critical to the successful performance of the finishers and the spray finishing equipment.

Width
To determine the necessary width you need to measure the diagonal dimension of the largest article, including fixture or pallet, and add two feet minimum clearance on each end. In multiple-operator booths include a minimum of 6 to 8 feet for each finisher. In conveyorized processes the width must be sufficient to allow finishers to complete the finishing operation within the allotted time, and spraying should not be closer than two feet from the conveyor opening.

Height
The height of the booth is determined by the overall height of the largest item plus the height of its holding fixture – plus two feet clearance. Ample room should be allowed for the finisher to spray the top and bottom of the object.

Depth
Working depth should be sufficient for the object to be within the enclosure – plus one foot clearance at the rear (from the filters). The finisher should work within front line of booth, except on bench or leg type booths.

Product Handing Methods
If conveyors are to be used requiring openings in side walls, order the proper size booth to accommodate these openings. Models are available "with provision for conveyor opening". These booths have the extra depth and exhaust capacity to allow for the openings and are adaptable to most types of conveyors.

Lights
Proper uniformity and intensity of lighting is necessary to produce good working conditions.

Final selection of your lighting should be based on your finishing operation. The standard lighting in all DeVilbiss spray booths is excellent for general operations. For situations requiring the illumination of vertical surfaces, it may be beneficial to add supplementary lighting.

Air Velocity
The air velocity or ventilation rate must be sufficient to insure that the solid particles and flammable vapors are confined to the inside of the spray booth. The configuration of the object being sprayed plays an important role in determining velocity requirements.

For example: Manually finishing the interior of file cabinets at higher air velocities would be required to insure that the overspray is removed from the area between the finisher and the cabinet interior. This "capture" velocity can often be as high as 150 FPM with a conveyorized production system.

Another example could be the finishing of large flat sheets. A high velocity spray booth would be necessary to insure that the air movement around the edges of the large sheets would be adequate to prevent the overspray from rebounding and escaping from the inside of the booth.

But the finishing of small objects with a lot of open spaces will allow the overspray to be captured with velocities of 125 FPM or sometimes less. Manual electrostatic spray guns, which are used to coat objects with open areas and objects that do not block the air flow, will allow overspray to be captured at velocities as low as 100 FPM.

Exhaust Stack
Exhaust stacks are required to ventilate the booth to the outside. DeVilbiss stacks should be the same size and diameter as the fan. The stack should discharge vertically for adequate exhaust air flow and DeVilbiss recommends that it extend a minimum of 6' above the roofline or as required by local codes.

Air Replacement
In order to ensure proper air balance, DeVilbiss air replacement systems are designed to deliver fresh, filtered and heated air into a building or booth.

To determine your air replacement needs, multiply the exhaust fan rated capacity (CFM) by 20 (based on three changes per hour: 60 min./ 3=20). The calculation using a 10' wide x 8' high spray booth rated at 125 FPM (with total CFM exhausted 10,000) would be 20 times 10,000 or 200,000 cubic feet of air. If your shop area (width x length x height) is less than this amount, you should install an air replacement system.

Code Requirements
As fire, electrical and building codes vary from one area to another, you should consult local inspection authorities before purchasing a spray booth. They often can help determine what equipment is necessary to meet the local codes. They can also provide guidance on electrical work, fire protection systems and the location of the spray booth in the paint shop and in relation to property lines.

DeVilbiss spray booths are designed to help you comply with the requirements of the National Fire Protection Association (NFPA-33) and the Occupational Safety and Health Act (OSHA).

Use of the booth requires a regular schedule of filter replacement. Codes require that the filters be inspected after each period of use and that clogged filters be discarded and replaced immediately. The codes further require that the clogged filters be removed to a safe, well detached location or placed in a water filled metal container and disposed of daily.

PROCLEAN™

ProClean Paint Arrestor Booths are Complete With:

Lights
Class I Div. 2 and general purpose fluorescent light fixtures are available.

Fans
Fans are furnished with nonferrous blades and have been selected to provide adequate velocity for booths with or without conveyor openings. Fans available are open, totally enclosed and explosion proof type. Specify type and voltage when ordering.

Paint Arrestor Filters
One complete set of rolls or pads are furnished with each ProClean booth.

Exhaust Chambers
Constructed from standard Galvanex™ panels and beams for installation in a "spray finishing room." The complete exhaust chamber section consists of the paint arrestor frame, retainers and arrestor pads or filter rolls.

ProClean paint arrestor booths may be erected for top or back exhaust outlet. Top is standard while the back is optional.

Draft Gauge
A draft gauge is standard. It indicates when ProClean paint arrestor filters have become sufficiently loaded to necessitate replacement.

Accessories

Air Input Plenums
Air input plenums are available for installation with any DeVilbiss spray booth to completely enclose the work area — to maximize dust control and balance air flow — and guarantee top quality finishes and an optimum working environment.

Exhaust Stack
Contact your DeVilbiss distributor for selection assistance since ceiling heights, building roof configurations, etc. must be considered.

Controls
Switches are available which are used to operate motors or lights from the spray area, while maintaining compliance with the electrical code.

Warranty
This product is covered by DeVilbiss' limited warranty, which is available upon request.

Worldwide Sales and Service

DeVilbiss Spray Booth Products
DeVilbiss has authorized distributers throughout the world. For equipment, parts and service, check the yellow pages under "Spray Equipment". If further assistance is required, write or call one of the following Sales Offices near you.

Additional information available on the following:

Bench and Bench Top Booths
Exhaust Stacks
Exhaust Fans
Motors
Filters
Air Input Plenums
Lights
Galvanex Panels
Safety Controls

DEVILBISS
SPRAY BOOTH PRODUCTS

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