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+ 444.0: 104-411-321/45775

MATERIAL SAFETY DATA SHEET

DOUCT NAME: Q.D. ACRYLIC FLAT BLACK

ODUCT CODE: LB-1406

55 gree 97

HMIS CODES: H F

BERNEUR SECTION I - MANUFACTURER IDENTIFICATION

NUPACTURER'S NAME: RICHARD'S PAINT MFG. CO. INC. press: 200 Paint Street, Rockledge, Florida 32955

ERGENCY PHONE: 407-636-6200

INFORMATION PHONE: 407-636-6200

: 05-25-94 TE REVISED

NAME OF PREPARER : RICHARD'S PAINT

---- SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

OCCUPATIONAL EXPOSURE LIMITS

VAPOR PRESSURE WEIGHT

COUS COMPONENTS

CAS NUMBER OSHA PEL ACGIN TLV OTHER

NO HAZARCOUS INGREDIENTS PRESENT ***

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

LING RANGE: N/A

SPECIFIC GRAVITY (H20=1):

LPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE:

8.345#/8

WER THAN ETHER

TING V.O.C. : 1.06 LB/GL (ATERIAL V.O.C.: 0.51 LB/GL (

127 G/L) 61 G/L)

MUBILITY IN WATER:

LUBLE

EARANCE AND ODOR:

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

METHOD USED: N/A LASH POINT: N/A

UPPER: Mable Limits in air by volume- Lower: N/A

ENGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

PECIAL PIRRPIGHTING PROCEDURES

if-contained breathing apparetus and protective clothing should be worn when fighting fires involving chemicals. If a protective contains ampunt is involved avacuate anyone not properly protected: ""

MATERIAL SAFETY DATA SHRET

PAGE 2 OF 3

ABILITY: STABLE NOITIONS TO AVOID

COMPATIBILITY (MATERIALS TO AVOID)

ARDOUS -DECOMPOSITION OR BYPRODUCTS

AZARDOUS POLYMERIZATION: WILL NOT OCCUR

*************** SECTION VI - HEALTH HAZARD DATA

NHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

matarion: innitates respiratory passages and eyes very slightly.

May count headache or newses

KIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE contact: Direct contact irritates slightly with redness and swelling.

KIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE integer: Can dry and defat skin causing gracks, irritation and dermitities:

GESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE stion: Can cours gastrointestinal irritation.

ALTH HAZARDS (ACUTE AND CHRONIC)

er Syda: Stight initation with redness. Skin: No adverse effect. Inhalation: Irritates respiratory pessage injections large whomse may chuse digestive discomfort.

nic: None known.

'ARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

TRDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE A SITE 19, respinatory tract irritation.

MERGENCY AND FIRST AID PROCEDURES

Immediately flush with water for 15 minutes. Skins Wash with soap and water. Inhalations Move subject to frash injections Give 2 glasses of water to drink. Consult physician. Never give anything by mouth to an unconclous erson.

ny symptoma persist, get medical attention.

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MATERIAL SAPETY DATA SHEET

PAGE 3 OF 3

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PRECAUTIONS FOR SAFE HANDLING AND USE

PS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

to spill send the cover with inert, absorbent meterial and remove to disposal container. Hop with mild detergents or learning solutions. Observe all relevant federal state and local laws.

MASTE DISPOSAL METHOD

sult local, state and federal waste regulations before disposing into approved waste landfills. Obey relevant laws.

ECAUTIONS TO BE TAKEN IN HANDLING AND STORING

andling: No special procautions.

turage: No aperial precoutions. Use ressonable dare.

THER PRECAUTIONS

SPIRATORY PROTECTION

or required under normal conditions of use.

-praying this mutarial use in well ventilated area.

PENTILATION

improx mechanical ventilation or local exhaust should be suitable to keep vepor concentrations below TLV.

POTECTIVE GLOVES

gs may be worn for protection if skin is sensitive. (latex, neoprene, nitrile rubber)

IXE PROTECTION

■chemical fafety glasses, goggles or faceshields for eye protection.

THER PROTECTIVE CLOTHING OR EQUIPMENT

se protective clothing whenever possible to prevent skin contact.

VORK/HYGIENIC PRACTICES

mashes and safety showers in the workplace are recommended.

ECLAIMER

Standard Lands and the

PAGE MATERIAL SAFETY DATA SHEET SECTION I - IDENTIFICATION TRADE NAME: ARMORCOTE
DESCRIPTION: TEAL ESSENCE-830893
PRODUCT CODE IDENTITY: 951GA337
NPCA HMIS RATING: H 2* F 3 R REVISION: 03 LAST REVISED : 12-03-97 DATE OF ISSUE: 05-26-98 COMPANY NAME: COOK COMPOSITES AND POLYMERS CO. ADDRESS: 919 E. 14th AVENUE NORTH KANSAS CITY, MO 64116 PREPARED BY: HAZARD COMMUNICATION DEPT. SEA RAY BOATS INC-P D & E 200 SEA RAY DR CUSTOMER NAME: INFORMATION TELEPHONE: 546038 1-800-821-3590 COMPOSITES: POLYMERS: 1-800-488-5541 MERRITT ISLAND FL ATTENTION: RANDY SHEPHARD 32953 TRANSPORTATION EMERGENCY TELEPHONE (CHEMTREC): 1-800-424-9300 CCP certifies that its products comply with all the provisions of the Toxic Substances Control Act (TSCA), unless otherwise stated by ingredient in Section II. The percent by weight composition data given in Sections II and XX are NOT SPECIFICATIONS, but are based on 'target' formula values for each ingredient in the product. The data are presented as ranges for low hazard ingredients and single point values for ingredients of regulatory concern. Actual batch concentrations will vary within limits consistent with separately established product specifications. * * * * * * * * * * * * * * * ... SECTION II INGREDIENTS CĀS# 014807-96-6 CAS# 01480/-36-6
TALC (HYDROUS MAGNESIUM SILICATE)
PCT BY WT: 5 - 10
EXPOSURE LIMIT:
ACGIH TLV/TWA: 2 MI
OSHA PEL/TWA: 2 MI 2 MG/CU.M., RESPIRABLE DUST 2 MG/CU.M., RESPIRABLE DUST NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE LD50, Dral: LD50, Dermal: LC50, Inhalation:

CĀS# 068611-44-9 SILICA, AMORPHOUS-HYDROPHOBIC, FUMED PCT BY WT: 1 - 5 EXPOSURE LIMIT:

ÄCĞİH TLV/TWA: OŞHA PEL/TWA:

ACGIH TLV/TWA: 10MG/CU.M.(TOT. DUST);5MG/CU.M.(RESPIRABLE FR
OSHA PEL/TWA: 15MG/CU.M.(TOT.DUST);5MG/CU.M.(RESPIRABLE FR
LD50, Oral: >5000 MG/KG (RAT)
LD50, Dermal: NOT AVAILABLE
LC50, Inhalation: NOT AVAILABLE

3

Included:

Irritation to nose and throat. Extended or repeated exposure to concentrations above the recommended exposure limits may cause brain or nervous system depression, with symptoms such as dizziness, headache or nausea and if continued indefinitely, loss of consciousness, liver

INHALATION:

and kidney damage.

PAGE

COOK COMPOSITES AND POLYMERS CO. MATERIAL SAFETY DATA SHEET

951GA337

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

INGESTION:

May cause mouth, throat, esophagus and stomach irritation, nausea, vomiting and diarrhea.

MEDICAL CONDITIONS THAT MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

Preexisting eye, skin, liver, kidney and respiratory disorders.

EMERGENCY AND FIRST AID PROCEDURES:

In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with scap and water. If affected by inhalation of vapors or spray mist, remove to fresh air. If swallowed, get medical attention immediately.

This material contains no intentionally-added ingredients, covered by the California "Safe Drinking Water and Toxic Enforcement Act of 1986" (Proposition 65), unless specifically stated under OTHER HEALTH HAZARDS, by individual chemical.

OTHER HEALTH HAZARDS:

The International Agency for Research on Cancer (IARC) has reclassified styrene as Group 28 "possibly carcinogenic to humans". This new classification is not based on new health data relating to either humans or animals, but on a change in the IARC classification system. The Styrene Information and Research Center does not agree with the reclassification and has published the following statement. "Recently published studies tracing 50,000 workers exposed to high occupational levels of styrene over a period of 45 years showed no association between styrene and cancer, no increase in cancer among styrene workers (as opposed to the average among all workers), and no increase in mortality related to styrene."

An increased incidence of lung tumors was observed in mice from a recent inhalation study. The relevance of this finding is uncertain. Data from other long-term animal studies and from epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic.

Lung effects have been observed in the mouse following repeated exposure.

Tafc, Hydrous Magnesium Silicate, contains crystalline silica at levels greater than 0.1% but less than 1.0%. "IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Supplement 7, 1987", concludes there is limited evidence for the carroinogenicity of crystalline silica to humans, Class 2A. This classification was based on exposure to free silica dust and should not be relevant to trace amounts of crystalline silica dispersed in paints and plastics.

SECTION VI REACTIVITY DATA

STABILITY: Stable HAZARDOUS POLYMERIZATION: May occur.

CONDITIONS TO AVOID:

Elevated temperatures. Improper addition of promoter and/or catalyst. Avoid direct contact of MEKP catalyst with accelerator. If an accelerator such as cobalt drier is to be added, mix this accelerator with base material before adding catalyst.

NCOMPATABILITY (MATERIALS TO AVOID):
Oxidizers, peroxides, strong acids, aluminum chloride and vinyl polymers

RECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Do not store above 100 deg. F. Store large quantities in buildings

PAGE

COOK COMPOSITES AND POLYMERS CO. MATERIAL SAFETY DATA SHEET

951GA337

or prior to the expiration of the shipment's quality life, whichever occurs first. THE WARRANTY DESCRIBED HEREIN SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF.

The Buyer's sole and exclusive remedy against Seller shall be for the replacement of the product or refund of the purchase price in the event that a defective condition of the product should be found to exist by Seller. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER.

The sole purpose of this exclusive remedy shall be to provide Buyer with replacement of the product or refund of the purchase price of the product if any defect in material or workmanship is found to exist. This exclusive remedy shall not be deemed to have failed its essential purpose so long as Seller is willing and able to replace the defective products or refund the purchase price.

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MATERIAL SAFETY DATA SHEET

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SECTION I - IDENTIFICATION

1198 846824

PRODUCT NAME: THERMACLEAN 095-0082 DESCRIPTION: WIPE BRIGHT PRODUCT CODE IDENTITY: 0950082KCB NFCA HMIS RATING: H2 F2 R0

COMPANY NAME: COCK COMPOSITES AND POLYMERS CO. ADDRESS: 919 E. 14th AVENUE NORTH KANSAS CITY, MO 54116

REVISION: 01 DATE OF MSDS: DATE PRINTED:

03-08-94

PREPARED BY:
HAZARD COMMUNICATION DEFT.

CUSTOMER NAME: GLS

1750 N KINGSBURY ST CHICAGO ... I - ... IL 60614 INFORMATION TELEPHONE:

COMPOSITES: 1-800-801-3550 POLYMERS: ----1-800-745-5541

TRANSPORTATION EMERGENCY TELEPHONE (CHEMTREC): 1-800-424-9300

We certify that our product(s) comply with all the provisions of the Toxic Substances Control Act (TSCA), unless otherwise specified. by raw material, in Section II. **MOTE:

SECTION II HALARDOUS INGREDIENTS

N-PROPOMY PROFANOL

% BY WT: 30 - 40

CAS# 001569-01-3

VAPOR PRESSURE: 1.70 MMHG @ 68F

EMPOSURE LIMIT: ACGIH TEV/TWA: OSHA PEL/TWA:

NONE ESTABLISHED NONE ESTABLISHED

DIPROPILENE GLYCOL MONOMETHIL ETHER

02 % BY WT: 5 - 10

VAPOR PRESSURE:

CAS# 03+590-94-9

EXPOSURE LIMIT:
ACGIH TLV/TWA:
ACGIH TLV/STEL: OSHA PEL/TWA: OSHA PEL/CEILING:

100 PPM (506 MG/CU.M.) (SKIN) 150 PPM (903 MG/CU.M.) (SKIN) 100 PPM (600 MG/CU.M.) (SKIN)

150 PPM (900 MG/CU.M.) (SKIN) 5.4 ML/KG (RAT) >20 ML/KG (RABBIT) NOT AVAILABLE LDSO. Oral: LDSO. Dermal:

LC50. Inhalation:

DIPROPYLENE GLYCOL MONOBUTYL ETHER

03 % BT WT: 1 - 5

CAS# 029911-28-2

VAPOR PRESSURE: .05 MMHG @ 68F

MFOSURE LIMIT:

ACGIH TLV/TWA: NONE ESTABLISHED CSHA PEL/TWA: NONE ESTABLISHED

Action to the production of the

0950082KCB Page 2

SECTION III PHYSICAL DATA

Boiling Range: High-N/A

Low-212.0

Vapor Pressure: See Section II

Vapor Density: Heavier Than Air

Evaporation Rate: Slower than Ether

Theoretical Weight per Gallon, Calculated: 7.88

Theoretical Specific Gravity, Calculated:

Maximum Theoretical VOC, Calculated: 6.990 lb/gal 74 ? -- If applicable , see Section IX for further VOC information--

paragraphic and the con-

Physical State: LIQUID

Appearance: CLEAR

Odor: MILD ALCOHOL

Odon Threshold: N/A

pH: M/A

Freezing Point: N/A

Water Solubility: SOLUBLE

Coefficient of Water/Oil Distribution: M/A

Mechanical Impact Explosion: N/A

Static Electricity Explosion: N/A

SECTION IV FIRE AND EMPLOSION HAZARD DATA

OSHA Flammability Classification: Class IIIA

DOT Flammability Classification: Combustible Liquid

Minimum Observed Closed Cup Flashpoint: 143.0 degrees F

Lower Flammable Limit in Air: Lower-% by volume

Shipping Name:
COMBUSTIBLE LIGUID, N.O.S., NA1993, PG III
CHEMICALS, N.O.I.
COMBUSTIBLE LIGUID, N.O.S., NA1993, PG III = Bulk / Land, Air, Sea = Non-Bulk / Land = Non-Bulk / Air, Sea (Contains a-Propoxypropanol, Dipropylene Glycol Monoethyl Ether)

EKTINGUISHING MEDIA:

Foam, carbon dioxide, dry chemical, water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Keep containers tightly closed and isolate from heat, electrical equipment, sparks and flame. Never use welding or cutting torch on or near Mever use welding or cutting torch on or near :

COOK COMPOSITES AND FOLIMERS CO. MATERIAL SAFETY DATA SHEET 0350032KC3 Page 3 drum (even empty) because product (even just residue) can ignite emplosively. If applied in confined areas and tanks, use only explosion-proof and properly grounded equipment, spark-proof tools and spark-proof shoes. SPECIAL FIRE FIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, for nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto-ignition or explosion when exposed to extreme heat. **ABDITIONAL TRANSPORTATION INFORMATION: NMFC: 48580/SUB 3 CLEANING COMPOUNDS, LIQUID, NOI LTL CLASS 55 SECTION V HEALTH HAZARD DATA EFFECTS OF ENCESSIVE OVEREMPOSURE. PRIMARY ROUTES OF ENTRY ARE: EUE CONTACT: Symptoms are tearing, redness and discomfort. Irritation. SKIN COMTACT: Can cause defatting of skin which may lead to dermatitie. Irritation. Irritation to nose and throat. Inhalation overexposure may cause irritation of the upper respiratory system. INGESTION: May cause mouth, throat, esophagus and stomach irritation, nausea, vemiting and diarrhea. MEDICAL CONDITIONS THAT MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.
Some presulating eye diseases may be aggravated by oversuposure to this material. EMERGENCY AND FIRST AID PROCEDURES:

In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water. If affected by inhalation of vapors or spray mist, remove to fresh air. If swallowed, get medical attention immediately. This material contains no intentionally-added ingredients, covered by th California "Safe Drinking Water and Toxic Enforcement Act of 1986" (Proposition 65), unless specifically stated under CTHER HEALTH HAZARDS, covered by the by individual chemical.

SECTION VI REACTIVITY DATA

STABILITY: Stable HAZARDOUS POLYMERIZATION: None under normal conditions.

ONDITIONS TO AVOID: Elevated temperatures.

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong acids and strong oxidizing agents. If this product is not water raducible, avoid water.

VENTILATION:

PROTECTIVE GLOVES:

Use solvent impermeable gloves to avoid contact with product.

EYE PROTECTION:

Do not get in eyes. Use safety eyewear with splash guards or side shields, chemical goggles, face shields.

OTHER PROTECTIVE EQUIPMENT:
Avoid contact with skin. Use protective clothing. Prevent contact with contaminated clothing. Wash contaminated clothing, including shoes, before rause.

SECTION IN SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Do not store above 100 deg. F. Store large quantities in buildings designed to comply with OSHA 1910.106. Keep away from heat. sparks and flame. Keep containers closed when not in use and upright to prevent Do not transfer contents to unlabeled bottles or other

COOK COMPOSITES AND POLYMERS CO. MATERIAL SAFETY DATA SHEET

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containers.

Do not take internally. Wash hands after using and before smoking or eating. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks and flames. Do not cut, puncture or weld on or near emptied containers. Follow all hazard precautions given in this data sheet until container is thoroughly cleaned or destroyed. If this product is blended with other components such as thinners, converter, colorants and catalysts prior to use, read all warning labels. Any mixture of components will have hazards of all components. Follow all precautions. If spraying this material, keep spray booths clean. Avoid buildup of spray dust or overspray in booths or ducts.

KEEP OUT OF REACH OF CHILDREN

FOR INDUSTRIAL USE ONLY

SECTION X Sara Title III Information

This product contains no reportable quantities of toxic chemicals subject to the reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right-To-Know Act of 1985 and of 40 CFR Part 372.

This law requires certain manufacturers to report on annual emissions of specified toxic chemicals and chemical categories. If you are unsure if you must report or require more information, call the EPA Emergency Planning and Community Right-To-Know Hot Line: 800-535-0202 or 202-479-2449.

DISCLAIMER AND LIMITATION OF LIABILITY

To the best of our knowledge, the information contained herein is accurate. THE WARRANTY DESCRIBED HEREIN SHALL BE IN LIEU OF ANY IMPLIED WARRANTY OF EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO. ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The Buyer's sole and exclusive remedy against seller shall be for the replacement of the products or refund of the purchase price in the event that a defective condition of the products should be found to exist. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS. LOST SALE, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. The sole purpose of this exclusive remedy shall be to provide Buyer with replacement of the products or refund of the purchase price of the products if any defect in materials or workmanship is found to exist. This exclusive remedy shall not be deemed to have failed its essential purpose so long as seller is willing and able to replace the defective products or refund the purchase price. Buyer must give Saller notice in writing of any alleged defect covered by this warranty (together with all identifying details, including the Product Code(s), description and date of purchase) within thirty (30) days of the discovery of such defect. Final determination of the suitability of the material for the use contemplated, the manner of use and whether the suggested use infringes any patents is the sole responsibility of the Buyer.

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JANUARY 1995

SEA RAY BOATS FLORIDA CORP ATTN: KERRY MCKINNEY, PURCH. SECRETARY 100 SEA RAY DRIVE MERRITT ISLAND FL 32953



OUR VALUED CUSTOMER:

IN KEEPING WITH THE FEDERAL AND STATE 'RIGHT TO KNOW' LAWS WE ARE ENCLOSING AN MSDS FOR THE PRODUCTS LISTED BELOW. THE INFORMATION CONTAINED IN THE MSDS IS IMPORTANT TO YOU AND TO YOUR EMPLOYEES.

95027 DX. 095-0082

THE OSHA HAZARD COMMUNICATION STANDARD STATES THAT EMPLOYEES MUST BE TRAINED IN HOW TO USE AN MSDS AS A SOURCE FOR HAZARD INFORMATION. ALL RELEVANT SHEETS MUST BE READILY ACCESSIBLE TO EMPLOYEES DURING EACH WORKSHIFT WHEN THEY ARE IN THEIR WORK AREAS.

IF YOU HAVE ANY QUESTIONS CONCERNING THE INFORMATION CONTAINED IN THE MSDS, PLEASE CONTACT ME AS SOON AS POSSIBLE. WE THANK YOU FOR YOUR VALUED BUSINESS AND WE WANT TO HELP YOU IN EVERY WAY THAT WE CAN.

BILL RUDERSDORF SAFETY SPECIALIST HEALTH, SAFETY & ENVIRONMENT

008/088/60485

CORPORATE OFFICES

1750 N Kingsbury Street Chicago IL 60614-4891 312 664-3500 312 664-1301 Fax

C15-120

MATERIAL SAFETY DATA SHEET COATINGS AND RESINS GROUP

SECTION 1 - PRODUCT INFORMATION

MANUFACTURERS NAME: PRODUCT CODEADENTITY: PPG INCLISTRIES INC. DTL16 (020590D)

CUSTOMER PARTE/NAME: PRODUCT TRADE NAME: CHEMICAL FAMILY:

ALL PURPOSE THINNER BOLVENT BLEND

SHIPPING INFORMATION

US-DOT-SHIP.NAMEYIAZ CLABS: PAINT RELATED MATERIAL-FLAMMABLE

HOUR LIN MUMBER: UN1263

IM-PLANT HAZARD RATINGS

HEALTH

FLAMMABATY = PEACTIVITY =

D=MINIMAL 1=SUIGHT 2=MODERATE 3=SERIOUS 4=SEVERE "-CONTAINS INGREDIENTIS) WHICH MAY CAUSE (LONG-168MI HEALTH EFFECTS

PRODUCT SAFETY INFO:

4325 ROSANKA DR. P.O. BOX 6

ALLISON PARK, PA. 18101 (412) 492 4444

PGH. PAINTS INFO. OR MSDS: 1-000-441-0000 AUTO REFINISH INFO. OR MICOS:

1-800-945-8590, IN OH, (216) 671-0060

EMERGENCY MEDICAL INFO: EMERGENCY SPILL INFO: DATE OF MISOS PREPARATION:

(304) 843-1309 (304) 843-1300

MATERIAL BAFETY DATA BHEET HAR REEN PREPARED IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (28 OFR 1818.1200), THE SUPPLIER NOTIFICATION REQUIREMENTS OF SARA TITLE II, SECTION 313, AND OTHER APPLICABLE RIGHT-TO-KNOW REQUIATIONS. ABBREVATIONS AND OTHER DESIGNATIONS USED ON THIS MATERIAL SAFETY DATA SHEET INCLUDE THE

UNKNOWN INFORMATION; N/A - NOT APPLICABLE; NOT ESTAS. - NOT ESTABLISHED: CERT. LTR. - CHEMICAL O.K. ON TOCA INVENTORY; CAS NO. NOT AVAILABLE

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS [FORMULA VALUES, NOT SALES SPECIFICATIONS]

BOILING FANGE: 56 - 150 DEG. C VAPOR PRESSURE: 108.8mmHa VAPOR DENSITY: HEAVIER THAN AIR % VOLVOLLME: 100.0

SOLUBILITY IN WATER: 40.4% WT/GAL ABS): 6.67 (U.S.)

વવ.વ 10. THORSW YE GLOS &

EVAP RATE(BuDAs-100): 591 SPECIFIC GRAVITY: .80 COORVAPPEARANCE NON-VISCOUS LIQUID WITH AN ODDER CHARACTERISTIC OF THE SOLVENTS LISTED IN SECTION IL

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

US-DOT CATEGORY: EXTREMELY FLAMMABLE FLASHFONT: 11 DEG. F PMCC

PLANMABLE UMITS: LEL 1.4 LIEL UA

EXTINGUISHING MEDIA

USE NATIONAL FIRE PRINTECTION ASSOCIATION (NFPA) CLASS B EXTINGLISHERS (CARBON DIOXOE, DRY CHEMICAL, OR UNIVERSAL ACUEOUS FILM FORMING FOAM)

DESIGNED TO EXTINGUISH NEPA CLASS IS FLAMMABLE LIQUID FIRES.
UNUSUAL FIRE AND EXPLOSION HAZARDS:

KEEP CONTAINERS TOURTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL
ECOMPANY, SPARKS, AND OPEN FLAMES. CLOSED CONTAINERS MAY EXPLOSE
WHEN EXPOSED TO EXTREME HEAT. OO NOT APPLY ON HOT SURFACES. TOUC

CASES MAY FORM WHEN PRODUCT IS CONTACTED BY FLAME OR HOT SUMFACES.

SPECIAL FIRE FIGHTING PROCEDURES:
WATER SPRAY MAY BE INSEFECTIVE. WATER SPRAY MAY BE USED TO COOL
CLOSED CONTAINERS TO PREVENT PRESSURE SUILD-UP AND POSSIBLE
AUTOGRITTON OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS UNGO, FOO NOZZLES ARE PREFERABLE. FIRE-PIONTERS SHOULD WEAR SELF CONTAINED BREATHING APPARATUS.

SECTION V - REACTIVITY DATA

STABILITY: MTABLE HAZARDOLIG POLYMERIZATION: NOT EXPECTED TO OCCUR INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID):

AVOID CONTACT WITH STRONG ALVALUES, STRONG MINERAL ACIDS, OR STRONG HAZARDOUS DECOMPOSITION PRODUCTS:
WAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS WHEN HEATED.

SECTION VI - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
PROVIDE MAXIMUM VENTICATION. ONLY PERSONNEL EQUIPPED WITH PROPER
RESPIRATORY AND SIGN AND EYE PROTECTION SHOULD BE PERMITTED IN THE
AREA. REMOVE ALL BOURCES OF IGNITION. TAKE UP SPILLED MATERIAL WITH
SAWDUST, VERNICULITE, OR OTHER ASSOCIATION MATERIAL AND PLACE INTO CONTAINERS FOR DISPOSAL WASTE DISPOSAL METHODA

WASTE MATERIAL MUST BE DISPOSED OF IN ACCORDANCE WITH PEDERAL, STATE, PROVINCIAL, AND LOCAL ENVIRONMENTAL CONTROL REGULATIONS. EMPTY CONTAINERS SHOULD BE RECYCLED ON DISPOSED OF THROUGH AN APPROVED WASTE MANAGEMENT FACILITY.

조 407 636 3261

SECTION VII - HEALTH HAZARD DATA EFFECTS OF OVEREXPOSURE FROM:

848242

INGESTION: HARMFUL OR FATAL IF SWALLOWED.

EYE CONTACT; -CAUSES SEVERE EYE IRRITATION.

BKIN CONTACT: -MAY CAUGE MODERATE BKIN IRRITATION. -MAY BE ABSORBED THROUGH THE SKINL

"VAPOR AND BPRAY MIST MAY BE NAMIFUL IF INHALED, -VAPOR IRRITATES EYES, NOSC, AND THROAT, -REPEATED EUPOBURE TO HIGH VAPOR CONCENTRATIONS MAY CAUSE IRRITATION OF THE RESPRATORY SYSTEM AND PERMANENT BRAIN AND NERVOUS SYSTEM CAMALL-INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INNALING THE CONTENTS CAN BE HARMFUL OR FATAL. CHRONIC OVEREXPOSURE: AVOID LONG TERM AND REPEATED CONTACT.

SIGHS AND SYMPTOMS OF OVEREXPOSURE:
-EYE WATERING, HEADACHER, MAINEA, DIZZNESE, AND LOSE OF COORDINATION ARE
-EYE WATERING, HEADACHER, MAINEA, DIZZNESE, AND LOSE OF COORDINATION ARE
-EYE WATERING, HEADACHER, AND THE HEADACHER, TICHING, SEMISTION
AND VISUAL DISTURBANCES MAY INDICATE DISCESSIVE EYE CONTACT. OPHYRES, TICHING, CRACKING, BURNING, MEDNESS, AND SWELLING ARE CONDITIONS ASSOCIATED WITH EXCESSIVE SKIN CONTACT.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

SECTION VIII - FIRST AID PROCEDURES

INGESTION IF SWALLOWED, DO NOT INDUCE VOMITING.

EYE CONTACT! IN CLASS OF EYE CONTACT, FLUSH EYES SAMEDIATELY WITH PLENTY OF WATER FOR AT

BKIN CONTACT:
W CASE OF SKIN CONTACT, FLUGH IMMEDIATELY WITH PLENTY OF WATER 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 SUPPORTIVE MEASURES AS REQUIRED. OTHER

DTHER THE POLLOWING OCCUR DURING OR POLLOWING USE OF THIS PRODUCT, CONTACT A POISON CONTROL CENTER EMERGENCY ROOM OR PHYSICIAN IMMEDIATELY; HAVE MATERIAL BAFETY DATA BHEET INFORMATION AVAILABLE. "INGESTION "EXCESSIVE EXPOSIGNE TO A CORPOSIVE MATERIAL." PERSISTENT SKINNEYE IMPRITATION OR SPEATHING OFFICIAL DES.

SECTION IX - PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT FOR:

EVE PROTECTION:
WEAR CHEMICAL TYPE SPLACH GOOGLES OR FULL FACE SHIELD.

WEAR PROTECTIVE CLOTHING, INCLUDING IMPERMEABLE APROH AND GLOVES CONSTRUCTED OF: NITRILE RUSSIER, NEOFTENE RUSSER OR POLYVINYL ALCOHOL

MESPIRATORY PROTECTION:

OVERESCOURE TO VAPORE MAY SE PREVENTED BY ENSURING VENTILATION CONTINUES, VAPOR EDUCATOR OF PRESH ARE ENTRY, INDEPUNSING APPROVED (TC-33C) PAINT SPRAY OR ARE SUPPLIED (TC-19C) PESPIRATORS MAY ALSO REQUEE EXPOSURE, READ RESINTATOR 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 OR DISCARD CONTAMINATED CLOTHING AND BHOES.

VENTILATION REQUIREMENTS:
PROVIDE GENERAL DILUTION OR LOCAL EXHAUST VENTILATION IN VOLUME AND PATTERN TO KEEP THE CONCENTRATION OF INGREDIENTS IN SECTION II BELOW THE LOWEST SUGGESTED EXPOSURE LIMIT, AND LEL IN SECTION IN SELOW STATED LIMIT.

SECTION X - SPECIAL PRECAUTIONS

MANDLING AND STORAGE PRECAUTIONS:
TOO NOT STORE ABOVE 120 DEGREES F. STORE LARGE QUANTITIES IN BUILDINGS OCSIGNED AND PROTECTED FOR STORAGE OF NEPA CLASS IS FLAMINABLE LIQUIDS.

OTHER PRECAUTIONS:

"IF THIS MATERIAL IS PART OF A MALTIPLE COMPONENT COATING SYSTEM, READ THE MATERIAL BAFETY DATA SHEETES FOR THE OTHER COMPONENT OR COMPONENTS BEFORE BLENDING AS THE RESULTING MICTURE MAY HAVE THE HAZARDS OF ALL OF ITS PARTIES. CONTAINERS SHOULD BE GROUNDED WHEN POURING. AVOID FREE FALL OF LIQUIDS IN EXCESS OF A FEW MICHES.

900TL19/0///127

CONTINUATION OF MANUFACTURER'S CODE: OTL16

DATE OF PREP: 7/27/90

PAGE 2

SECTION II - INGREDIENTS AND REGULATORY INFORMATION

			\$4	RA TIT	LE 111	& CER	CLA CLA	\$\$!F	I CA	TIQ	NS.	
INGREDIENTS	CAS NUMBER	% WEIGHT	HS	EHS	TC+	黄白	TPQ (LBS)	\$4	ARA	31	1/3	
ACETONE ISOPROPYL ALCOHOL, ANHYDROUS PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE TOLUENE LIGHT ALIPHATIC SOLVENT NAPHTHA	67-64-1 67-63-0 108-65-6 108-88-3 64742-89-8	25-30 / 5-10 / 5-10 / 20-25 / 15-20 /	Y N H Y	N N N N	Y W W	5000 H/A H/A 1000 H/A	, И/А И/А И/А И/А	Y Y Y Y	N N N	-	N N	
XALENE	1330-20-7	15-20 🗸	Y	N	Y	1000	N/A	¥	N	Y	¥	M

*** OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THE FOLLOWING MATERIALS ***

	INGREDIENTS .	TLV-TWA	TLV-STEL	PEL-THA	PEL-STEL		PEL
CETOME PROPYL CYLENE	ALCOHOL, ANHYDROUS	750 pps 400 pps 100 pps 100 pps	1,000ppm 500 ppm 150 ppm 150 ppm	1,000ppm 400 ppm 200 ppm 100 ppm	HOT ESTAB HOT ESTAB 300 ppm HOT ESTAB	750° ppm 400 ppm 100 ppm 100 ppm	1,000ppm 500 ppm 150 ppm 150 ppm

*** SARA 311/312 CATEGORIES FOR THIS PRODUCT ***
ACUTE=Y CHRONIC=N FLAM=Y PRESS=N REAC=N

PRODUCT STATUS RELATIVE TO THE US EPA TOXIC SUBSTANCES CONTROL ACT
ALL CHEMICAL SUBSTANCES IN THIS PRODUCT COMPLY WITH ALL APPLICABLE
RULES OR ORDERS UNDER THE ENVIRONMENTAL PROTECTION AGENCY'S TOXIC
SUBSTANCES CONTROL ACT.

FOOTNOTES FOR SECTION II ***
LD50 ORAL (RAT), (g/kg) DERM= LD50 DERMAL (RABBIT), (g/kg) INHL= LC50 INHALATION (RAT), (Mg/L)
REDIENTS IN THE TC COLUMN ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE 111. SEE 40 CFR PART 372.

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OLE SARGE PAINT & EQUIPMENT CO.INC.

SPECIALIZING IN AUTOMOTIVE PAINTS

809 N. COCOA BLVD. COCOA, FL 32922 (407) 636-2634 FAX:(407) 636-3261

TOTAL # OF PAGES INCL, COVER SHEET (3)

	SENT TO: COMPANY NAME SER PRO O	
	DAVID CLEVENGER	
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P.P.C. Thinner



121 TECH DRIVE SANFORD, FL 32771 Tel:(407) 322-4000/Fax:(407) 321-9700

MATERIAL SAFETY DATA SHEET 10-30 -Identity (As Used on Label and List) 01# 863142 102. Instantbond 121 SECTION I Manufacturer's Name Emergency Telephone Number HERNON MANUPACTURING, INC. (407)322-4000 Address (Number, Street, City, State and Zip) Telephone Number for Information 121 Tech Drive (407)322-4000 Sanford, PL, 32771 Date Prepared Feb. 1992 Signature of Preparer SECTION II - Hazardous Ingredients/Identity Information Hazardous Components (Specific Chemical Identity: Common Name) OSHA PEL ACGIH_TLV Other Limits % Optional Ethyl Cyanoacrylate N/A_ 2DDm N/A. 90+% Poly (Methyl methacrylate)* (10% **Hydroquinone** (0.5% *PURE POLY (METHYL METHACRYLATE) HAS BEEN SHOWN TO CAUSE TUMORS IN EXPERIMENTAL ANIMALS WHEN IMPLANTED BENEATH THE SKIN. IN LIGHT OF THE LOW CONCENTRATION OF THIS COMPONENT IN THE PRODUCT. IT IS OUR BEST TECHNICAL JUDGEMENT THAT NORMAL USB OF THIS PRODUCT POSES NO SUCH HAZARD. WARNINGS PRESENT TO COMPLY WITH OSHA REGULATIONS. SECTION III - Physical/Chemical Characteristics **Boiling Point** Specific Gravity (H20=1) 140°P at 3mmHg 1.050 Vapor Pressure (mm Hg.) **Melting Point** 0.3 at 68°P N/A__ Vapor Density (AIR = 1) Evaporation Rate VOC 8690 (Butyl Acetate = 1) Solubility in Water Polymerized by Water Appearance and Odor Transparent liquid - irritating odor, SECTION IV - Fire and Explosion Hazard Data Flash Point (Method Used) Flammable Limits UEL. 170°F (Seta flash closed cup) N/A Extinguishing Media CO2. Foam. Dry chemical Special Fire Fighting Procedures Pire fighters should be equipped with self contained breathing apparatus to protect against potentially toxic fume Unusual Fire and Explosion Procedures None SECTION V - Reactivity Data Stability Unstable Conditions to Avoid Stable Incompatibility (Materials to Avoid) Water, alkaline materials, peroxides Hazardous Decomposition or Byproducts Decompose upon heating to release toxic fume of nitrogen oxide . carbon monoxide Hazardous May Occur Conditions to Avoid: Contamination of the adhesive with alkaline materials. <u>Polymerization</u> peroxides, water can result in rapid polymerization. May Not Occur

Route(s) of Entry:			
	Inhalation?	Skin?	Ingestion?
Health Hazards (Acute and			X
Eve: Will bond evelids to	ogether Skin; on contact there	is immediate bonding of skin Inhal	ation: vapor may be
irritating to respiratory	tract	· .	
Carcinogenicity:	NTP? —	IARC Honographs?	OSHA Regulated
	N/A,	N/A	N/A
Circo and Co. A. C.			· · · · · · · · · · · · · · · · · · ·
Signs and Symptoms of Expo			
		epeated over exposure to vapor may	produce allergic
reaction in sensitive indi	lly Aggravated by Exposure		
None known	xiy wagawated by Exposure		
Emergency and First Aid Pr	rocedures		
= :		ds open. Get medical, attention in	mmediately. Cured
adhesive will not bond wel	ll to surface of eye, but corneal	damage from abrasion may result.	Do not wear contact
lenses when working with t	this material. SKIN: No attempt	should be made to remove material	from skin or to remove
contaminated clothing, as	the bonded skin can be easily to	rn. Wash with large volumes of sos	ap and water while
flexing bonded skin parts.	This procedure will slowly rel	ease bonded areas. DO NOT mechanic	cally remove cured
adhesive or attempt to bul	l skin apart. INHALATION: Remo	ve to fresh air. If breathing is d	lifficult, give oxygen.
If breathing has stopped.	give artificial respiration. Ge	t medical attention. INCESTION:	Immediate bonding of
mouth will occur. Get med			
SECTION VII - Precautions	for Safe Handling Use		
	for Safe Handling Use Material is Released or Spilled		
Steps to be Taken in Case		rbent material	
Steps to be Taken in Case	Material is Released or Spilled	rbent material	
Steps to be Taken in Case	Material is Released or Spilled	rbent material	
Steps to be Taken in Case Flood with water to polyme	Material is Released or Spilled rize, soak up with an inert adso		
Steps to be Taken in Case Flood with water to polyme	Material is Released or Spilled rize, soak up with an inert adso	rbent material accordance with EPA and local regul	ations.
Steps to be Taken in Case Flood with water to polyme Waste Disposal Method: Pol	Material is Released or Spilled rize. soak up with an inert adso	accordance with EPA and local regul	
Steps to be Taken in Case Flood with water to polyme Waste Disposal Method: Pol Precautions to Be Taken in	Material is Released or Spilled rize, soak up with an inert adso ymerize as above, incinerate in the Handling and Storing: Store belo		
Steps to be Taken in Case Flood with water to polyme Waste Disposal Method: Pol Precautions to Be Taken in and skin: avoid breathing	Material is Released or Spilled rize, soak up with an inert adso ymerize as above, incinerate in the Handling and Storing: Store belo	accordance with EPA and local regul	
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Steps to be Taken in Case Flood with water to polyme Waste Disposal Method: Pol Precautions to Be Taken in and skin: avoid breathing of Other Precautions: N/A SECTION VIII - Control Mean Respiratory Protection (Spe Positive down draft exhaust	Material is Released or Spilled rize, soak up with an inert adsoverize as above, incinerate in the Handling and Storing: Store beloof vapors sures ecify Type) t ventilation should be provided	accordance with EPA and local regulow 75°F to maximize shelf life. Ay	oid contact with eve
Steps to be Taken in Case Flood with water to polyme Waste Disposal Method: Pol Precautions to Be Taken in and skin: avoid breathing of Other Precautions: N/A SECTION VIII - Control Mean Respiratory Protection (Spe Positive down draft exhaust Ventilation: Local	Material is Released or Spilled rize, soak up with an inert adso rize, so r	accordance with EPA and local regulow 75°F to maximize shelf life. Av	oid contact with eve
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Plood with water to polyme Waste Disposal Method: Pol Precautions to Be Taken in and skin: avoid breathing of Other Precautions: N/A SECTION VIII - Control Mean Respiratory Protection (Spe Positive down draft exhaust Ventilation: Local Mechan: Protective Cloves	Material is Released or Spilled rize, soak up with an inert adsorize, soak up with an inert adsorize, soak up with an inert adsorize as above, incinerate in the Handling and Storing: Store beloof vapors Sures ecify Type) t ventilation should be provided Exhaust Yes ical (General)	to maintain vapor concentration be Special Other Eye Protection Safety glasses are recommended	oid contact with eye
Steps to be Taken in Case Flood with water to polyme Waste Disposal Method: Pol Precautions to Be Taken in and skin: avoid breathing of Other Precautions: N/A SECTION VIII - Control Mean Respiratory Protection (Spe Positive down draft exhaust Ventilation: Local Mechan: Protective Gloves Polyethylene gloves recommend	Material is Released or Spilled rize, soak up with an inert adsorize, soak up with an inert adsorize in a specific as above, incinerate in a specific and Storing: Store belong the storing store belong to should be provided exhaust as a specific and specific an	to maintain vapor concentration be Special Other Eye Protection	oid contact with eye
Steps to be Taken in Case Flood with water to polyme Waste Disposal Method: Polyme Precautions to Be Taken in and skin: avoid breathing of the Precautions: N/A SECTION VIII - Control Mean Respiratory Protection (Special Mechanics) Ventilation: Local Mechanics Protective Gloves Polyethylene sloves recommendation of the Protective Clothing of the Protective Clothin	Material is Released or Spilled rize, soak up with an inert adsorize, soak up with an inert adsorize in a special clot rize, so a	accordance with EPA and local regul Dw 75°F to maximize shelf life. Av to maintain vapor concentration be Special Other Eye Protection Safety glasses are recommender	oid contact with eye

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121 TECH DRIVE SANFORD, FL 32771 Tel:(407) 322-4000/Fax:(407) 321-9700

MATERIAL SAFETY DATA SHEET

Page 1 of 4

I.PRODUCT IDENTIFICATION

Product Name: Product Type: EF Series Primer 48

Activator

II.COMPOSITION

Ingredients:

Isopropyl Alcohol N,N-Dialkyltoluidine 96 - 991-3

Hydroquinone

0.01 - 0.1

III. CHEMICAL AND PHYSICAL PROPERTIES

Vapor Pressure:

33 mm at 70 F

Vapor Density:

2.1 95-100%

Solubility in Water: Specific Gravity:

0.79 180 F

Boiling point: Volatile Organic Com-

99.9%; 789 grams/liter

pound (EPA Method 24)

1

Evaporation Rate:

(Ether = 1)

Appearance:

Does not apply Clear liquid

Odor:

pH:

Alcoholic

IV. FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash point:

53 F

Method: TCC

Estimated NFPA Code:

2

Health Hazard:

Fire Hazard: Reactivity Hazard: 3

Does not apply

Specific Hazard:

Estimated HMIS Code:

Health Hazard:

Flammability Hazard:

3

Reactivity Hazard:

Personal Protection:

See Section X

Explosive Limits:

LEL:

2.0% Isopropyl alcohol

1.2% Dialkyl toluidine

UEL:

12.7% isopropyl alcohol at 200 F

Recommended

Extinguishing Agents:

7% Dialkyltoluidine

Carbon dioxide, foam, dry chemical

Hazardous Products Formed

by Fire/Thermal Decomp

Oxides of Carbon

Unusual Fire or

Explosion Hazards:

Distant ignition sources may ignite vapors

1.04

Manufacturer Of High Performance ADHESIVE SEALANTS

Page 2 of 4 #48-

traveling with moving air currents. Compressed Gases:

None

Pressure at Room Temp. Does not apply

OR LEAK AND DISPOSAL PROCEDURES

Steps to be taken in case

of spill or leak:

Remove sources of ignition. Allow to evaporate with good ventilation.

Recommended methods of disposal:

Incinerate following EPA and local regulations.

VI. STORAGE AND HANDLING PROCEDURES

Storage:

Store below 110 F away from sources of ignition.

Handling:

Avoid prolonged breathing of vapor. Keep away from eyes. Avoid prolonged skin contact.

VII. SHIPPING REGULATIONS

DOT (49 CFR 172)

Proper shipping Name

Ground: Consumer Commodity (Not more than one quart); Isopropanol solution (more than one quart)

Air: Consumer Commodity (Not more than one quart) Isopropanol Solution (more than one quart)

Hazard Class or Division

Ground: ORM-D (Not more than 1 quart)

Flammable liquid (more than 1

quart)

Air: ORM-D-Air (not more than 1 quart) Flammable liquid (more than 1 quart)

Identification Number

None (not more than, 1, quart,) UN 1219 (More than 1 quart)

IATA

Proper Shipping Name Class or Division UN or ID number

Class 3, Packing Group II UN 1219

Isopropanol solution

IMO

Substance

Marine Pollutant

Status Class -

Subsidiary Risk Label

IMDG Code Page

UN Number

Not available

Not available Not available

Not available

Not available

Not available

VIII. REACTIVITY DATA

Stability:

Stable

Hazardous

Polymerization:

Will not occur

Hazardous Decomposition

Products (non-thermal)

Incompatibility:

None

Strong oxidizing agents, aluminum, nitric

acid, sulfuric acid, amines, ammonia, halogen acids and chlorides, aldehydes

IX. EMERGENCY TREATMENT PROCEDURES

Ingestion:

Do not induce vomiting. Keep individual calm.

Obtain medical

attention.

Inhalation:

Remove to fresh air. If symptoms

persist, obtain medical attention.

Wash with soap and water. Skin contact:

Eye contact: 1

Flush at least 15 minutes with water. Obtain

medical attention.

X. PERSONAL PROTECTION

Eyes:.

Skin:

Safety glasses or goggles. Rubber or plastic gloves:

Ventilation:

Provide adequate local ventilation

to maintain vapor concentration below TLV

XI. HEALTH HAZARD DATA

Toxicity:

Eye and skin irritant. Also see

"Effects of overexposure."

Primary Routes of Entry:

Inhalation, ingestion, skin and eye

Signs and Symptoms

of Exposure:

Headache, nausea, dizziness, vomiting,

drowsiness, irritation of

respiratory tract, loss of consciousness, pulmonary edema, temporary corneal damage, gastrointestinal irritation, central nervous

system depression.

Existing conditions

Isopropyl alcohol: Aggravated by exposure:

Skin disorders, eye problems, respiratory

disorder

Exposure Limits (TWA)

Ingredients

ACGIH (TLV)

OSHA

(PEL)

400 ppm TWA

Isopropyl Alcohol

400 ppm TWA

OTHER

983 mg/m3

980 mg/m3

None

Hydroquinone

2 mg/m3 TWA

2 mg/m3 TWA

2 mg/m3 TWA 4 mg/m3 STEL

Exposure Limits (Stel) Ingredients

Page 4 of 4 #48

. Carcinogen

Isopropyl Alcohol

500 ppm 500 ppm 1230 mg/m3 1225 mg/m3

2 Literature Referenced - Target Organ and other Health Effects

Ingredients

Isopropyl Alcohol N,N Dialkyltoulidine Hydroquinone.

GAS IRR NER REP No Data No Data

NTP IARC OSHA No N/A No No No No 5 No N/A No

XII. PREPARATION INFORMATION

Company:

HERNON MANUFACTURING, INC.

121 Tech Drive

Sanford, FL 32771

Prepared by: Josef Arnon

Title:

Phone:

Revision:

Technical Director

407-322-4000

March (1993

868885

MAY 92.794 01:50PM KOPCOAT MARINE GROUP OUTSIDE U.S.A. : 412-22757708

DATA KOP-COAT, INC. PRODUCT INFORMATION: 800-221-4466(EAST)

SHEET

: 800-932-2239(WEST)

PETTIT PAINT 36 PINE STREET ROCKAWAY, NJ 07866

CHEMTREC ASSISTANCE 800-424-9300

CANUTEC: 613-996-6666

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: 1255 Aqua-Clean Waterbased Antifouling Paint Blue

COMMODITY NUMBER:

H - 1

SYNONY:

F - Z

PRODUCT USE: Paint/Coating

CHEMICAL FAMILY: Waterbased Antifoulant

FORMULA: Mixture

CAS NUMBER: None

DOT INFORMATION

APPLICABLE REGULATION: 49 CFR 171 - 179

U.S. POSTAL REGULATIONS : Not Shippable

DOT PROPER SHIPPING NAME: Paint

'. DOT HAZARD CLASS: Combustible liquid

LABEL: Combustible liquid

UN/NA NUMBER: UN 1263

LIMITED QUANTITY: Yes

SECTION II - HEALTH/SAFETY ALERT

CAUTION

COMBUSTIBLE LIQUID AND VAPOR HARMFUL IF INHALED OR SWALLOWED ---

KAY CAUSE IRRITATION TO SKIN AND EYES

MAY CAUSE ALLERGIC SKIN REACTION

Avoid prolonged or repeated breathing of vapor

USE WITH ADEQUATE VENTILATION

AVOID PROLONGED AND/OR REPEATED CONTACT

OBSERVE GOOD HIGIENE AND SAFETY PRACTICES WHEN HANDLING THIS PRODUCT DO NOT USE THIS PRODUCT UNTIL MADE HAS BEEN READ AND UNDERSTOOD

. SECTION III - HEALTH RAZARD INFORMATION

Direct confact with liquid or vapor may cause irritation

characterized by redness, cracking, blistering, irritation and dermatitis.

INHALATION: Inhalation of high concentrations of vapors may dause respiratory tract irritation and central nervous system depression characterized by headache, weakness, dizziness, incoordination and possible collapse. Prolonged and/or repeated inhalation of high concentrations of metal fumes may cause metal fume fever characterized by headache, dizziness, metallic taste in mouth and general flu-like symptoms.

INGESTION: May cause gastrointestinal disturbances such as nausea, vomiting, diarrhea and effects similar to those described under INHALATION. Aspiration of this product into the lung may cause chemical pneumonitis which can be fatal.

OTHER: See SECTION XII - COMMENTS for additional information on health effects.

REVISION DATE: 10/93

SPECIFICATION SHEET NUMBER:

COMMODITY NUMBER:

CODE NUMBER:

REPLACES SHEET: NA

SUPPLIER INFORMATION: Same as manufacturer.

SECTION IV - EMERGENCY AND FIRST AID PROCESURES

EYE CONTACT: Immediately flush with large amounts of water for 15 minutes. Seek medical aid.

SKIN CONTACT: Wash thoroughly with soap and water. If redness, itching, burning or other symptoms develop or persist, seek medical aid. Wash contaminated clothing before reuse.

INHALATION: Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as indicated. Seek medical aid.

INGESTION: Do not induce vomiting. Give 1 glass of milk or 1 to 2 oz (30 to 60g) of activated charcoal in water to victim as tolerated. Seek medical aid. DO NOT ATTEMPT TO GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTE TO PHYSICIAN: There is no specific antidote for effects from overexposure to this material. Treatment should be directed at the control of symptoms and the clinical condition.

SECTION V - FIRE AND EXPLOSION HAZARD INFORMATION

FLASH PT. & METHOD: 140F/60C

AUTOIGNITION TEMP: No information found

FLAMMABLE LIMITS (% BY VOLUME/AIR):

LCWER: No information found UPPER: No information found

EXTINGUISHING MEDIA: Use carpon dioxide, dry chemical or foam. Water may be ineffective. Use carbon dioxide, dry chemical, water spray, alcohol or universal type foams as per manufacturer's recommendations.

FIRE-FIGHTING PROCEDURES: Wear complete fire service protective equipment, including full-face MSHA/NIOSH approved self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect personnel.

FIRE AND EXPLOSION HAZARDS: Heat/fire conditions: vapors form flammable/explosive mixtures in air. Vapors heavy, may travel(ground, pit, sewer) to ignition source-flash. Open/closed containers may contain flammable/explosive vapors. Closed containers may explode when exposed to extreme heat(fire). Under fire conditions, may emit irritant/toxic gas and/or fumes.

SENSITIVITY TO MECHANICAL IMPACT: No information found

SENSITIVITY TO STATIC DISCHARGE: No information found

SECTION VI - SPILL, LEAK AND DISPOSAL INFORMATION

SFILL OR LEAK PROCEDURES (PRODUCT): Stop spill/leak if no risk involved. Avoid breathing vapors. Eliminate ALL sources of ignition. Ventilate area. Avoid contact with hot liquid and fumes. Take up carefully to avoid heat and sparks. Use an inert absorbent to complete a clean-up. This material reacts with oxidizing materials. This product released into the environment must be reported to the National Response Center (1-800-424-8802). When this product is spilled or leaked, the reportable quantity is 100 lbs. or more.

WASTE DISPOSAL: This product is a US EPA defined ignitable hazardous waste. Dispose of as an ignitable hazardous waste in accordance with local, state and federal regulations.

SECTION VII - RECOMMENDED EMPOSURE LIMIT/HAZARDOUS INGREDIENTS

EXPOSURE LIMIT (PRODUCT):

(+) NIOSH Occupational Carcinogen

**total dust

HAZAREOUS INGREDIENTS	CAS XUXSER	* 38 F	VI. EMPOSURE :	TIKIL	(PPH; MG/M3)
Ethylene Glycol (vapor & mist)	107-21-1	1-5	1	***	1770
Tenfacile differ (vapor a misc)	101-51-1	7-2	ACGIH-TLV. OSHA-CZILIN	\$0C 3 50	127C 125
Titanium Dioxide(+)	13463-67-7	1-5	ACGIH-TLV	•	10==
Ethylene Glycol Monobutyl Ether		• ,	OSHA-TVA	-	10**
(skin)	111-76-2	1-5	ACGIH-TLV	25	121
	44- 74-2		OSHA-TWA	25	120
Cannon	7440 770 0		ntosh	25	120
Copper (as Cu duscs & mists)	7440-50-8	SS-60			_
(as cu dusts a mists)			ACGIH-TLV	-	Ţ
			osha-Twa	-	1
		a.	hiosh	-	1
(as Cu fume) .			ACGIH-TLV	-	0.2
t in the state of		,	osha-twa	, 	0.1 .
			HZOIK	-	0.1

(SEE SECTION VII FOR CAS NUMBERS AND PERCENTAGES)

Ethylene Glycol

SECTION VIII - PERSONAL PROTECTION INFORMATION

EYE PROTECTION: Industrial safety glasses, minimum. When needed for 29 CFR 1910.133 (work area conditions), use side shields, goggles and/or faceshield. Chemical goggles; face shield (if splashing is possible).

SKIN PROTECTION: As required, industrial resistant flexible-type gloves (heavy duty neoprene or equal - see Section XII).

Wear industrial-type work clothing and safety footwear.

Depending on working conditions, i.e., contact potential, wear resistant protective garments such as head/neck cover, aprons, jackets, pants, coveralls, boots, etc.

RESPIRATORY PROTECTION: If ventilation does not maintain inhalation exposures below PEL(TLV), use MSHA/NIOSH approved units as per current 29 CFR 1910.134, Instructions/Warnings and NIOSH-Respirator Decision Logic-Pub.#87.108.If within OSHA protection factor, air purifying OV/filter units OK.

VENTILATION: Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits and areas below flammable vapor concentrations. Local exhaust is necessary for use in enclosed or confined spaces. See OSHA requirements/NIOSH publication 87-113 "...Confined Spaces".

SECTION IX - PERSONAL HANDLING INSTRUCTIONS

HANDLING: Avoid prolonged or repeated concact with skin or eyes. Avoid prolonged or repeated breathing of vapors, mists or fumes. Handle and use in

accordance with OSHA 29CFR1910.106/local codes. Spray paint in accordance with OSHA 29 CFR 1910.107. Observe good personal hygiene practices and recommended procedures.

STORAGE: Store in areas/buildings designed to comply with OSHA 1910.106. Reep in a closed, labeled container within a cool (well shaded), dry, ventilaced area. Protect from physical damage. Keep containers closed when material is not in use. Kaintain good housekeeping.

OTHER: Ground and bond drums. Do not use pressure to empty drums. Do not wear contaminated clothing. Discard contaminated footwear. Keep away from heat and open flame. See SECTION XII (COMMENTS) for additional information. Do not use without fully understanding Section X - "Reactivity Data".

CONDITIONS CONTRIBUTING TO INSTABILITY: None

INCOMPATABILITY: Avoid oxidizing agents, heat, sparks and open flames

HAZARDOUS REACTIONS/DECOMPOSITION/COMBUSTION PRODUCTS: Cardon monoxide, cardon dioxide upon thermal decomposition

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: None

SECTION XI - PHYSICAL DATA

BOILING POINT: No information found

SPEC. GRAV. OR WT/GAL/:19.9 Abs/gal

MELTING POINT: Not applicable

* VOLATILE BY VOL: No information found

. . . .

VAPOR PRESSURE: No information found

EVAPORATION RATE(ETHER=1): No information found

VAPOR DENSITY(AIR=1): 1 2 .

VISCOSITY: No information found

SOLUBILITY

(WATER): negligible

pH: Not applicable

VOC: No information found

COEFFICIENT OF WATER/OIL DISTRIBUTION: No information found

APPEARANCS/ODOR: Blue viscous liquid with a typical solvent odor.

SECTION XII - COMMENTS

المستحد المداري المنافق المناف

Individuals with pre-existing disease in or a history of ailments involving the skin, eye, respiratory tract, liver, kidney, central nervous system are at a greater than normal risk of developing adverse effects when exposed to this material.

Overexposure to Ethylene Glycol Monobutyl Ether has apparently been found to cause the following effects in laboratory animals: anemia, liver abnormalities, kidney damage, lung damage, blood abnormalities.

EMPTY CONTAINERS may retain product residue including flammable or explosive vapors. Do not cut, drill, grind or weld on or near full, partially full or empty product containers.

No known ingredients which occur at greater than 0.1% are listed as a carcinogen in the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, the NT9 Annual Report on Carcinggens or OSHA 29 CFR 1910.1001-1047 subpart Z Toxic and Hazardous Substances (Specifically Regulated

SKIN PROTECTION (protective material): Permeation/degradation values of chemical mixtures cannot be predicted from pure components or Chemical classes. Thus, these materials are normally best estimates based on available pure component data. A significant difference in chemical breakthrough time has been reported for generically similar gloves from different manufacturers (AIHA J., 48, 941-947 1987).

Do not use until manufacturer's precautions have been read/understood. Wash exposed areas promptly and thoroughly after skin contact from working with this product and before eating, drinking, using tobacco products or rest rooms.

Do not wear contact lens without proper eye protection when using this product.

Prepared By: Occupational Health and Product Safety Department - C.A. Hope

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

#QT



AQUA-CLEAN

WATER BASED ANTIFOULING

86885

TB 117

- WATER BASED TECHNOLOGY FOR EASY APPLICATION AND CLEANUP
- HIGH LOADING OF CUPROUS OXIDE FOR LONG TERM PROTECTION, EVEN IN HIGHLY FOULING WATERS
- COMPLIES WITH ALL AIR POLLUTION (VOC)
 REGULATIONS
- ABLATIVE FINISH REDUCES COATING BUILDUP

GENERAL DESCRIPTION

Aqua-Clean is a waterbased antifouling bottom coating designed to give long term protection against all types of marine and fresh water fouling. It's waterbased formula results in an effective product that is easy to apply and environmentally safer to use.

APPLICATION DATA

Aqua-Clean is heavily loaded with cuprous oxide. As a result of this loading there is a tendency for settling to occur, especially if the paint has been on the shelf for several months. It is necessary to thoroughly mix the paint before using. If possible, shake the can of paint on a mechanical paint shaker. Before using, check the sides and bottom of the can to make sure all the pigment has been mixed in. If mixing is going to be done with a wooden paddle or an electric drill mixer, pour off half of the liquid from the top of the can into another can and then properly mix in any settled pigment; then remix the two parts together thoroughly. Adhere to all application instructions, precautions, conditions, and limitations to obtain optimum performance. Refer to individual labels and tech sheets for detailed instructions when using associated products, etc. When spraying, do not thin Aqua-Clean more than 10% (12 ounces per gallon) or inadequate paint film thickness will occur and premature erosion of the finish will be likely.

SURFACE PREPARATION

Coating performance, in general, is proportional to the degree of surface preparation. Follow recommendations carefully, avoiding shortcuts. Inadequate preparation of surfaces will virtually assure inadequate coating performance.

MAINTENANCE

No antifouling paint can be effective under all conditions of exposure. Man made pollution and natural occurrences can adversely affect antifouling paint performance. Extreme hot and cold water temperatures, silt, dirt, oil, brackish water and even electrolysis can ruin an antifouling paint. Therefore, we strongly suggest that the bottom of the boat be checked several times a month to make sure it is clean and that no growth is occurring. Lightly scrub the bottom with a soft brush to remove anything from the antifouling paint surface. Scrubbing is particularly important with boats that are idle for extended periods of time. The self-cleaning nature of the coating is most effective when the boat is used periodically.

PHYSICAL DATA

VEHICLE TYPE...Waterbased Emulsion

FINISH...Flat

COLORS...Blue, Red, Black

COMPONENTS...1

CURING MECHANISM...Solvent Release

SOLIDS (theoretical)

By weight...75+2%

By volume...40+2%

COVERAGE...400 sq. ft./gal.

VOC(..140 g/l max)

FLASH POINT...None

APPLICATION DATA

METHOD...Brush, Roller, Airless or conventional spray.

NUMBER OF COATS...2 min.

DRY FILM THICKNESS PER COAT...2-3.

with additional coat at waterline.

APPLICATION TEMP...50° F. Min.

90° F. Max.

DRY TIME (Hours)

	To Recoat	To Launch
90° F.	1	12
70° F.	2	16
50° F.	4	48
THINN	ERWater	

ASSOCIATED PRODUCTS

15095 Fiberglass Dewaxer 6999 Sandless Primer

PETTIT PAINT COMPANY
36 PINE STREET, ROCKAWAY, NJ 07866 (201) 625-3100

SYSTEMS

<u>Coated Surfaces:</u> To paint old, hard antifoulings, thoroughly sand painted surface with 80 grit sandpaper, wipe clean of sanding residue, and apply Aqua-Clean. Old tin copolymers should be sanded thoroughly with 80 grit sandpaper to remove the chalky outer surface, wiped clean of sanding residue, and then may be overcoated directly with Aqua-Clean. Traditional, soft antifoulings should be removed before applying Aqua-Clean.

Fiberglass: Wash the fiberglass with Pettit 15095 Dewaxer to remove parting agents, grease and dirt. Sand thoroughly with 80 grit sandpaper to a dull, frosty finish. Rewash the sanded surface with 15095 Fiberglass Dewaxer and then apply at least two coats of Aqua-Clean. To skip the tedium of sanding, wash the fiberglass twice with 15095 Fiberglass Dewaxer and apply a thin coat of Pettit 6999 Sandless Primer. Let dry one half hour and apply Aqua-Clean. Please note that acetone does not readily clean contaminated surfaces and its use as a cleaner/dewaxer is not recommended.

Blistered Fiberglass: See Pettit Blister Repair Technical Sheet for detailed instruction.

Wooden Hulls: Bare wooden hulls should be sanded thoroughly with 80 grit sandpaper and wiped clean of sanding residue. A primer coat of Aqua-Clean thinned 10% with water should be applied directly to the bare wood. Allow to dry to recoat and then apply two unthinned coats of Aqua-Clean per instructions. Existing, hard antifouling paint should be thoroughly sanded. If priming is necessary on bare wood spots, apply a touch-up coat of Aqua-Clean thinned 10% with water to these areas. Then apply the subsequent coats of Aqua-Clean antifouling paint.

Steel Hulls: To remove loose rust and scale from the metal surface, scrape, sandblast or wire brush. Solvent clean the surface to remove grease and dirt then apply two or three coats of Pettit 6980 Rustlok Primer*. Follow with Aqua-Clean antifouling paint.

<u>Underwater Metal Parts:</u> Abrade to clean bright metal by scraping, sandblasting or wire brushing. Solvent clean and apply one thin coat of Pettit 6455/044 Metal Primer*. Let dry four hours and apply one coat of Pettit 6462 Q.D. Zinc Chromate Primer*, or Pettit 6627 Tie Coat Primer*. Let dry four hours and apply Aqua-Clean or let dry overnight, sand lightly and apply Aqua-Clean.

DO NOT USE THIS PRODUCT ON ALUMINUM HULLS AND OUTDRIVES.

*These are simplified systems for small areas. Please consult your Pettit representative or the Pettit Technical Department for more complex, professional systems. Always read the labels or tech sheets for all products specified herein before using.

MATERIAL SAFETY DATA

SHEET

KOP-COAT, INC.

EMERGENCY NUMBER: 800-548-0489

PETTIT PAINT DIVISION

OUTSIDE U.S.A.: 412-227-2700 PRODUCT INFORMATION: 201-625-3100

PETTIT PAINT 36 PINE STREET ROCKAWAY, NJ 07866

CHEMTREC ASSISTANCE 800-424-9300 CANUTEC:

613-996-6666

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: 6999 Sandless Primer

COMMODITY NUMBER:

F-A

SYNONYM: None

R- 0

P-B

PRODUCT USE: Paint/Coating

CHEMICAL FAMILY: Urethane

FORMULA: Mixture

CAS NUMBER: None

DOT INFORMATION

APPLICABLE REGULATION : 49 CFR 171 - 179

U.S. POSTAL REGULATIONS : Not Shippable

DOT PROPER SHIPPING NAME: Paint

DOT HAZARD CLASS: Flammable liquid

LABEL: Flammable liquid

UN/NA NUMBER: UN 1263

LIMITED QUANTITY: Yes

SECTION II - HEALTH/SAFETY ALERT

WARNING: HAZARDOUS MATERIAL FLAMMABLE LIQUID AND VAPOR HARMFUL IF INHALED OR SWALLOWED MAY CAUSE IRRITATION TO SKIN AND EYES AVOID PROLONGED OR REPEATED BREATHING OF VAPOR USE WITH ADEQUATE VENTILATION

AVOID PROLONGED AND/OR REPEATED CONTACT OBSERVE GOOD HYGIENE AND SAFETY PRACTICES WHEN HANDLING THIS PRODUCT DO NOT USE THIS PRODUCT UNTIL MSDS HAS BEEN READ AND UNDERSTOOD

SECTION III - HEALTH HAZARD INFORMATION

EYE: Direct contact with liquid or vapor may cause irritation.

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SKIN: Prolonged and/or repeated contact with the skin may cause defatting characterized by redness, cracking, blistering, irritation and dermatitis. INHALATION: Inhalation of high concentrations of vapors may cause respiratory tract irritation and central nervous system depression characterized by headache, weakness, dizziness, incoordination and possible collapse.

INGESTION: May cause gastrointestinal disturbances such as nausea, vomiting, diarrhea and effects similar to those described under INHALATION. Aspiration of this product into the lung may cause chemical pneumonitis which can be fatal.

OTHER: See SECTION XII - COMMENTS for additional information on health effects.

REVISION DATE: 10/91

SPECIFICATION SHEET NUMBER:

COMMODITY NUMBER:

CODE NUMBER: PETO00770C9100

REPLACES SHEET: NA

SUPPLIER INFORMATION: Same as manufacturer.

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SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Immediately flush with large amounts of water for 15 minutes. Seek medical aid.

SKIN CONTACT: Wash thoroughly with soap and water. If redness, itching, burning or other symptoms develop or persist, seek medical aid. Wash contaminated clothing before reuse.

INHALATION: Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as indicated. Seek medical aid.

INGESTION: Do not induce vomiting. Give 1 glass of milk or 1 to 2 oz (30 to 60g) of activated charcoal in water to victim as tolerated. Seek medical aid. DO NOT ATTEMPT TO GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTE TO PHYSICIAN: There is no specific antidote for effects from overexposure to this material. Treatment should be directed at the control of symptoms and the clinical condition.

SECTION V - FIRE AND EXPLOSION HAZARD INFORMATION

FLASH PT. & METHOD: 64F/18C (CC) AUTOIGNITION TEMP: No information found

FLAMMABLE LIMITS (% BY VOLUME/AIR):

LOWER: No information found UPPER: No information found

EXTINGUISHING MEDIA: Use carbon dioxide, dry chemical or foam. Water may be ineffective. Use carbon dioxide, dry chemical, water spray, alcohol or universal type foams as per manufacturer's recommendations.

FIRE-FIGHTING PROCEDURES: Wear complete fire service protective equipment, including full-face MSHA/NIOSH approved self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect personnel.

FIRE AND EXPLOSION HAZARDS: Heat/fire conditions: vapors form flammable/explosive mixtures in air. Vapors heavy, may travel(ground, pit, sewer) to ignition source-flash_Open/closed containers may contain , flammable/explosive vapors. Closed containers may explode when exposed to extreme heat(fire). Under fire conditions, may emit irritant/toxic gas and/or fumes.

SENSITIVITY TO MECHANICAL IMPACT: No information found

SENSITIVITY TO STATIC DISCHARGE: No information found

SECTION VI - SPILL, LEAK AND DISPOSAL INFORMATION

SPILL OR LEAK PROCEDURES (PRODUCT): Stop spill/leak if no risk involved. Avoid breathing vapors. Eliminate ALL sources of ignition. Ventilate area. Avoid contact with hot liquid and fumes. Take up carefully to avoid heat and sparks. Use an inert absorbent to complete a clean-up. This material reacts with oxidizing materials. This product released into the environment must be reported to the National Response Center (1-800-424-8802). When this product is spilled or leaked, the reportable quantity is 100 lbs. or more.

----- DOT REPORTABLE QUANTITIES -----

5000 lbs. Methyl Isobutyl Ketone

WASTE DISPOSAL: This product is a US EPA defined ignitable hazardous waste. Dispose of as an ignitable hazardous waste in accordance with local, state and federal regulations.

SECTION VII - RECOMMENDED EXPOSURE LIMIT/HAZARDOUS INGREDIENTS

EXPOSURE LIMIT (PRODUCT):

*10 minutes

**none established

HAZARDOUS	INGREDIENTS	CAS NUMBER	\$	BY	WT.	EXPOSURE	LIMIT	(PPM;MG	/M3)
Diphenylmethane	e Diisocyanate	26447-40-5	4		OS N I	CGIH-TLV SHA-CEIL. OSH OSH-CEIL.		0.2	5

Aromatic Solvent Naphtha 64742-94-5 10 Methyl Isobutyl Ketone 108-10-1 50

ACGIH-TLV 50 205 ACGIH-STEL 75 307 50 OSHA-TWA 205

OSHA-STEL 75

300

----- SARA TITLE III SECTION 313 CHEMICALS (SEE SECTION VII FOR CAS NUMBERS AND PERCENTAGES)

Methyl Isobutyl Ketone

SECTION VIII - PERSONAL PROTECTION INFORMATION

EYE PROTECTION: Industrial safety glasses, minimum. When needed for 29 CFR 1910.133 (work area conditions), use side shields, goggles and/or faceshield. Chemical goggles; face shield (if splashing is possible).

SKIN PROTECTION: As required, industrial resistant flexible-type gloves (heavy duty neopreme or equal - see Section XII).

Wear industrial-type work clothing and safety footwear.

Depending on working conditions, i.e., contact potential, wear resistant protective garments such as head/neck cover, aprons, jackets, pants, coveralls, boots, etc.

RESPIRATORY PROTECTION: If ventilation does not maintain inhalation exposures below PEL(TLV), use MSHA/NIOSH approved units as per current 29 CFR 1910.134, Instructions/Warnings and NIOSH-Respirator Decision Logic-Pub.#87.108.If within OSHA protection factor, air purifying OV/filter units OK.

VENTILATION: Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits and areas below flammable vapor concentrations. Local exhaust is necessary for use in enclosed or confined spaces. See OSHA requirements/NIOSH publication 87-113 "...Confined Spaces".

SECTION IX - PERSONAL HANDLING INSTRUCTIONS

HANDLING: Avoid prolonged or repeated contact with skin or eyes. Avoid prolonged or repeated breathing of vapors, mists or fumes. Handle and use in accordance with OSHA 29CFR1910.106/local codes. Spray paint in accordance with OSHA 29 CFR 1910.107. Observe good personal hygiene practices and recommended procedures.

STORAGE: Store in areas/buildings designed to comply with OSHA 1910.106. Keep in a closed, labeled container within a cool (well shaded), dry, ventilated

area. Protect from physical damage. Keep containers closed when material is not in use. Maintain good housekeeping.

OTHER: Ground and bond drums. Do not use pressure to empty drums. Do not wear contaminated clothing. Discard contaminated footwear. Keep away from heat and open flame. See SECTION XII (COMMENTS) for additional information. Do not use without fully understanding Section X - "Reactivity Data".

SECTION X - REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY: None

INCOMPATABILITY: Avoid oxidizing agents, heat, sparks and open flames

HAZARDOUS REACTIONS/DECOMPOSITION/COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide upon thermal decomposition

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: None

SECTION XI - PHYSICAL DATA

BOILING POINT: 240-350F

SPEC. GRAV. OR WT/GAL(:7.80 1/bs/gal

MELTING POINT: Not applicable

% VOLATILE BY VOL (80

VAPOR PRESSURE: No information found

EVAPORATION RATE(ETHER=1): 1

VAPOR DENSITY(AIR=1): 1

VISCOSITY: No information found

SOLUBILITY

(WATER): negligible

pH: Not applicable

VOC: No information found

COEFFICIENT OF WATER/OIL DISTRIBUTION: No information found

, APPEARANCE/ODOR: viscous liquid with a typical solvent odor.

SECTION XII - COMMENTS

Individuals with pre-existing disease in or a history of ailments involving the skin, eye, respiratory tract, liver, kidney, central nervous system are at a greater than normal risk of developing adverse effects when exposed to this material.

EMPTY CONTAINERS may retain product residue including flammable or explosive vapors. Do not cut, drill, grind or weld on or near full, partially full or empty product containers.

No known ingredients which occur at greater than 0.1% are listed as a carcinogen in the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, the NTP Annual Report on Carcinogens or OSHA 29 CFR 1910.1001-1047 subpart Z Toxic and Hazardous Substances (Specifically Regulated Substances).

SKIN PROTECTION (protective material): Permeation/degradation values of chemical mixtures cannot be predicted from pure components or chemical classes. Thus, these materials are normally best estimates based on available pure component data. A significant difference in chemical breakthrough time has been reported for generically similar gloves from different manufacturers (AIHA

J., 48, 941-947 1987).

Do not use until manufacturer's precautions have been read/understood. Wash exposed areas promptly and thoroughly after skin contact from working with this product and before eating, drinking, using tobacco products or rest rooms.

Do not wear contact lens without proper eye protection when using this product.

Prepared By: Occupational Health and Product Safety Department - C.A. Hope

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

#QT

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KÖP-CÖAT PITTSBURGH

FAX NO. 2272618 /5-/20

P. 07

Pettit Paints

MATERIAL SAFETY DATA SHEET

2272618

KOP-COAT, INC MARINE GROUP EAST 36 PINE STREET ROCKAWAY 07866 N.T

EMERGENCIES HEALTH/SPILLS.....: 800-548-0489 CHEMTREC ASSISTANCE: 800-424-9300 CANUTEC..... 613-996-6666

KOP-COAT, INC PRODUCT INFORMATION: 800-221-4466 OUTSIDE USA....: 201-625-3100

1 PRODUCT IDENTIFICATION

PRODUCT NAME: 12120 No. 120 Brushing Thinner

PRODUCT USE.: Thinner/Dewaxer

APPEARANCE ..: Clear liquid with hydrocarbon odor

CAS NUMBER ... Mixture

SYNONYMS....: None

REVISION...:

DATE....: 11/16/95 MSDS NUMBER: 11212006

2 HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	REG AGENCY	PPM	NOTES	MG/M3	NOTES
Petroleum naphtha CAS NUMBER:64742-88-7 PERCENT BY WGT: 20 TO 25	NIOSH NIOSH STEL OSHA TWA	- 400	, .	350 1800 1600	·
Petroleum distillates CAS NUMBER:64742-95-6 PERCENT BY WGT: 70 TO 75	NIOSH NIOSH STEL OSHA TWA	- 400		350 1800 1600	4

NOTES:

4) The short term exposure limit (STEL) is a 15-minute TWA that should not be exceeded at any time during a workday.

3 HAZARDS IDENTIFICATION

EYE: Direct contact with liquid or wapor may cause irritation.

SKIN: Prolonged or repeated contact with the skin can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

INHALATION: Avoid breathing vapors or mists. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches). Prolonged or repeated inhalation and ingestion may cause delayed injury involving the kidneys and the blood.

INGESTION: Irritating to the nose, throat and respiratory tract. May cause vomiting. Aspiration of this product into the lung may cause chemical pneumonitis which can be fatal.

Individuals with pre-existing disease in or a history of ailments involving the skin, eye, respiratory tract, liver, kidney, central nervous system are at a greater than normal risk of developing adverse effects when exposed to this material.

4 FIRST AID MEASURES

EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes. Get medical attention.

SKIN CONTACT: Remove contaminated clothing. Wash thoroughly with soap and

PRODUCT NAME: 12120 No. 120 Brushing Thinner

PAGE 2 OF . 4

4 FIRST AID MEASURES

water. If redness, itching, burning or other symptoms develop or persist, get medical attention. Wash contaminated clothing before reuse.

INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If breathing has stopped have a trained person administer artificial respiration preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.

If swallowed do NOT induce vomiting. Give victim a glass of water INGESTION: or milk. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS

NOTE TO PHYSICIAN: There is no specific antidote for effects from overexposure to this material. Treatment should be directed at the control of symptoms and the clinical condition.

5 FIRE FIGHTING MEASURES

FLASH POINT: 107 F/42C

EXTINGUISHING MEDIA: Use dry chemical, carbon dioxide, water spray or foam.

FIRE FIGHTING PROCEDURES: As in any fire, wear complete fire service protective equipment, including full-face MSHA/NIOSH approved or equivalent self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect

FIRE AND EXPLOSION HAZARDS: Can release vapors that form explosive mixtures. Vapors can travel to a source of ignition and flash back. Closed containers may explode when exposed to extreme heat (fire). Toxic vapors may be given off in a fire.

6 SPILL AND LEAK PROCEDURES

Stop spill/leak if no risk involved. Avoid breathing vapors. Eliminate ALL sources of ignition. Ventilate area. Take up carefully to avoid heat and sparks. Use an inert absorbent to complete a clean-up. This material reacts with oxidizing materials. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7 HANDLING AND STORAGE

HANDLING: Avoid prolonged or repeated breathing of vapors, mists or fumes. Do not get on skin, in eyes or on clothing. Wash thoroughly after handling.

STORAGE: Keep in a closed, labeled container within a cool (well-shaded), dry, ventilated area. Protect from physical damage. Keep containers closed when material is not in use. Maintain good housekeeping.

OTHER: Keep away from heat and open flame. Do not use until manufacturer's precautions have been read/understood.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Ventilation is normally required when handling or using this product to keep exposure to airborns contaminants below the exposure limit. Facilities storing or utilizing this product should be equipped with an eyewash facility.

RESPIRATORS: Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstates vapor levels are above applicable limits, wear an appropriate, properly fitted

1. 1. 1. 1.1.

FAX NO. 2272618

P. 09

PRODUCT NAME: 1	2120 No. 1	120 Brushing	Thinner		PAGE	3 OF
	8 ЕХРО	SURE CONTRO	LS/PERSONAL	PROTECTION		
respirator (NIOS Follow respirato after each use. 288.2 requirement respirator's use	A repira	oproved or ecturer's directory protectors followed w	quivalent) dections for tion program whenever wor	uring and aft respirator us that meets 1 kplace condit	er applica e. Closa 910.134 an ions warra	tion. containe d ANSI nt a
PERSONAL PROTECT necessary for wo As required, che equal). Wear in working conditio such as head/nec	na i.e.	Contact pot	ential work	salacy tootwe	ir bepen	arud ou
	9 РНҮ	ICAL AND CHE				
Weight Per Gallo Vapor Density.: Vapor Pressure: 1 pH	Not deter Not detern ter: Negli	mined mined igible : 848 g/L	% VOL by W Boiling Po Evaporation Specific of	Weight:: 100 pint: Not cont: Not cont: (etheravity: < 1: Not cont	letermined er=1)>1	
			~			
	10 STAB	BILITY AND R	EACTIVITY DA	TA		
thermal decomposi	11 TOXI					
		OGICAL INFOR		·		
Product has not b	een teste	d for ecotox	icity.	!	• * • · •	
	13 DISPO	OSAL CONSIDE				
This product as su of unusable produ and federal regula	ations.	nazardous wa:	fined ignita ste (DOO1) i	ble hazardous n accordance	waste. Di with local	
	14 TRANS	SPORTATION II	NFORMATION -			
DOT PROPER SHIPPIN DOT HAZARD CLASS: LABEL: None	ORM-D	Consumer con			~~ ~ ~~~~~	
OOT IDENTIFICATION	NUMBER:	None				
	15 REGUL	ATORY INFORM	ATION			
No information ava						****
	16 ОТИБЪ	INFORMATION		~~~~~~~~		~~~~~
		THEORMATION				

FAX NO. 2272618

P. 10

PRODUCT NAME: 12120 No. 120 Brushing Thinner

PAGE 4 OF

16 OTHER INFORMATION

NOTE: The petroleum distillate (CAS# 64742-95-6) may contain approximately 7% xylene, 3% cumene and 40% trimethylbenzene.

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

PREPARED BY: L. Briggs Manager Environmental and Regulatory Affairs

Land Street Strates design (Co.

Information Telephone Number (201) 772-5252

ALL CHEMICAL EMERGENCIES

1-800-424-9300 - USA 1-202-483-7616 - International

Issue Date:

9/95

Page 1

SECTION I - PRODUCT IDENTIFICATION

Product Code:

B-WH, B-BL, B-GY, B-BO, B-TL, B-PK, B-PL

Trade Name:

BACKCOAT

Product Class:

Unsaturated Polyester Resin

C.A.S. Number:

Mixture

HMIS Rating:

Health = 2

Fire = 3

Reactivity = 2

SECTION II - INGREDIENTS

Ingredients Styrene Monomer	<u>CAS#</u> 100-42-5	Max. Content	Exposure Limits 50.0 ppm
Polyester Resin	Proprietary	Proprietary	Non Assigned
Galaxy Granules	N/A	Proprietary	N/A
Inorganic Filler	N/A	Proprietary	N/A
Pigment (TiO2)	13463-67-7	Proprietary	N/A

SECTION III - PHYSICAL DATA

Boiling Point:

270-300°F

Vapor Density:

Heavier than air

Specific Gravity:

1.2

Volatile %:

40 by weight

Evaporation Rate:

Slower than n-Butyl Acetate

Appearance:

Colored liquid with high viscosity

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class:

1C

Flash Point:

92°F

LEL:

1.1

- EXTINGUISHING MEDIA: Water spray, foam, dry chemical, carbon dioxide or any Class B extinguishing agent.

- SPECIAL FIRE FIGHTING PROCEDURE: Fire fighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.
- UNUSUAL FIRE & EXPLOSION HAZARDS: At elevated temperatures, such as in a fire, polymerization may take place. If polymerization takes place in a closed container, there is the possibility of violent rupture of the container. Product vapor may form an explosive mixture in air.

Issue Date:

9/95

Page 3

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: If a TLV or PEL listed in section V of this data sheet is exceeded, then suitable respiratory protection must be worn to prevent overexposure.

- VENTILATION: General ventilation is required during normal use. Local ventilation may be required during certain operations to keep exposure levels below the TLV listed in Section II of this data sheet.
- PROTECTIVE GLOVES: Wear appropriate impervious gloves to prevent skin contact.
- EYE PROTECTION: Wear face shield or protective goggles.
- OTHER PROTECTIVE EQUIPMENT: Wear protective clothing to prevent skin contact. Eye wash station and safety shower should be available.

SECTION IX - SPECIAL PRECAUTIONS

- PRECAUTIONS TO BE TAKEN FOR HANDLING AND STORING: Avoid storage above 72°F. Avoid prolonged or repeated skin contact. Avoid inhalation of heated vapors or spray mists.
- OTHER PRECAUTIONS: Avoid improper addition of promoter and/or catalyst. A promoter and catalyst used with this product should be mixed separately with the product and must never be mixed together.

SECTION X - SUPPLEMENTAL INFORMATION

- REGULATORY INFORMATION: SCAQMD Rule 1162 establishes specific process, control, housekeeping and record keeping requirements for fabrication operations using polyester resin materials. It is the responsibility of the fabricator to ensure compliance with these requirements. Styrene is NOT currently listed as a carcinogen by California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).
- SARA HAZARD CLASSIFICATION: This material has been categorized as having the following hazard(s) as defined by SARA Title III regulations (40 CFR 370): acute, fire.
- SARA SECTION 313 LISTED INGREDIENTS: The following ingredients in this material are subject to the reporting requirements of section 313 of SARA and 40 CFR 372 (see Section II for percentage of ingredient(s)).

 Styrene Monomer (100-42-5)

- DOT PROPER SHIPPING NAME:

Resin Solution

- UN NUMBER:

UN1866

- DOT HAZARD CLASS:

Flammable liquid

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ALL CHEMICAL EMERGENCIES

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Page 1

SECTION I - PRODUCT IDENTIFICATION

Product Code:

Alexander, Alicon, Nury, Accent, Solids

Trade Name:

GRANICOAT

Product Class:

Unsaturated Polyester Resin

C.A.S. Number:

Mixture

HMIS Rating:

Health = 2

Fire = 3

Reactivity = 2

SECTION II - INGREDIENTS

<u>Ingredients</u>	CAS#	Max. Content	Exposure Limits
Styrene Monomer	100-42-5	24%	50.0 ppm
Methyl Methacrylate	80-62-6	4%	100.0 ppm
Polyester Resin	Proprietary	Proprietary	Non Assigned
Galaxy Granules	N/A	Proprietary	N/A
Inorganic Filler	N/A	Proprietary	N/A
Pigment (TiO2)	13463-67-7	Proprietary	Little N/A hith

SECTION III - PHYSICAL DATA

Boiling Point:

270-300°F

Vapor Density:

Heavier than air

Specific Gravity:

1.4

Volatile %:

28 by weight

Evaporation Rate:

Slower than n-Butyl Acetate

Appearance:

Colored liquid with high viscosity

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class:

1C

Flash Point:

92°F

1.1

- EXTINGUISHING MEDIA: Water spray, foam, dry chemical, carbon dioxide or any Class B extinguishing agent.
- SPECIAL FIRE FIGHTING PROCEDURE: Fire fighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.
- UNUSUAL FIRE & EXPLOSION HAZARDS: At elevated temperatures, such as in a fire, polymerization may take place. If polymerization takes place in a closed container, there is the possibility of violent rupture of the container. Product vapor may form an explosive mixture in air.

SECTION V - HEALTH HAZARD DATA

- PERMISSIBLE EXPOSURE LEVEL: OSHA, PEL and ACGIH TLV for styrene are 50 ppm for an eight hour Time Weighted Average (TWA). The OSHA and ACGIH Short Term Exposure Level (STEL) are 100 ppm for a fifteen minute period (no ceiling for brief exposures), however the average for a single STEL period must not exceed 100 ppm.

- EFFECTS OF OVEREXPOSURE:

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.

EYES: May cause irritation. Liquid splashes may result in more serious injuries. May cause lachrymation (tears). 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.

- FIRST AID:

SKIN: Wash with soap and water.

EYES: Flush with copious amounts of water for 15 minutes. Seek immediate medical aid.

INHALATION: Remove victim from exposure. If victim is unconscious, administer artificial respiration and/or oxygen as needed. Seek medical aid.

INGESTION: DO NOT INDUCE VOMITING (aspiration hazard). Seek immediate medical help.

- PRIMARY ROUTE(S) OF ENTRY:

SECTION VI - REACTIVITY DATA

Inhalation and skin absorption.

- STABILITY:

Unstable

x Stable

- HAZARDOUS POLYMERIZATION:

x May occur

May NOT occur

- INCOMPATIBILITY:

Strong acids and oxidizing agents.

- CONDITIONS TO AVOID:

Heat and direct sunlight.

- HAZARDOUS DECOMPOSITION PRODUCTS:

Heating of this material to decomposition may cause the emission of irritating acrid fumes.

SECTION VII - SPILL OR LEAK PROCEDURES

- STEPS TO TAKE 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. This material contains the following ingredients which, if spilled or released in quantities equal to or greater than the Reportable Quantity (RQ), are subject to the reporting requirements of CERCLA and/or SARA (40 CFR parts 302 & 355):

Styrene Monomer

RQ Value = 1,000 lbs

Methyl Methacrylate

RQ Value = 1,000 lbs

WASTE DISPOSAL METHOD:

This material has been tested and found to have to have a flash point below 140°F. If discarded, this material and containers should be treated as hazardous wastes based on the characteristic of ignitability as defined under the federal RCRA regulations (40 CFR 261). Disposal of this material and its container, requires compliance with applicable labeling, packaging, and record keeping standards. Solidified and/or scrap finished product is Nonhazardous under RCRA. Check local regulation for details on disposal. For further information, contact your state or local waste agency or the Federal EPA RCRA hotline (800-424-9346 or 202-382-3000).

9/95

Page 3 '

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: If a TLV or PEL listed in section V of this data sheet is exceeded, then suitable respiratory protection must be worn to prevent overexposure.

- VENTILATION: General ventilation is required during normal use. Local ventilation may be required during certain operations to keep exposure levels below the TLV listed in Section II of this data sheet.
- PROTECTIVE GLOVES: Wear appropriate impervious gloves to prevent skin contact.
- EYE PROTECTION: Wear face shield or protective goggles.
- OTHER PROTECTIVE EQUIPMENT: Wear protective clothing to prevent skin contact. Eye wash station and safety shower should be available.

SECTION IX - SPECIAL PRECAUTIONS

- PRECAUTIONS TO BE TAKEN FOR HANDLING AND STORING: Avoid storage above 72°F. Avoid prolonged or repeated skin contact. Avoid inhalation of heated vapors or spray mists.
- OTHER PRECAUTIONS: Avoid improper addition of promoter and/or catalyst. A promoter and catalyst used with this product should be mixed separately with the product and must never be mixed together.

SECTION X - SUPPLEMENTAL INFORMATION

- REGULATORY INFORMATION: SCAQMD Rule 1162 establishes specific process, control, housekeeping and record keeping requirements for fabrication operations using polyester resin materials. It is the responsibility of the fabricator to ensure compliance with these requirements. Styrene is NOT currently listed as a carcinogen by California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).
- SARA HAZARD CLASSIFICATION: This material has been categorized as having the following hazard(s) as defined by SARA Title III regulations (40 CFR 370): acute, fire.
- SARA SECTION 313 LISTED INGREDIENTS: The following ingredients in this material are subject to the reporting requirements of section 313 of SARA and 40 CFR 372 (see Section II for percentage of ingredient(s)).

Styrene Monomer (100-42-5) Methyl Methacrylate (80-62-6)

- DOT PROPER SHIPPING NAME:

Resin Solution

- UN NUMBER:

UN1866

- DOT HAZARD CLASS:

Flammable liquid

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Information Telephone Number (201) 772-5252

10-120 994790 893720

ALL CHEMICAL EMERGENCIES

1-800-424-9300 - USA 1-202-483-7616 - International

Issue Date:

9/95

Page 1

SECTION I - PRODUCT IDENTIFICATION

Product Code:

B-WH, B-BL, B-GY, B-BO, B-TL, B-PK, B-PL

Trade Name:

BACKCOAT

Product Class:

Unsaturated Polyester Resin

C:A.S: Number:

Mixture

HMIS Rating:

Health = 2

Fire = 3

Reactivity = 2

Max. Content

SECTION II - INGREDIENTS

Ingredients
Styrene Monomer
Polyester Resin
Galaxy Granules
Inorganic Filler
Pigment (TiO2)

CAS# 100-42-5 Proprietary N/A

13463-67-7

N/A

32% Proprietary Proprietary Proprietary Exposure Limits 50.0 ppm Non Assigned N/A

Proprietary N/A
Proprietary N/A

SECTION III - PHYSICAL DATA

Boiling Point:

270-300°F

Vapor Density:

Volatile %:

Heavier than air 40 by weight

Specific Gravity: Evaporation Rate: 1.2 Slower than n-Butyl Acetate

Appearance: Colored liquid with high viscosity

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class:

1C

Flash Point:

92°F

LEL:

1.1

- EXTINGUISHING MEDIA: Water spray, foam, dry chemical, carbon dioxide or any Class B extinguishing agent.

- SPECIAL FIRE FIGHTING PROCEDURE: Fire fighters and others exposed to vapors or products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

- UNUSUAL FIRE & EXPLOSION HAZARDS: At elevated temperatures, such as in a fire, polymerization may take place. If polymerization takes place in a closed container, there is the possibility of violent rupture of the container. Product vapor may form an explosive mixture in air.

SECTION V - HEALTH HAZARD DATA

- PERMISSIBLE EXPOSURE LEVEL: OSHA, PEL and ACGIH TLV for styrene are 50 ppm for an eight hour Time Weighted Average (TWA). The OSHA and ACGIH Short Term Exposure Level (STEL) are 100 ppm for a fifteen minute period (no ceiling for brief exposures), however the average for a single STEL period must not exceed 100 ppm.

- EFFECTS OF OVEREXPOSURE:

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.

EYES: May cause irritation. Liquid splashes may result in more serious injuries. May cause lachrymation (tears). 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.

- FIRST AID:

SKIN: Wash with soap and water.

EYES: Flush with copious amounts of water for 15 minutes. Seek immediate medical aid.

INHALATION: Remove victim from exposure. If victim is unconscious, administer artificial respiration and/or oxygen as needed. Seek medical aid.

INGESTION: DO NOT INDUCE VOMITING (aspiration hazard). Seek immediate medical help.

- PRIMARY ROUTE(S) OF ENTRY:

Inhalation and skin absorption.

SECTION VI - REACTIVITY DATA

- STABILITY:

Unstable

_x_Stable

- HAZARDOUS POLYMERIZATION:

x May occur

__May NOT occur

- INCOMPATIBILITY:

Strong acids and oxidizing agents.

- CONDITIONS TO AVOID:

Heat and direct sunlight.

- HAZARDOUS DECOMPOSITION PRODUCTS:

Heating of this material to decomposition may cause the emission of irritating acrid fumes.

SECTION VII - SPILL OR LEAK PROCEDURES

- STEPS TO TAKE 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. This material contains the following ingredients which, if spilled or released in quantities equal to or greater than the Reportable Quantity (RQ), are subject to the reporting requirements of CERCLA and/or SARA (40 CFR parts 302 & 355):

Styrene Monomer

RO Value = 1.000 lbs

- WASTE DISPOSAL METHOD:

This material has been tested and found to have to have a flash point below 140°F. If discarded, this material and containers should be treated as hazardous wastes based on the characteristic of ignitability as defined under the federal RCRA regulations (40 CFR 261). Disposal of this material and its container, requires compliance with applicable labeling, packaging, and record keeping standards. Solidified and/or scrap finished product is Non-hazardous under RCRA. Check local regulation for details on disposal. For further information, contact your state or local waste agency or the Federal EPA RCRA hotline (800-424-9346 or 202-382-3000).

Issue Date:

9/95

Page 3.

SECTION VIII - SPECIAL PROTECTION INFORMATION

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- EYE PROTECTION: Wear face shield or protective goggles.
- OTHER PROTECTIVE EQUIPMENT: Wear protective clothing to prevent skin contact. Eye wash station and safety shower should be available.

SECTION IX - SPECIAL PRECAUTIONS

- PRECAUTIONS TO BE TAKEN FOR HANDLING AND STORING: Avoid storage above 72°F. Avoid prolonged or repeated skin contact. Avoid inhalation of heated vapors or spray mists.
- OTHER PRECAUTIONS: Avoid improper addition of promoter and/or catalyst. A promoter and catalyst used with this product should be mixed separately with the product and must never be mixed together.

SECTION X - SUPPLEMENTAL INFORMATION

- REGULATORY INFORMATION: SCAQMD Rule 1162 establishes specific process, control, housekeeping and record keeping requirements for fabrication operations using polyester resin materials. It is the responsibility of the fabricator to ensure compliance with these requirements. Styrene is NOT currently listed as a carcinogen by California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).
- SARA HAZARD CLASSIFICATION: This material has been categorized as having the following hazard(s) as defined by SARA Title III regulations (40 CFR 370): acute, fire.
- SARA SECTION 313 LISTED INGREDIENTS: The following ingredients in this material are subject to the reporting requirements of section 313 of SARA and 40 CFR 372 (see Section II for percentage of ingredient(s)).

 Styrene Monomer (100-42-5)
- DOT PROPER SHIPPING NAME:

Resin Solution

- UN NUMBER:

UN1866

4 - DOT HAZARD CLASS:

Flammable liquid

This information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of Safas Corporation's knowledge or obtained from sources believed by Safas Corporation to be accurate. Safas Corporation does not assume any responsibility for use or reliance upon same. Customers are encouraged to conduct their own tests. BEFORE USING ANY PRODUCT, READ ITS LABEL.

Page: 1 of 2

PREPARED: February 1996 : Inc. By: Cliff Danville 70 box 2385 Bivarview, MI 48192-1385 24 hr EMERGENCY PHONE# (800) 424-9300 (Chemtree) (113) | 285~1480 | en de la company PRODUCT NAMES: 60112-50 FOR SHIPPING DESCRIPTION: Environmentally hazardous substances, solid, a, o, +(Styrene monomer, inhibited), 9, UN 3077, PG III, Marine Pollutant hote: 49 CFR 171.4(c) excepts marine pollutants from regulation when transported in a non-bulk packaging by motor vehicle, rail car, or aircra-INGREDIENT CAS NUMBER PERCENT ACGIH OSHA

TLV PEL RQ

I yester Resin 64386-66-9 or 26123-45-5 25-27 ... - -
Trene Monomer 100-42-5 11-13 50ppm 100ppm1000 (bs)

Sept Fillers MIXTURE 61-63 * ** esut Fillers Velsance bust * ACGIH TLV
Fotal Dust 10mg/m3
cspirable Dust 5mg/m3 ** OSHA PEL 15mg/m3 5mg/m3 Saution 3 - PHYSICAL DATA on the state of the first that the same and are not to the state of the same state of the same that are same state of N/D .
N/D
3.6 (for Styrene)
1.4 - 1.5 Bolling Point Mapor Pressure Tapor Pressure Tapor Density (Air=1) Specific Gravity (H2O=1) Percent Volatile 11-13 (By Weight) Melting Point N/AEvaporation Rate (Butyl Acetate=1)Less Than 1 (for Styrene) Solubitity in Water Negligible Appearance and Odor Thick paste with pungent odor tion 4 - SUPPLIER NOTIFICATION This product contains toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. CAS# CHEMICAL NAME
100-42-5 Styrone PERCENT 11-13 Fromula Proposition 65: Styrene Oxide is listed as known to the State of elifornia to cause cancer. Styrene Oxide is a metabolite of Styrene monome: on 5 - FIRE AND EXPLOSION DATA Stash Point (for Styrene): 89-90 Deg. F. Method Used: Closed cup (SETA) Flammable Limits by volume (for styrene): LEL 1.1% UEL 6.1% EXTINGUISHING MEDIA: Water or Foam or Carbon Dioxide or Dry Chemical SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH/MSHA approved self-confidence

prouthing appacatus to avoid inhalation of smoke.

"ion 6 - HEALTH HAZARD DATA

EFFECTS OF ACUTE OVEREXPOSERE: Can cause skin and eye irritation. Excessive inhalation of vapors can cause nasal and respiratory irritation; central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation. Ingestion cause gastcointestinal irritation, vomiting, diarrhea..

EFFECTS OF CHRONIC OVEREXPOSERE: The International Agency for Research on Cancer (IARC) has classified styrene in Group 2B (Possibly Carcinogenic for Humans. This classification is not based on any significant new evidence that styrene may be carcinogenic, but rather on a revised definition for Group 2B and consideration of new data on styrene oxide. A number of lifetime animal studies with styrene including those conducted in the NC Bioassay Program have not shown styrene to be carcinogenic. There is currently not sufficient evidence to indicate that styrene is carcinogen to humans.

NOTE: Overexposure to styrene has been found to cause the following effects in laboratory animals: liver abonormalities, kideny damage and lung damage PRIMARY ROUTES OF ENTRY: Inhalation, Skin Contact.

FIRST AID:

EYES: Flush with large amounts of water, lifting upper and lower lids occasionally. Get medical attention.

SKIN WASH: Wash skin & contaminted clothing thoroughly with soap and water INHALATION: Remove to fresh air. If breaching is dufficult administer oxygen. If breathing has stopped, give CPR. Keep person warm, quiet and get medical attention.

INGESTION: Do not induce vomiting. Aspiration into lungs can cause chemical pneumonitis. See a physician.

ction 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STORAGE: Avoid temperatures of over 100 deg. F.

WASTE DISPOSAL: Dispose in accordance with local, state and federal regulations.

VENCILATION: Provide sufficient ventilation to maintain exposure below TLV for styrene.

PROTECTIVE EQUIPMENT: Normal work clothes covering arms and legs. Gloves an eye protection should also be worn. If concentration levels for styrene are above recomended exposure, organic vapor respirator should be worn. Use appropriate dust mask and eye protection when sanding, cutting or grinding cured materials as nuisance dust may be created.

THE INFORMATION accumulated herin is believed to be accurate but is not warranted to be whether originating with DBF or not. Recipients are advised to confirm in advances of need that the information is current, information is current, applicable, and suitable to their circumstances.

tion 8 - REACTIVITY DATA

MAZARDOUS POLYNERIZATION: Can Occur. Avoid exposure to excessive heat.

peroxides and polymerization catalysts.

RTABILITY: Stable

COMPATABILITY: Avoid contact with: strong alkalies, strong mineral acids and oxidizing agents.

CONDITIONS TO AVOID: Exposure to excessive heat or open flame; storage in open containers; long exposure to intense sunlight; contamination with oxidizing agents.

MAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide,

Aterial safety data sheet LGATE-PALMOLIVE COMPANY

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

≤ HEALTH

FIRE 2

REACTIVITY Ω

HMIS LEAST- 0 HAZARD RATING:

SLIGHT- 1 HIGH - 3

MODERATE - 2 EXTREME - 4

PRODUCT NAME:

PALMOLIVE DISHWASHING LIQUID

PALMOLIVE DISHWASHING LIQUID with LEMON-LIME.

STOCK #/UPC#: 46000, 46101, 46170, 46111, 46201, 45803, 46400

46600,46670,46611, 46701, 45903

CAS NUMBER: Not applicable; product is a mixture.

والفريدية ليسهول بالمماريون NERAL USE: Both products are formulated liquid detergents for hand deshwashing. Packaged in 12 oz. (#46000), 22 oz. (#46101 and # 46600), 26.4 oz. (#46170 and # 46670), 31.9 oz. (#46111 and # 46611), 32 oz. (#46201 and (#45803 and #45903) and 64 oz. (#446400) size. 6701) , 42 oz.

COLGATE-PALMOLIVE COMPANY300 Park Avenue

New York, NY 10022

For consumer information: Call (800-221-4607)

ERERGENCY TELEPHONE NUMBER: For emergency involving spill, leak, fire, emosure or accident, call CHEMTREC: (800) 424-9300, day or night.

PITTSBURGH POISON CENTER HAS BEEN PROVIDED SPECIFIC INFORMATION FOR USE IN AL EMERGENCIES INVOLVING THIS PRODUCT: CALL COLLECT: (412) 692-5596.

COMPOSITION/INFORMATION ON INGREDIENTS

A REGULATED COMPONENTS (present at a concentration > or = 1%):

Component CAS # 왕 PEL

Etayl Alcohol 00064-17-5 4.3 1900 mg/m3 1880 mg/m3

The specific chemical identities of the ingredients of this mixture are considered by Colgate to be trade secrets and are withheld in accordance with provisions of 29 CFR 1910.1200.

The following components, present at a concentration > or = 0.1%, are listed as cinogens or potential carcinogens by either the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or OSHA:

CAS # PEL TLV ponent

HAZARDS IDENTIFICATION

MIXTURE HAS NOT BEEN TESTED AS A WHOLE

ENTIAL HEALTH EFFECTS :

EYE CONTACT: Eye irritant upon direct contact.

May cause skin irritation upon prolonged contact. SKIN CONTACT: GESTION: Nausea, vomiting and diarrhea. HALATION: Not known. al Conditions Generally Aggravated by Exposure: Not Known FIRST AID MEASURES EYE CONTACT: Flush eye with large amounts of warm water for 15 minutes. If irritation persists, call your poison center or doctor. No problem expected, but if skin irritation occurs, discontinue SEIN CONTACT: use of product unless precautionary measures are used (rubber or plastic g bves). and the section of th INGESTION: If you eat or drink this product, you may throw up. Drink sips of water or milk. If vomiting continues, call your poison center or doctor. ALATION: Expect no problems. FIRE FIGHTING MEASURES Flash Point (Method): 134'F (Tag closed cup) 1gh this product has a flash point below 200 'F (closed cup), it is an - us solution containing ethyl alcohol which does not sustain conbustion. Exminguishing Media: Use water, CO2, Foam, Dry Chemicals (For case lots of orduct exposed to fire). SPECIAL FIRE FIGHTING PROCEDURES: Seaf-contained breathing apparatus and protective clothing should be worn when lighting chemical fires. ACCIDENTAL RELEASE MEASURES Small spills can Be wiped up with a cloth, paper or standard absorbents Sawdust, vermiculite) or vacuumed up. Rinse area thoroughly with water, be lert for slippery surfaces. HANDLING AND STORAGE re in a cool dry place (40'F to 125'F).

"XPOSURE CONTROLS / PERSONAL PROTECTION

Work/ Hygiene Practices: Avoid contact with skin and eyes. Under normal orbitions of product use, no special protection for eyes/skin is required. rolonged daily hand dishwashing with any detergent may cause irritation of hands. Use of rubber or plastic gloves is recommended in such instances.

MO NOT USE WITH CHLORINE BLEACH to avoid irritating fumes. P OUT OF THE REACH OF CHILDREN. PHYSICAL AND CHEMICAL PROPERTIES _ng Point: Not Applicable: Evaporation Rate: Not Applicable ecific Gravity: 1.05 g/cc Solubility in Water: Very Soluble por Pressure: Not Applicable Appearance/Odor: Soap/Fragrant pH (1% Solution) =7.3 + 0.2 STABILITY AND REACTIVITY This product is stable. audiki elemendun (b.) COMPATIBLE MATERIALS: None Known. HAZARDOUS DECOMPOSITION: None known. 11. TOXICOLOGICAL INFORMATION is product has not been tested as whole. It is expected to cause nausea, vomiting and diarrhea if ingested. It is an eye irritant and may cause skin imitation upon prolonged contact. Toxicity data for components of this material are available by calling (908) °28-7772. _COLOGICAL INFORMATION Not known. DISPOSAL CONSIDERATIONS Preferred method is to use the product for indicated purposes. Empty containers may be disposed as conventional waste. The RCRA Hazardous Waste Number for this product is D 001 based on the characteristic if ignitability (40 CFR 261.21) TRANSPORTATION Non Bulk Containers (<118 gallons) Consumer Commodity ORM-D Quantity limitations: Passenger aircraft or railcar 1LCargo aircraft only: Bulk Containers (> 118 gallons) Flammable liquid, NOS, 3, UN 1993, PG 11 eid excessive heat, open flames or other sources of ignition. EGULATORY INFORMATION OSHA: Considered hazardous under the OSHA Hazard Communication Standard (29 CFR

0.1200).

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RCBA (40 CFR 261, Subpart D):
   The RCRA Hazardous Waste Number for this product is D 001 based on the
characteristic if ignitability (40 CFR 261.21)
CI AN WATER ACT:
Section 311 (Hazardous Substances) 40 CFR Part 116.4
   'π dodecylbenzenesulfonate (5.3 %) is a Section 311 listed hazardous
    رal.
CLEAN AIR ACT:
Section 111 -112 (CFR 60-63)
This product contains Ethyl Alcohol (4.3%) which is listed in Section 111 as a
Jomatile Organic Compound.
BARA:
Sections 301-304 (Threshold planning quantity - TPQ) 40 CFR 355:
TO TPQ for any OSHA regulated component .
Sections 311-312 (Community Right to Know ) 40 CFR 370
        (Threshold reporting quantity ) for this product is10,000lbs.
TRQ
Section 313 (Toxic chemical release reporting) 40 CFR 372:
?he following chemicals must be reported when released:
Io applicable to any OSHA regulated component .
ERCLA:
Section 102 (Reportable Quantity - RQ) 40 CFR 302: The reportable quantity (RQ) for this product to the environment is 7 lbs.
pased on the presence of glycol ethers (14.0%) . The RQ for Sodium
ecylbenzenesulfonate (5.3%) is 18, 867 lbs. Releases greater than or equal
     .bs. must be reported to the National Response Center (NCR) immediately:
80°: 424-8802.
ew Jersey Right to Know Hazardous Substance List : This product contains the
ollowing OSHA regulated components subject to reporting requirements: Ethyl
lahol (4.3%), Sodium dodecylbenzenesulfonate (5.3 %)
er sylvania Hazardous Substance List: This product contains the following OSHA
egulated components subject to reporting requirements: Ethyl Alcohol (4.3%) assachusetts Substance List: This product contains the following OSHA
edulated components subject to reporting requirements: Ethyl Alcohol (4.3%),
odium dodecylbenzene sulfonate (5.3 %)
alifornia Safe Drinking Water and Toxic Enforcement Act
 Proposition 65) : This product contains the following OSHA regulated
on onents subject to reporting requirements: None
anada:
or place Hazardous Materials Information System (WHMIS) listed material.
has product contains the following OSHA regulated components subject to
eporting requirements:
thyl Alcohol (4.3%), Sodium dodecylbenzenesulfonate (5.3%)
  OTHER INFORMATION
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ABEL: PALMOLIVE has always contained ingredients that are idegradable and phosphate free. Bottle is made with 50% post onsumer recycled plastic.

CAUTION: DO NOT USE WITH CHLORINE to avoid irritating fumes. Do not use

dishwasher (try Palmolive Automatic Dish Detergent)

1n. automatic

EP OUT OF REACH OF CHILDREN

This MSDS was revised 08-26-94

The information on this sheet is limited to the material identified and is believed by the Colgate-Palmolive Company to be correct based on its knowledge and information as of the date noted. Colgate makes no representation, grantee or warrantee, expressed or implied, as to the accuracy, reliability of completeness of the information and assumes no responsibility for injury, damage or loss resulting from the use of the material.

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MATERIAL IDENTIFICATION

"CORIAN" PRODUCTS, SILICONE SEALANT ALL COLORS

MSDS NUMBER

: CORQ05

25-110- 911859

Revision Date Date Printed

: 07-Nov-91 : 23-Mar-93

MANUFACTURER/DISTRIBUTOR

Du Pont

Polymers, ringer and

1007 Market Street Wilmington, DE 19898

PHONE NUMBERS

PRODUCT INFORMATION: 1-(800)441-7515 TRANSPORT EMERGENCY : 1-(800)424-9300 MEDICAL EMERGENCY : 1-(800)441-3637

TSCA INVENTORY STATUS : Reported/Included

Material ACETOXY SILANES

AMORPHOUS SILICA

DIMETHYL SILICONE POLYMER

During cure, Acetic Acid is formed during

exposure to moisture

CAS Number

NA

7631-86-9

PHYSICAL DATA

* Volatiles

: 5%

Water Solubility : Nil. Specific Gravity: 1.04

HAZARDOUS REACTIVITY

Instability : Stable at normal temperatures and storage conditions

Incompatibility : None reasonably foreseeable.

Decomposition : Decomposes with heat.

Polymerization : Polymerization will not occur.

OF OT UNC

9947-947-010.

Page 2

FIRE AND EXPLOSION DATA

FLASHPOINT: Above 100 degrees C.

FIRE AND EXPLOSION HAZARDS

FIRE AND EXPLOSION HAZARDS: Sulfur oxides form.

EXTINGUISHING MEDIA

Water. Dry Chemical. CO2.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Wear self-contained breathing apparatus. Wear full protective equipment.

ednibmeuc.

HEALTH HAZARD INFORMATION

ROUTE OF ENTRY

INGESTION: NOT A LIKELY ROUTE OF EXPOSURE.

INHALATION: MAY CAUSE NOSE AND THROAT IRRITATION.

SKIN OR EYE CONTACT: MAY CAUSE IRRITATION OR BURNING OF THE EYES. REPEATED OR PROLONGED CONTACT MAY CAUSE SKIN IRRITATION WITH DISCOMFORT AND DERMATITIS. FOR SKIN, WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, CONSULT A PHYSICIAN. FOR EYE, FLUSH WITH WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION.

CARCINOGENICITY

None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

EXPOSURE LIMITS

"CORIAN" PRODUCTS, SILICONE SEALANT ALL COLORS

TLV (ACGIH) : None Established

PEL (OSHA) : Particulates Not Otherwise Regulated

15 mg/m3 - 8 Hr TWA - Total Dust

5 mg/m3 - 8 Hr TWA - Respirable Dust

OTHER APPLICABLE EXPOSURE LIMITS AMORPHOUS SILICA

AEL * (Du Pont): None Established

TLV (ACGIH): 10 mg/m3, total dust. - 8 Hr TWA PEL (OSHA): 6 mg/m3, total dust. - 8 Hr TWA

* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

(HEALTH HAZARD INFORMATION - Continued)

SAFETY PRECAUTIONS

Avoid breathing dust.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Observe label precautions. Keep away from heat, sparks and flame. Close container after each use. Wash thoroughly after handling and before eating or smoking. Do not store above 120 deg. F.

INHALATION

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

SKIN CONTACT

The compound is not likely to be hazardous by skin contact, but cleansing the skin after use is advisable.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult physician if necessary.

PROTECTION INFORMATION

GENERALLY APPLICABLE CONTROL MEASURES AND PRECAUTIONS Avoid dust generation.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face : Safety Glasses. Additional : Protective footwear.

Protective Gloves: Leather or cotton

RESPIRATORY:

Do not breathe vapors. Wear a fitted organic vapor respirator unless local exhaust ventilation is adequate or air sampling show exposures are within TLV and PEL guidelines. Follow the respirator manufacturer's directions for respirator use.

VENTILATION:

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Provide sufficient ventilation in volume and pattern to keep contaminants below applicable OSHA requirements and other suggested exposure limits.

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(PROTECTION INFORMATION - Continued)

PROTECTIVE CLOTHING: Rubber or plastic gloves are recommended.

EYE PROTECTION: Safety glasses with side shields.

DISPOSAL INFORMATION

AOUATIC TOXICITY

No information available.

Toxicity is expected to be low based on insolubility in water.

SPILL, LEAK, OR RELEASE

NOTE: Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ventilate area. Remove sources of ignition. Prevent skin contact and breathing of vapor. Confine and remove with inert absorbent.

WASTE DISPOSAL

Do not flush to surface water or sanitary sewer system. Incinerate material in accordance with Federal, State/Provincial, and Local requirements. Do not incinerate in closed containers.

SHIPPING INFORMATION

DOT

Proper Shipping Name : Not regulated

STORAGE CONDITIONS

Store in cool place.

TITLE III HAZARD CLASSIFICATIONS

SECTION 313 SUPPLIER NOTIFICATION

This product contains no known toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

ADDITIONAL INFORMATION AND REFERENCES

NA = Not Applicable NE = Not Established

= New or revised information in this section when # is in right margin.

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE: None known.

SUBSTANCES ON THE PENNSYLVANIA SPECIAL HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 0.01% OR MORE: None known.

NONHAZARDOUS INGREDIENTS PRESENT AT A CONCENTRATION OF 3% OR MORE REQUIRED TO BE LISTED BY PENNSYLVANIA: Since this product contains no hazardous substances as defined by the Pennsylvania R-T-K Regulations, a MSDS is not required by law.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: None known.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPORDUCTIVE HARM: None known.

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): None known.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

(END OF MSDS - Continued)

Responsibility for MSDS

: F. M. LOGULLO POLYMERS CRP711/208 WILMINGTON, DE 19880-0711 302-999-4615

End of MSDS

PARKSITE OF FLORIDA, INC. 5650 BRECKENRIDGE PARK DRIVE SUITE 107 TAMPA, FL 33610-4232 TEL: 800-237-0229 FAX: 813-623-6860

Fax

To: Low _	From: plethis
Fax: 407-	- 452-3568 Pages: 6
Phone:	Date: 6/18/96
Re:	CC:

• Comments:

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K OT UNC

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MATERIAL IDENTIFICATION

"CORIAN" JOINT ADHESIVE - COMPONENT "A"

MSDS NUMBER : CORO02

CORPORATE NUMBER

: DU004027

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"CORIAN" is a registered trademark of Du Pont.

Revision Date

: 16-Feb-93

Date Printed

: 23-Mar-93

25-110 918706 25-110-91871A

MANUFACTURER/DISTRIBUTOR

Du Pont Polymers

1007 Market Street Wilmington, DE 19808

PHONE NUMBERS

PRODUCT INFORMATION : 1-(800)441-7515

TRANSPORT EMERGENCY : CHEMTREC: 1-800-424-9300

MEDICAL EMERGENCY : 1-(800)441-3637

DU PONT REGISTRY NUMBER: DP313-53-5

TSCA INVENTORY STATUS : Reported/Included

COMPONENTS

Material

Act of 1986 and 40 CFR part 372.

ACRYLIC POLYMER

ALUMINA TRIHYDRATE *METHYL METHACRYLATE MONOMER 21645-51-2 80-62-6

CAS Number

Regulated as a Toxic Chemical under Section 313 of Title III of the Superfund Amendments and Reauthorization

PHYSICAL DATA

Boiling Point : 101 deg C (214 deg F) at 760 mm Hg. MM Monomer Vapor Pressure : 29 mm Hg at 20 deg C (68 deg F) Vapor Density : 3.42 (Air = 1.0) @16 deg C (60 deg F) : 40 WT % at 20 deg C (68 deg F)

Evaporation Rate : 3.0 (Butyl Acetate = 1.0)

Water Solubility : Nil

Form : Syrupy liquid

Specific Gravity: 1.22 at 20 deg C (68 deg F)

rayex

HAZARDOUS REACTIVITY

Instability

: Stable at normal temperatures and storage

conditions. Avoid heat and ignition sources.

Incompatibility: Incompatible with amines and peroxides.

Decomposition: Carbon monoxide, carbon dioxide, smoke.

Polymerization: Polymerization can occur. Conditions leading to

polymerization are abnormal temperatures, direct

sunlight or oxidizing agents.

FIRE AND EXPLOSION DATA

Flash Point : 13 deg C (55 deg F)
Method : TOC

Flammable Limits in Air, & by Volume

LEL : 2.1

UEL : 12.5

FIRE AND EXPLOSION HAZARDS

Flammable liquid. Vapor forms explosive mixture with air. Vapors or gases may travel considerable distances to ignition source and flash back.

EXTINGUISHING MEDIA

Water Spray. Foam. Dry Chemical. CO2.

Use chemical foams for extinguishing flaming pools of material.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Wear full protective equipment. Use water spray.

HEALTH HAZARD INFORMATION

ACRYLIC POLYMER

Repeated or prolonged liquid contact may cause skin irritation.

METHYL METHACRYLATE

HEALTH HAZARD INFORMATION

Methyl methacrylate is a skin, nose and throat irritant and can cause allergic skin rashes. Skin permeation may occur. It is a severe eye irritant and can cause tearing, blurring of vision and possible corneal damage.

Inhalation can cause headache, nausea, weakness and lung

(HEALTH HAZARD INFORMATION - Continued)

irritation with cough, and shortness of breath. Temporary sensory nervous system effects such as coldness or numbness of the extremities can occur, as well as abnormal kidney function tests and temporary elevation of blood pressure.

ANIMAL DATA

Inhalation 4 hour LC50: 7093 ppm in rats Skin absorption LD50: > 35,500 mg/kg in rabbits Oral LD50: 7900 mg/kg in rats

The compound is a skin irritant, is a moderate eye irritant, and is a skin sensitizer in animals.

INHALATION

Toxicity described in animals from single exposures to levels primarily in the range of 8-100 times the TLV by inhalation include upper respiratory and gastrointestional irritation, lung damage, nervous system effects, and blood in the urine. Toxicity described in animals from repeated exposures to levels in the range of 5-100 times the TLV by inhalation include lung damage, pulmonary irritation, liver changes, eye irritation, nasal tissue changes, incoordination and upper respiratory irritation. Toxicity described in animals from long term repeated exposures by inhalation include inflammation of the nasal cavity and changes in nasal sensory cells, and slight decrease in body weight.

INGESTION

Toxicity described in animals single exposures by ingestion near the LD50 include blood in the urine and liver changes. Toxicity described in animals from repeated exposures by ingestion include liver and kidney effects with altered function in both organs, peeling of the skin and impaired locomotor activity and learning. Toxicity described in animals from long term repeated exposures by ingestion include decreased body weight, and increased relative kidney weight at high dose levels.

SKIN CONTACT

HOLE GODING COURT - OF IT HOS

Repeated dermal exposure resulted in peeling of the skin and localized neuromuscular changes indicated by by abnormal muscle responses to nerve stimulation.

Animal testing indicates that this compound does not have carcinogenic effects.

Developmental toxicity has been observed in tests with animals, but in most cases it was accompanied by maternal toxicity. In one instance reduced fetal weights were

(HEALTH HAZARD INFORMATION - Continued)

observed in the absence of maternal toxicity.

The compound does produce genetic damage in mammalian cell cultures. It does not produce heritable genetic damage in animals.

HUMAN HEALTH EFFECTS

Skin contact may include skin irritation with rash; or allergic skin rashes.

Eye contact may include severe eye irritation with tearing, or blurring of vision, or possible corneal damage.

Inhalation may include irritation of the upper respiratory passages; nonspecific discomfort, such as nausea, headache, or weakness; temporary lung irritation effects with cough, difficulty breathing, or shortness of breath; temporary sensory nervous system effects such as coldness or numbness of extremities; abnormal kidney function as detected by laboratory tests; or temporary elevation of blood pressure.

Evidence from animal tests suggests that skin permeation may occur. The compound may cause skin sensitization in susceptible humans.

Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures.

ALUMINA TRIHYDRATE

HEALTH HAZARD INFORMATION

No adverse effects are expected as the compound has been used safely as an antacid in humans without significant effects for a long period of time. Chronic over-use may interfere with phosphate absorption.

ANIMAL DATA

INHALATION

Guinea pigs exposed by long term, repeated inhalation exhibited no evidence of injurious effects but did show progressive accumulation of aluminum in the lungs.

INGESTION

Toxicity described in animals from repeated ingestion include growth impairment, and bone changes due to phosphate depletion but ingestion of phosphate eliminates these changes.

(HEALTH HAZARD INFORMATION - Continued)

CARCINGENICITY

None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

APPLICABLE EXPOSURE LIMITS METHYL METHACRYLATE MONOMER

AEL * (Du Pont): None Established

TLV (ACGIH): 100 ppm, 410 mg/m3 - 8 Hr TWA PEL (OSHA): 100 ppm, 410 mg/m3 - 8 HR TWA

* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SAFETY PRECAUTIONS

Do not breathe vapor or mist. Do not get in eyes. Avoid contact with skin. Avoid contact with clothing. Wash thoroughly after handling. Wash clothing after use.

FIRST AID

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. Moderate Toxicity

SKIN CONTACT

In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Immediately give two glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

NOTES TO PHYSICIAN

Activated charcoal slurry may be administered. To prepare activated charcoal slurry, suspend 50 grams activated charcoal in 400mL water and mix thoroughly. Administer 5mL/kg, or 350mL for an average adult.

PROTECTION INFORMATION

GENERALLY APPLICABLE CONTROL MEASURES AND PRECAUTIONS Keep away from heat, sparks and flames. Keep container in a cool place. Keep container in a dark place. Keep container tightly closed Use of non-sparking and explosion-proof equipment may be necessary depending on type of operation. Do not consume food, drink or tobacco in the areas where they may become contaminated with this material.

Use local exhaust ventilation to keep employee exposure to airborne concentrations below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face : Coverall chemical splash goggles. Additional : Polyethylene apron,

Protective Gloves: Rubber gloves, or disposable polyethylene

DISPOSAL INFORMATION

SPILL, LEAK, OR RELEASE

NOTE: Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Remove source of heat, sparks, flame, impact, friction or electricity. Dike spill. Prevent liquid from entering sewers, waterways or low areas. Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

WASTE DISPOSAL

Cleaned-up material is a RCRA Hazardous Waste. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system. Do not incinerate in closed . containers.

RCRA hazardous waste number is D001.

SHIPPING INFORMATION

DOT

Proper Shipping Name : Not regulated.

Lugary &

STORAGE CONDITIONS

Store below 80 deg F. Store in well ventilated area. Store in cool place. Store in dark place. Keep container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

TITLE III HAZARD CLASSIFICATIONS

Acute : Yes
Chronic : Yes
Fire : Yes
Reactivity : Yes
Pressure : No

ADDITIONAL INFORMATION AND REFERENCES

NA = Not Applicable NE = Not Established

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES): Methyl Methacrylate.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: None known.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS):

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS

: F. M. LOGULLO DU PONT POLYMERS CHESTNUT RUN PLAZA 715/215 WILMINGTON, DE 19880-0715 302-999-4615

Indicates updated section.

End of MSDS

MATERIAL IDENTIFICATION

"CORIAN" JOINT ADHESIVE - COMPONENT "B"

MSDS NUMBER : COROO3

CORPORATE NUMBER : DU004028

"CORIAN" is a registered trademark of Du Pont.

Revision Date

: 24-Mar-92

Date Printed

: 23-Mar-93

MANUFACTURER/DISTRIBUTOR

Du Pontable and the

Polymers

1007 Market Street Wilmington, DE 19808 -

PHONE NUMBERS

PRODUCT INFORMATION: 1-(800)441-7575

TRANSPORT EMERGENCY : CHEMTREC: 1-800-424-9300

MEDICAL EMERGENCY : 1-(800)441-3637

DU PONT REGISTRY NUMBER: DP313-54-6

TSCA INVENTORY STATUS : Reported/Included

COMPONENTS

CAS Number Material ' ł 10 94-36-0 *BENZOYL PEROXIDE 90 *DIBUTYL PHTHALATE 84-74-2

* Regulated as a Toxic Chemical under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

PHYSICAL DATA

Vapor Pressure : <3 mm Hg at 20 deg C (68 deg F) * Volatiles : 0 WT *

Evaporation Rate : None

Water Solubility : <0.03 g/liter

OG TO HAY

: Liquid Form

Specific Gravity: 1.044 at 20 deg C

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HAZARDOUS REACTIVITY

: Stable at normal temperatures and storage Instability

conditions. Avoid heat, high temperatures, and

ignition sources.

: Incompatible with heat and oxidizing materials, Incompatibility

strong acids.

: Decomposes with heat. Hazardous gases/vapors Decomposition

produced are carbon monoxide, carbon dioxide, smoke.

Polymerization : Polymerization will not occur.

FIRE AND EXPLOSION DATA

Flash Point : >93 deg C (>200 deg F)
Method : TCC

Method

: TCC

Slight fire hazard when exposed to heat or flame.

FIRE AND EXPLOSION HAZARDS

Heating can release vapors which can be ignited.

EXTINGUISHING MEDIA

Water. Dry Chemical.

SPECIAL FIRE FIGHTING INSTRUCTIONS

Evacuate personnel to a safe area. Keep personnel removed & upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. Cool tank/container with water spray. Isolate area.

HEALTH HAZARD INFORMATION

DIBUTYL PHTHALATE

HEALTH HAZARD INFORMATION

This compound is a skin, eye, nose and throat irritant.

Ingestion may cause nausea, headache and weakness.

High exposures may cause dizziness, confusion, incoordination and loss of consciousness. Abnormal liver and kidney function may occur.

ANIMAL DATA

Inhalation 2 hour LC50: 25 mg/L in rats

Skin absorption LD50: - 21,000 mg/kg in rabbits

Oral LD50: 8000 mg/kg in rate

Page /

(HEALTH HAZARD INFORMATION - Continued)

CARCINOGENICITY

None of the components in this material is listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

APPLICABLE EXPOSURE LIMITS BENZOYL PEROXIDE

AEL * (Du Pont): None Established
TLV (ACGIH): 5 mg/m3 - 8 Hr TWA
PEL (OSHA): 5 mg/m3 - 8 Hr TWA

AEL * (Du Pont): 5 mg/m3 - 8 Hr. TWA TLV (ACGIH): 5 mg/m3 - 8 Hr TWA PEL (OSHA): 5 mg/m3 - 8 Hr TWA

* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

SAFETY PRECAUTIONS

Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Wash clothing after use.

FIRST AID

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. Moderately Toxic

SKIN CONTACT

Flush skin with water after contact. Wash contaminated clothing before reuse.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Immediately give two glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

NOTES TO PHYSICIAN

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Activated charcoal slurry may be administered. To prepare activated charcoal slurry, suspend 50 grams activated charcoal in 400mL water and mix thoroughly. Administer 5mL/kg, or 350mL for an average adult.

(HEALTH HAZARD INFORMATION - Continued)

The compound is a skin and eye irritant, but is not a skin sensitizer in animals.

Inhalation: The effects in animals from single exposure by inhalation include mucous membrane and eye irritation, body weight loss, increased red blood cell counts, and other nonspecific effects. Repeated exposures caused lung and liver effects. Long term exposures resulted in decreased body weight gain, increased brain and lung weights, and changes in clinical chemical parameters.

Skin: Repeated skin applications caused testicular atrophy, dermatitis, kidney changes and weight loss.

Ingestion: Toxicity described in animals from the administration of single high doses include damage of the gastrointestinal tract, muscular incoordination, immobility, difficult respiration, eye lid edema and conjunctivitis. Repeated dosing at high levels caused liver, kidney, testicular and stomach injury, and decreased growth rate. Long term dosing at lower levels caused no adverse changes.

Tests in animals demonstrate no carcinogenic activity. Tests in some animals indicate that the compound may have developmental and reproductive toxicity at very high doses.

The compound does produce genetic damage in bacterial cultures but not in mammalian cell cultures. It has not been tested in animals.

HUMAN HEALTH EFFECTS

Skin contact may include skin irritation with rash.

Eye contact may include eye irritation with tearing, or blurring of vision.

Inhalation may include irritation of the upper respiratory passages, with coughing.

Ingestion may include nonspecific discomfort, such as nausea, headache, or weakness.

Higher exposures may lead to temporary nervous system depression with anaesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness; or abnormal liver and kidney function as detected by laboratory tests.

PROTECTION INFORMATION

GENERALLY APPLICABLE CONTROL MEASURES AND PRECAUTIONS Keep away from heat, sparks and flames. Keep container in a cool place. Keep container in a dark place. Keep container tightly closed. Close container after each use. Do not consume food, drink or tobacco in the areas where they may become contaminated with this material.

Use local exhaust ventilation to keep employee exposure to airborne concentrations below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face : Coverall chemical splash goggles. Additional : Polyethylene apron

Protective Gloves: Rubber Gloves or disposable polyethylene

DISPOSAL INFORMATION

SPILL, LEAK, OR RELEASE

NOTE: Review FIRE AND EXPLOSION HAZARDS and SAFETY PRECAUTIONS before proceeding with clean up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean up.

Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Remove source of heat, sparks, flame, impact, friction or electricity. Dike spill. Prevent liquid from entering sewers, waterways or low areas. Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up.

WASTE DISPOSAL

Cleaned-up material is a RCRA Hazardous Waste. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system. Do not incinerate in closed containers.

RCRA hazardous waste number is U069.

SHIPPING INFORMATION

DOT

Proper Shipping Name : Not Regulated

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STORAGE CONDITIONS

Store in well ventilated area. Store in cool place. Store in dark place. Keep container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

TITLE III HAZARD CLASSIFICATIONS

Acute : Yes
Chronic : Yes
Fire : No
Reactivity : Yes
Pressure : No

ADDITIONAL INFORMATION AND REFERENCES

NA = Not Applicable NE = Not Established

STATE RIGHT-TO-KNOW LAWS

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No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES): Benzoyl Peroxide 10%; Dibutyl Phthalate 90%.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: None known.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPORDUCTIVE HARM: None known.

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): Benzoyl Peroxide 10%; Dibutyl Phthalate 90%.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS

: F. M. LOGULLO
DU PONT POLYMERS
CHESTNUT RUN PLAZA 715/215
WILMINGTON, DE 19880-0715
302-999-4615

Indicates updated section.

End of MSDS

PARKSITE OF FLORIDA, INC. 5650 BRECKENRIDGE PARK DRIVE SUITE 107

TAMPA, FL 33610-4232

TEL: 800-237-0229 FAX: 813-623-6860

Fax

From: Wha
Pages:
Date: 6-21-56
CC:

Comments:

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0067-2667-018:17

PHRKSITE OF FL.

Essex Specialty Products, Inc.
•A Subsidiary of The Dow Chemical Company

1250 Harmon Ruad Auburn Hills: MI 48326 810-391-6300 Fax: 810-391-6417

Material Safety Data Sheet

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Page: 1

24-HOUR EMERGENCY PHONE NUMBER: 248-391-6300

Product: BETASEAL** 43518 GLASS PRIMER

Product Code: 15964

Effective Date: 10/21/97

Date Printed: 02/04/98

MSD: 005622

Essex Specialty Products, Inc. 1250 Harmon Rd, Auburn Hills MI 48326

CUSTOMER INFORMATION CENTER: 248-391-6300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component (s)

Amount (wt % or ppm)

Toluene Methyl alcohol

000108-88-3 45-60 000067-56-1 40-55

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

This section includes possible adverse effects which could occur if this material is not handled in the recommended manner.

EYE: May cause moderate irritation with corneal injury. Vapros may irritate eyes.

SKIN: Prolonged or repeated exposure may cause skin irritation. A single prolonged exposure may result in the material being absorbed in harmful amounts. repeated skin exposure may result in absorption of harmful amounts. Effect from skin absorption of methanol are the same as those observed via oral and inhalation exposure and include central nervous system depression, visual impairment up to blindness, and metabolic acidosis with effects on organ systems such as the liver, kidney and heart. Skin absorption of the organosilane component has caused kidney/

(Continued on page 2 , over)
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MATERIAL SAFETY DATA SHEET

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Product: BETASEAL** 43518 GLASS PRIMER

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bladder effects when tested in laboratory animals.

INGESTION: Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing amounts larger than that may cause serious injury, even death, methanol, a component in this mixture, is highly toxic to humans and may cause central nervous system effects, visual disturbances up to blindness, metabolic acidosis, and degenerative damage to other organs including liver, kidney, and heart. Effects may be delayed. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects. If aspirated (liquid enters the lung), may cause lung damage or even death due to chemical pneumonia. The lethal dose in humans for methanol is approximately 1-8 ounces (29-237 ml).

INHALATION: Excessive vapor concentrations are readily attainable and may cause serious adverse effects, even death. Excessive exposure may cause irritation to upper respiratory tract and lungs. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects, central nervous system effects, and/or abdominal cramps and/or diarrhea. Inhalation of methanol may cause effects ranging from headache, narocsis and visual impairment to metabolic acidosis, blindness, and even death. effects may be delayed. Alcohol consumption and exertion may increase the adverse effects of toluene. Signs and symptoms of excessive exposure may include tingling, numbness and pain in the hands and forearms.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Signs and symptoms of excessive exposure may be central nervous system effects. excessive exposure may cause neurologic signs and symptoms and/or upper respiratory tract irritation. Toluene has caused hearing loss in laboratory animals upon exposure to high concentrations. Intentional misuse by deliberately inhaling toluene may cause nervous system damage, hearing loss, liver and kidney effects and death. Repeated excessive exposures may cause blindness, gastric distress and headaches.

CANCER INFORMATION: Components methanol and toluene did not cause cancer in long-term animals studies.

TERATOLOGY (BIRTH DEFECTS): Methanol has caused birth defects in mice at doses nontoxic to the mother as well as slight behavioral effects in offspring of rats. Toluene has been toxic to the fetus in laboratory animals at doses toxic to the mother, and has caused birth defects in mice dosed orally but not by inhalation.

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Product: BETASEAL** 43518 GLASS PRIMER

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REPRODUCTIVE EFFECTS: Contains toluene, which did not interfere with reproduction in animal studies. No relevant information found on other components (s).

4. FIRST AID

EYE: Irrigate with flowing water immediately and continously for 15 Minutes.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. wash clothing before reuse. Destroy contaminated shoes.

INGESTION: DO NOT INDUCE VOMITING. Call a physician and/or transport to emergency facility immediately.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficuly, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

NOTE TO PHYSICIAN: The decision of whether to induce vomiting or not should be made by an attending physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote, Supportive care. Treatment based on judgment of the physician in response to reactions of the patient. In cases where significant quantities have been ingested, consider the use of ethanol and hemodialysis in the treatment. Consult standard literature for details of treatment.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES FLASH POINT: 27 F METHOD USED: Setaflash

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear selfcontained breathing apparatus.

(Continued on page 4 , over) * Indicates a Trademark of Essex Specialty Products, Inc. A Subsidiary of The Dow Chemical Company

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UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may travel along the ground or by ventilation duct to ignition sources far from material handling point. flammable.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Secure ignition sources. Wear protective equipment. Dike, if necessary to prevent spread of spill. Cover and contain spill with absorbent material. Pump diked material and scoop absorbed material into container(s) for disposal. Use non-sparking tools.

7. HANDLING AND STORAGE

HANDLING & STORAGE: Flammable. Keep from heat, sparks, and flame. Use appropriate grounding equipment while handling this material. Store indoors in tightly closed containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions with high potential for exposure. If handling procedures are such that there is only a low potential for exposure, less protection may be needed. emergency conditions may require additional precautions.

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. lethal concentrations may exist in areas with poor ventilation.

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Use chemical goggles. If vapor exposure causes eye discomfort. Use a full-face respirator.

SKIN PROTECTION: Use protective clothing impervious to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full body suit will depend on operation. Safety shower should be located in immediate area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse. Contaminated leather items, such as shoes, belts and watchbands, should be removed and destroyed.

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Product: BETASEAL** 43518 GLASS PRIMER

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RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved positivepressure supplied-air respirator. For emergency and other conditions where the exposure guidelines may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus or positive pressure air-line with auxiliary self-contained air supply. in confined or poorly ventilated areas, use an approved positive-pressure supplied-air respirator.

EXPOSURE GUIDELINES: Toluene: ACGIH TLV is 50 ppm TWA, skin. OSHA PEL is 100 ppm TWA, 150 ppm STEL.

METHYL ALCOHOL (METHANOL): ACGIH TLV and OSHA PEL are 200 ppm TWA, 250 ppm STEL.

PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

A "SKIN" notation following the exposure guideline refers to the potential for dermal absorption of the material. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposure should be considered.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Colorless liquid.

ODOR: Solvent odor.

VAPOR PRESSURE: 80

VAPOR DENSITY: 1.7

BOILING POINT: 111 F

SOLUBILITY IN WATER/MISCIBILITY: Negligible.

SPECIFIC GRAVITY: 0.83 (+/-0.03)

VOLATILE ORGANIC COMPOUNDS (VOC) (LBS/GAL): 6.94 EPA Method 24 Procedure B

10. STABILITY AND REACTIVITY

(Continued on page 6, over) * Indicates a Trademark of Essex Specialty Products, Inc. A Subsidiary of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET PAGE: 6

Product: BETASEAL** 43518 GLASS PRIMER

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Effective Date: 10/21/97 Date Printed: 02/04/98 MSD: 005622

CHEMICAL STABILITY: Stable.

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioside, carbon monoxide. Smoke, fumes.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

MUTAGENICITY: The majority and most reliable of many mutagenicity studied done on toluene, both in vitro (test tube) and in animal indicate it is not mutagen.

In vitro studies on methanol have been negative.

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12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

For detailed ecological data, write or call the Dow Chemical company.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BOBY OF WATER.

All disposal methods must be in compliance with all Federal. State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterization and compliance with applicable law are the responsibility solely of the waste generator.

ESSEX SPECIALTY PRODUCTS, INC. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL.

THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCTS AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION

(Continued on page 7)

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Product: BETASEAL** 43518 GLASS PRIMER

Product Code: 15964

Effective Date: 10/21/97 Date Printed: 02/04/98 MSD: 005622

2 (Composition/Information On Ingredients).

14. TRANSPORT INFORMATION

U.S. DOT CLASSIFICATION/DESCRIPTION: For dot regulatory information, if required, consult transportation regulations or product shipping papers.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: 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:

4	CHEMICAL NAME	CAS NUMBER			
	METHANOL TOLUENE	000067-56-1 000108-88-3	40	-55 -60	*

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:

An immediate health hazard A delayed health hazard A fire hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA):

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REGULATORY INFORMATION (CONTINUED)

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
METHANOL	000067-56-1	NJ1 NJ2 NJ3
TOLUENE	000108-88-3	PAT PA3 NJT NJ2 NJ3 PAT PA3

NJ1=New Jersey Special Health Hazard Substance (present at greater than or equal to 0.1%).

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PAl=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD: "

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND):

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases: Category:

(Continued on page 9) # Indicates a Trademark of Essex Specialty Products, Inc. A Subsidiary of The Dow Chemical Company



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MSD: 005622

REGULATORY INFORMATION (CONTINUED)

Chemical Name	CAS#	ŔQ	% in	Product
Methanol Toluene	000067-56-1	5000 1000		40-55 45-60

CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

> Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

CPR STATEMENT: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following ingredients which are Controlled Products and/or on the ingredient Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS:

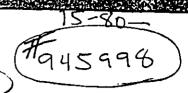
AMOUNT (%w/w) METHANOL 000067-56-1 40-55 TOLUENE 000108-88-3 45-60

16. OTHER INFORMATION

^{*} Indicates a Trademark of Essex Specialty Products, Inc A Subsidiary of The Dow Chemical Company The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied. Is Made. Consult Essex Specialty Products. Inc. for Further Information.

BETASEAL* 43520A Glass Primer

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Description

BETASEAL* 43520A glass primer is a polyurethane based solvent release type primer. This black-out primer is suitable for use to screen out ultraviolet rays and to promote adhesion between polyurethane adhesive and glass.

Typical Applications

As an integral component of a BETASEAL Bonding System, BETASEAL 43520A is used for priming applications which include windshield installation and backlite bonding in automotive trucks, buses and off-road vehicles.

Application Technique

BETASEAL 43520A must be agitated prior to use. The primer is capable of being applied by means of a brush or other suitable applicator. A wet film of 3-5 mils must be applied to assure the necessary .3-1 dry mil coating. The primer shall be allowed to air-dry to a tack-free condition prior to urethane adhesive application. Provided that the primer surface is kept clean, sealant may be applied within 96 hours.

Physical Properties		
Color Black		
Weight/Volume,		
Lbs./Gal.	8.2 ± 0.30	
Kgs./Liter	0.98 ± 0.04	
Flash point		
°F	24	
°C	- 6	
Solids Content, Minimum, %	35	

Mike Greco 855ex - Dow 1-810-391-6329 1-810-391-6393

Performance Properties - Primer

Brushability	No voids, bare spots of brush marks.	
Hiding Power	Complete black-out	
Open Time		
Minimum, seconds	30	
Maximum, hours	96	
Viscosity, Initial, R.T.		
#4 Ford Cup, Seconds	15 ± 4	
Viscosity, after 72 hours at 54 ±	3°C.	
(after minimum of 1 hour recover		
lo R.T.) #4 Ford Cup,	•	
maximum, seconds	25	

Performance Properties Bonding System

Shear Adhesion, after 72 hours R.T.	100% cohesive bond to substrate of approved urethane adhesive which typically results in minimum values of 1.7 MPa or 250 psi.
Cold Impact	No loss of adhesion.
Vibration Testing	Samples shall withstand without loss of adhesion to appropriate substrate and urethane adhesive a total of 900,000 cycles.
Sandwich Pull Strength, after 3 hours R.T.	100% cohesive bond to substrate of approved urethane adhesive which typically results in minimum values of 0.25MPa or 36 psi.



SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER'S NAME:

Essex Specialty Products, Inc.*

ADDRESS:

1250 Harmon Road

Auburn Hills, MI 48326

EMERGENCY TELEPHONE NUMBER:

(810) 391-6300 / CHEMTREC: (800) 424-9300 TO BE USED ONLY IN

EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL. LEAK.

FIRE, EXPOSURE, OR ACCIDENT INVOLVING CHEMICALS.

TELEPHONE NUMBER FOR INFO:

(810) 391-6300 Mon./Fri. 8 AM-4 PM EST

PRODUCT NAME:

Betaseal® 43520A Glass Primer

SYNONYM(S):

U-402 Glass Primer #2

MSD NUMBER:

0501.00

EFFECTIVE DATE:

04-04-96

DATE PRINTED:

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS #	AMOUNT (wt x)	
Toluene	000108-88-3	5-15	10%
Methyl ethyl ketone	000078-93-3	35-45	4070
Carbon black	001333-86-4		
n-Butyl acetate	000123-86-4	< 6	670
Polyisocyanate polymer	Proprietary		

SECTION III - HAZARDS IDENTIFICATION

(See Section XI for toxicological data.)

EMERGENCY OVERVIEW

Black liquid. Toluene/ketone odor. Flammable.

Causes eye irritation. Can cause allergic skin reaction.

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MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 43520A Glass Primer

INGESTION:

INHALATION:

PAGE 2 of 8 MSD#: 0501.00

POTENTIAL HEALTH EFFECTS

This section includes possible adverse effects which could occur if this material is not handled in the recommended manner.

EYES: May cause pain. May cause moderate eye irritation. May cause moderate corneal injury. Vapors may irritate eyes. Vapors may cause lacrimation (tears).

SKIN: Short single exposure not likely to cause significant skin irritation. Prolonged or repeated exposure may cause moderate skin irritation. Repeated contact may cause drying or flaking of skin. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. May cause allergic skin reaction in susceptible individuals. May stain skin.

Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury: swallowing amounts larger than that may cause injury. If aspirated (liquid enters the lung), may cause lung damage or even death due to chemical pneumonia.

Excessive vapor concentrations are attainable and could be hazardous on single exposure. Excessive exposure to solvent(s) may cause respiratory irritation and central nervous system depression. Signs and symptoms of central nervous system depression, in order of increasing exposure, are headache, dizziness, drowsiness, and incoordination. Signs and symptoms of excessive exposure may be nausea and/or vomiting. Alcohol consumed before or after exposure may increase adverse effects. Contains small amounts of isocyanate homo-/prepolymers. Excessive isocyanate exposure may cause respiratory effects including irritation, sensitization, and lung injury (decreased ventilatory capacity). Extremely low isocyanate concentrations may cause allergic reactions in individuals who have been sensitized by previous isocyanate exposures. Symptoms may include difficult breathing, chest tightness and coughing. Allergic response may be immediate or delayed.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS

Excessive exposure may cause irritation to upper respiratory tract. Signs and symptoms of excessive exposure may be central nervous system effects. Excessive exposure may cause neurologic signs and symptoms. Contains component(s) which, in animals, have been shown to cause liver, kidney, and spleen effects. Toluene has caused hearing loss in laboratory animals upon exposure to high concentrations. Intentional misuse by deliberately inhaling toluene may cause nervous system damage, hearing loss, liver and kidney effects and death.

CANCER INFORMATION

Contains toluene and butyl acetate, which did not cause cancer in laboratory animals.

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MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 43520A Glass Primer

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TERATOLOGY (BIRTH DEFECTS)

Contains methyl ethyl ketone and butyl acetate, which did not cause birth defects: other fetal effects occurred only at doses toxic to the mother.

Toluene has been toxic to the fetus in laboratory animals at doses toxic to the mother, and has caused birth defects in mice dosed orally but not by inhalation.

REPRODUCTIVE EFFECTS

Contains toluene, which did not interfere with reproduction in animal No relevant information found on other component(s).

SECTION IV - FIRST-AID MEASURES

Irrigate with flowing water immediately and continuously for 15 minutes. EYES: Consult medical personnel.

Wash off in flowing water or shower. SKIN:

Do not induce vomiting. Call a physician and/or transport to emergency INGESTION:

facility immediately.

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified. INHALATION: personnel. Call a physician or transport to a medical facility.

NOTE TO PHYSICIAN

The decision of whether to induce vomiting or not should be made by an attending physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.

May cause respiratory sensitization or asthma. Bronchodilators. expectorants, and antitussives may be of help.

No specific antidote. Supportive care. Treatment based on Judgment of the physician in response to reactions of the patient.

May cause respiratory sensitization. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed for 48 hours for signs of respiratory distress.

SECTION V - FIRE FIGHTING MEASURES

FLASH POINT: 24° F. METHOD USED: Setaflash

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical. foam.

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MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betaseal® 43520A Glass Primer

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SPECIAL FIRE

Fire fighters should wear self-contained

FIGHTING PROCEDURES:

breathing apparatus.

A second and

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors are heavier than air and may travel along the ground or by ventilation duct to ignition sources far from

material handling point. FLAMMABLE.

SECTION VI - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Secure ignition sources. Wear protective equipment. Dike, if necessary to prevent spread of spill. Cover and contain spill with absorbent material. Pump diked material and scoop absorbed material into container(s) for disposal. Use non-sparking tools.

SECTION VII - HANDLING AND STORAGE

HANDLING & STORAGE:

FLAMMABLE. Keep from heat, sparks and flame. Use appropriate grounding equipment while handling this material. Store indoors in tightly closed

containers.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions with a high potential for exposure. If handling procedures are such that there is only a low potential for exposure. less protection may be needed. Emergency conditions may require additional precautions.

ENGINEERING CONTROLS:

Provide general and/or local exhaust ventilation to

control airborne levels below the exposure

quidelines. Use only with adequate ventilation.

EYE/FACE PROTECTION:

Use chemical goggles. If vapor exposure causes eye

discomfort, use a full-face respirator.

SKIN PROTECTION:

Wear clean. long-sleeved, body-covering clothing.

Use gloves impervious to this material.

RESPIRATORY PROTECTION:

Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use an approved air-purifying or positive-pressure supplied-air respirator depending on the potential airborne concentration. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus or positivepressure airline with auxiliary self-contained air

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MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betaseal® 43520A Glass Primer

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supply. In confined or poorly

ventilated areas, use an approved positive-pressure

supplied-air respirator.

EXPOSURE GUIDELINES:

Methyl ethyl ketone (2-butanone): ACGIH TLV and OSHA PEL are 200 ppm TWA, 300 ppm STEL.

Toluene: ACGIH TLV is 50 ppm TWA, skin. OSHA PEL is

100 ppm TWA. 150 ppm STEL.

n-Butyl acetate: ACGIH TLV and OSHA PEL are 150 ppm

TWA. 200 ppm STEL.

PELs are in accord with those recommended by OSHA, as

in the 1989 revision of PELs.

A "skin" notation following the exposure guideline refers to the potential for dermal absorption of the material. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be

considered.

Although some of the fillers used in this product may have exposure guidelines, no exposure would be expected under normal handling conditions because of

the physical state of the material.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

VOC (LBS/GAL):(4.81

4.81 8.2 = EPA Method 24 Procedure 8

SPECIFIC GRAVITY: 0.99 (+/-0.03)

BOILING POINT: 130° F.

VAPOR PRESSURE (mmHg):

EVAPORATION RATE: N/A

VAPOR DENSITY (AIR=1): > 1

SOLUBILITY IN WATER: Negligible

APPEARANCE AND ODOR: Black liquid: Toluene/ketone odor.

SECTION X - STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY: Strong oxidizers

HAZARDOUS

DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, smoke, fumes Indicates a Trademark of Essex Specialty Products, Inc. * A subsidiary of The Dow Chemical Company

MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betaseal® 43520A Glass Primer

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HAZARDOUS POLYMERIZATION: Will not occur

SECTION XI - TOXICOLOGICAL INFORMATION

(See Section III for Potential Health Effect. For detailed toxicological data write or call The Dow Chemical Company.)

ACUTE

Skin: The dermal LD50 has not been determined.

Ingestion: Single dose oral LD50 has not been determined.

MUTAGENICITY: The majority of the many mutagenicity studies, both

in vitro and in animals. on components methyl ethyl ketone and toluene were negative. In vitro studies on butyl acetate and one of the isocyanate components

were negative.

SECTION XII - ECOLOGICAL INFORMATION

(For detailed ecological data, write or call The Dow Chemical Company.)

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Dispose of in compliance with all applicable federal,

state/provincial and local statutes regarding the management,

use, handling treatment, storage, disposal, and

transportation of hazardous wastes. Customers having compliance questions should contact their local. state/provincial or federal environmental agency.

SECTION XIV - TRANSPORTATION INFORMATION

U.S. DOT CLASSIFICATION/DESCRIPTION: For DOT regulatory information, if required. consult transportation regulations or product shipping papers.

SECTION XV - REGULATORY INFORMATION

(Not meant to be all-inclusive--selected regulations represented.)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another: it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

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MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betaseal® 43520A Glass Primer

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U.S. REGULATIONS:

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by OSHA Hazard Communication Standard 29CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA or SUPERFUND):

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

<u>Chemical Name</u>	CAS#	% in Product	RQ (LBS)
Toluene	000108-88-3	5-15	1000
Methyl ethyl ketone (2-butanone)	000078-93-3	35-45	5000

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:

An immediate health hazard A delayed health hazard A fire hazard

OT ",I

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III or the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

<u>Chemical Name</u>	<u>CAS#</u>	<u>% in Product</u>
Toluene	000108-88-3	5-15
Methyl ethyl ketone (2-butanone)	000078 - 93-3	35-45

STATE RIGHT-TO-KNOW: The following product components are cited on certain state list as mentioned. Non-listed components may be shown in the composition section of the MSDS.

<u>Chemical Name</u>	<u>CAS#</u>	LIST
Toluene Methyl ethyl ketone (2-butanone) n-Butyl acetate Carbon black	000108-88-3 000078-93-3 000123-86-4 001333-86-4	NJ1 NJ2 NJ3 PA1 PA3 NJ2 NJ3 PA1 PA3 NJ1 NJ3 PA1 PA3 NJ3 PA1

NJ1=New Jersey Special Health Hazard Substance (present at greater than or equal to 0.1%).

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

NJ3-New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PAl=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).
PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

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MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betaseal® 43520A Glass Primer

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CALIFORNIA PROP 65: This product contains a chemical(s) known to the State of California to cause reproductive toxicity.

The chemical(s) is/are: Toluene.

SELECTED INTERNATIONAL REGULATIONS:

CANADIAN REGULATIONS: This product contains the following ingredients which are on Canada's Hazardous Ingredients List (WHMIS) in concentrations at or above the threshold.

<u>Chemical Name</u>	<u>CAS#</u>
Toluene Methyl ethyl ketone (2-butanone) n-Butyl acetate Carbon black	000108-88-3 000078-93-3 000123-86-4 001333-86-4

SECTION XVI - OTHER INFORMATION

None

The information herein is given in good faith, but no warranty, expressed or implied is made. Consult Essex Specialty Products, Inc. for further information.

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BETASEAL* 43532

Body Primer



BETASEAL* 43532 is a polyurethane based, methylene chloride free, solvent evaporation, moisture cure type primer. After application to a substrate, this primer has a tendency to drip less than standard primers, BETASEAL 43532 is recommended for use as an adhesion promoter between BETASEAL Urethane Adhesives and automotive paint coatings.

Typical Applications

BETASEAL 43532 primer is an integral component of a BETASEAL bonding system. Its suggested use is priming coated automotive body flanges (pinchwelds) before the application of a BETASEAL adhesive.

Application Techniques

BETASEAL 43532 must be agitated prior to use. Recommended minimum agitation times are:

Shaker (1 cycles/sec), minutes

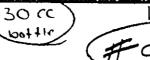
60

. Roller (28 RPM), hours

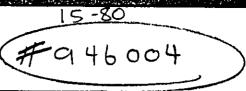
8

The primer can be applied by using pressurized dispensing (stream or spray) equipment, pad, brush, or other suitable applicator. A wet film thickness of 3 to 5 mils (0.003 to 0.005 inch) should be achieved. Allow the BETASEAL 43532 to dry at room temperature for a minimum of 30 minutes before applying a BETASEAL adhesive. If the primed surface is clean (free of oil, dirt or dust), adhesive can be applied for up to 110 hrs after the primer has dried. After 110 hours, as long as the primed surface is not oily or dirty, the surface should be reprimed. If the surface is contaminated, wipe it with a clean rag wet with acetone or methyl ethyl ketone. Allow to dry and reprime. Only one reprime operation should be conducted.

Physical Properties		
Color	8.5 ± 0.5 1.00 ± 0.06	
Weight/Volume at RT Lbs./Gal. Kgs./Liter		
Flash Point °C (°F)	-11 (12)	
Solids%	48.0 ± 5.0	



Shear Adhesion, after



Performance Properties - Primer

Brushability	Easily applied with no voids, bare spots or brush marks.		
Open Time at RT			
Minimum, Mins.	30		
Maximum, Hrs.	110		
Hiding Power	Complete black out		
Room Temperature Viscosity Ford # 4 Cup, initial, secs. After 72 hrs. at 54 ± 3°C, secs.	23.0 ± 6.0 35 max		

Performance Properties Bonding Systems

100% cohesive bond

72 hours R.T.	to substrate of approved urethane adhesive which typically results in minimum values of 1.7 MPa or 250 psi.
Cold Impact	No loss of adhesion.
Vibration Testing	Samples shall withstand without loss of adhesion to appropriate substrate and urethane adhesive a total of 900,000 cycles.
Sandwich Pull Strength, after 3 hours R.T.	100% cohesive bond to substrate of approved urethane adhesive which typically results in minimum values of 0.25MPa or 36 psi.



SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER'S NAME:

Essex Specialty Products, Inc.*

ADDRESS:

1250 Harmon Road

Auburn Hills. MI 48326

EMERGENCY TELEPHONE NUMBER:

(810) 391-6300 / CHEMTREC: (800) 424-9300 TO BE USED ONLY IN

EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK.

FIRE. EXPOSURE. OR ACCIDENT INVOLVING CHEMICALS.

TELEPHONE NUMBER FOR INFO:

(810) 391-6300 Mon./Fri. 8 AM-4 PM EST

PRODUCT NAME:

Betaseal® 43532 Body Primer

SYNONYM(S):

U-413 Pinchweld Primer #3

MSD NUMBER:

0502.00

EFFECTIVE DATE:

04-10-96

DATE PRINTED:

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS #	AMOUNT (wt %)	
Methyl ethyl ketone	000078-93-3	40-50	45%
Talc	014807-96-6		
Carbon black	001333-86-4		•
Acetone	000067-64-1	10-20	15 70
Silica, crystalline	014808-60-7	< 0.2	
Polymethylene polyphenyl isocyanate containing methylene bisphenyl isocyanate (MDI)	009016-87-9 000101 - 68-8 *	15 -25 3-5	. ,
* Free MDI (CAS# 101-68-8) = 3.87%			

* Free MDI (CAS# 101-68-8) *

*

7 3.87%

SECTION III - HAZARDS IDENTIFICATION

(See Section XI for toxicological data.)

EMERGENCY OVERVIEW

Black liquid. Ketone odor. Extremely flammable. Causes eye irritation.

May cause allergic respiratory reaction. May cause allergic skin reaction.

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MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 43532 Body Primer

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POTENTIAL HEALTH EFFECTS

This section includes possible adverse effects which could occur if this material is not handled in the recommended manner.

EYES: May cause moderate eye irritation. May cause moderate corneal injury. Vapors may irritate eyes.

SKIN: Prolonged or repeated exposure may cause moderate skin irritation. Repeated contact may cause drying or flaking of skin. Skin contact may result in allergic skin reactions or respiratory sensitization but is not expected to result in absorption of amounts sufficient to cause other adverse effects. May stain skin.

INGESTION: Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

INHALATION: Excessive vapor concentrations are attainable and could be hazardous on single exposure. Excessive exposure may cause respiratory irritation and central nervous system depression. Signs and symptoms of central nervous system depression, in order of increasing exposure, are headache, dizziness, drowsiness, and incoordination. Signs and symptoms of excessive exposure may be nausea and/or vomiting. May cause respiratory sensitization in susceptible individuals. MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Effects may be delayed. Impaired lung function (decreased ventilatory capacity) has been associated with overexposure to isocyanates. Potential for exposure to MDI is minimal. Representative monitoring of workplace air where these types of materials are used showed no detectable MDI at a detection limit of 0.5 ppb.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS

Contains certain components which may cause effects of injury in the upper respiratory tract, lung, liver, kidney, blood and testis. The components are methyl ethyl ketone, acetone, methylene bisphenyl isocyanate and fillers. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects. Methyl ethyl ketone is probably not neurotoxic by itself but it potentiates the neurotoxicity of methyl-n-butyl ketone and n-hexane.

CANCER INFORMATION

Contains acetone, which did not cause cancer in laboratory animals.

Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

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MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal@ 43532 Body Primer

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TERATOLOGY (BIRTH DEFECTS)

Contains components which did not cause birth defects; other fetal effects occurred only at doses toxic to the mother. The components are methyl ethyl ketone and acetone. In laboratory animals, MDI/polymeric MDI did not produce birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

REPRODUCTIVE EFFECTS

Contains acetone, which did not interfere with reproduction in animal studies.

SECTION IV - FIRST-AID MEASURES

Irrigate with flowing water immediately and continuously for 15 minutes. EYES:

Consult medical personnel.

SKIN: Wash off in flowing water or shower.

If swallowed, seek medical attention. Do not induce vomiting unless INGESTION:

directed to do so by medical personnel.

Remove to fresh air. If not breathing, give artificial respiration. INHALATION: If breathing is difficult, oxygen should be administered by qualified

personnel. Call a physician or transport to a medical facility.

NOTE TO PHYSICIAN

May cause respiratory sensitization or asthma. Bronchodilators. expectorants, and antitussives may be of help. Respiratory symptoms. including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed for 48 hours for signs of respiratory distress.

No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

SECTION V - FIRE FIGHTING MEASURES

FLASH POINT: 12° F. METHOD USED: Setaflash

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam.

SPECIAL FIRE Fire fighters should wear self-contained

FIGHTING PROCEDURES: breathing apparatus.

UNUSUAL FIRE AND Vapors are heavier than air and may travel along

EXPLOSION HAZARDS: the ground or by ventilation duct to ignition sources far from

material handling point. EXTREMELY FLÄMMABLE.

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MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betasea 1 43532 Body Primer

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SECTION VI - ACCIDENTAL RELEASE MEASURES

(See Section XV for Regulatory Information.)

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Secure ignition sources. Wear protective equipment. Dike, if necessary to prevent spread of spill. Cover and contain spill with absorbent material. Pump diked material and scoop absorbed material into container(s) for disposal. Use non-sparking tools.

SECTION VII - HANDLING AND STORAGE

HANDLING & STORAGE:

EXTREMELY FLAMMABLE. Keep from heat, sparks and flame. Use appropriate grounding equipment while handling this material. Store indoors in tightly closed containers.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions with a high potential for exposure. If handling procedures are such that there is only a low potential for exposure. less protection may be needed. Emergency conditions may require additional precautions.

ENGINEERING CONTROLS:

Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Use only with adequate ventilation.

EYE/FACE PROTECTION:

Use chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION:

Use protective clothing impervious to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full body suit will depend on operation. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse.

RESPIRATORY PROTECTION:

Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations. use an approved positive-pressure supplied-air respirator. For emergency and other conditions where the exposure guidelines may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-

contained air supply.

EXPOSURE GUIDELINES:

Methyl ethyl ketone (2-butanone): ACGIH TLV and OSHA PEL are 200 ppm TWA. 300 ppm STEL.

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MANUFACTURER: Essex Specialty Products, Inc.

PRODUCT NAME: Betaseal® 43532 Body Primer

PAGE 5 of 8 MSD#: 0502.00

Acetone: ACGIH TLV and OSHA PEL are 750 ppm TWA. 1000 ppm. STEL.

Methylene bisphenyl isocyanate (MDI): ACGIH TLV is 0.005 ppm TWA and OSHA PEL is 0.02 ppm Ceiling.

PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

Although some of the fillers used in this product may have exposure guidelines, no exposure would be expected under normal handling conditions because of the physical state of the material.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

4.65/8.5 =

VOC (LBS/GAL): 4.65

EPA Method 24 Procedure B

SPECIFIC GRAVITY: 1.02

.02 (+/-0.03)

VAPOR PRESSURE (mmHq): 104 @ 20°C.

BOILING POINT: 133°F.

(acetone)

VAPOR DENSITY (AIR=1): > 1

SOLUBILITY IN WATER: Partial

APPEARANCE AND ODOR: Black liquid; ketone odor

SECTION X - STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY: Strong oxidizers

HAZARDOUS

DECOMPOSITION PRODUCTS: Carbon dioxide. carbon monoxide. smoke. fumes

HAZARDOUS POLYMERIZATION: Will not occur

SECTION XI - TOXICOLOGICAL INFORMATION

(See Section III for Potential Health Effect. For detailed toxicological data write or call The Dow Chemical Company.)

ACUTE

Skin: The dermal LD50 has not been determined.

Ingestion: Single dose oral LD50 has not been determined.

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MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betaseal® 43532 Body Primer

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MUTAGENICITY:

Several components in this mixture have been tested for their ability to affect genetic material. Mutagenicity studies in animals on tested components

have been negative. In vitro mutagenicity studies on methyl ethyl ketone have been predominantly negative. In vitro studies on methylene bisphenyl isocyanate and acetone were negative in some cases,

positive in others.

SECTION XII - ECOLOGICAL INFORMATION

(For detailed ecological data, write or call The Dow Chemical Company.)

SECTION XIII - DISPOSAL CONSIDERATIONS

(See Section XV for Regulatory Information)

WASTE DISPOSAL METHOD: Dispose of in compliance with all applicable federal.

state/provincial and local statutes regarding the management.

use. handling, treatment, storage, disposal, and

transportation of hazardous wastes. Customers having

compliance questions should contact their local, state/provincial or federal environmental agency.

SECTION XIV - TRANSPORTATION INFORMATION

U.S. DOT CLASSIFICATION/DESCRIPTION: For DOT regulatory information, if required. consult transportation regulations or product shipping papers.

SECTION XV - REGULATORY INFORMATION

(Not meant to be all-inclusive--selected regulations represented.)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS:

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by OSHA Hazard Communication Standard 29CFR 1910.1200.

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MANUFACTURER: Essex Specialty Products, Inc.

PRODUCT NAME: Betaseal@ 43532 Body Primer

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COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA or SUPERFUND):

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

<u>Chemical Name</u>	<u>cas#</u>	% in Product	RQ (LBS)
Methyl ethyl ketone	000078-93-3	40-50	5000
Acetone	000067-64-1	10-20	5000
Methylene bisphenyl isocyanate (MDI)	000101-68-8	3-5	5000

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:

An immediate health hazard A delayed health hazard A fire hazard A reactive hazard

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III or the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Chemical Name	<u>CAS#</u>	<u>% in Product</u>
Methyl ethyl ketone	000078-93-3	40-50
Acetone	000067-64-1	10-20
Methylene bisphenyl isocyanate (MDI)	000101-68-8	3-5
Polymethylene polyphenyl isocyanate	009016-87-9	15-25

STATE RIGHT-TO-KNOW: The following product components are cited on certain state list as mentioned.

Chemical Name	CAS#	LIST
Methyl ethyl ketone	000078-93-3	NJ2 NJ3 PA1 PA3
Acetone	000067-64-1	NJ1 NJ2 NJ3 PA1 PA3
Methylene bisphenyl isocyanate (MDI)	000101-68-8	NJ2 NJ3 PA1 PA3
Talc	014807-96-6	NJ3 PA1
Carbon black	001333-86-6	NJ3 PA1

NJ1=New Jersey Special Health Hazard Substance (present at greater than or equal to 0.1%).

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

NJ3-New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PAl-Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%). PA3-Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

Indicates a Trademark of Essex Specialty Products, Inc. * A subsidiary of The Dow Chemical Company

MANUFACTURER: Essex Specialty Products. Inc.

PRODUCT NAME: Belaseal@ 43532 Body Primer

PAGE 8 of 8 MSD#: 0502.00

SELECTED INTERNATIONAL REGULATIONS:

CANADIAN REGULATIONS: This product contains the following ingredients which are on Canada's Hazardous Ingredients List (WHMIS) in concentrations at or above the threshold.

Chemical Name CAS#

Methyl ethyl ketone 000078-93-3 Acetone 000067-64-1 Methylene bisphenyl isocyanate (MDI) 000101-68-8 Carbon black 001333-86-4

SECTION XVI - OTHER INFORMATION

None

The information herein is given in good faith, but no warranty, expressed or implied 1s made. Consult Essex Specialty Products, Inc. for further information.

> Indicates a Trademark of Essex Specialty Products. Inc. * A subsidiary of The Dow Chemical Company

* MATERIAL SAFETY DATA-SHEET

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER'S NAME:

Essex Specialty Products. Inc.*

ADDRESS:

1250 Harmon Road

Auburn Hills, MI 48326

EMERGENCY TELEPHONE NUMBER:

(810) 391-6300 / CHEMTREC: (800) 424-9300 TO BE USED ONLY IN

EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL. LEAK.

FIRE. EXPOSURE. OR ACCIDENT INVOLVING CHEMICALS.

TELEPHONE NUMBER FOR INFO:

(810) 391-6300 Mon./Fri. B AM-4 PM EST

PRODUCT NAME:

Betaseal® 58702 Urethane Adhesive

SYNONYM(S):

None

MSD NUMBER:

0434.04

EFFECTIVE DATE:

03-05-96

DATE PRINTED:

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

· · · · · · · · · · · · · · · · · · ·		
COMPONENTS	CAS #	AMOUNT (wt x)
Proprietary diphenylmethane diisocyanate (MDI) based urethane polymer *	Proprietary	•
Carbon black	001333-86-4	·
Toluene	000108-88-3	< 5 🔑
Phthalate esters	Proprietary	25-35
Clay	001332-58-7	-
* Free MDI - CAS# 101-68-8 = < 1%		

SECTION III - HAZARDS IDENTIFICATION

(See Section XI for toxicological data.)

02:1

EMERGENCY OVERVIEW

Black paste. Solvent odor. Combustible.

Indicates a Trademark of Essex Specialty Products, Inc. * A subsidiary of The Dow Chemical Company

MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 58702 Urethane Adhesive

PAGE 2 of 7 MSD#: 0434.04

POTENTIAL HEALTH EFFECTS

This section includes possible adverse effects which could occur if this material is not handled in the recommended manner.

EYES: May cause irritation or corneal injury due to mechanical action.

SKIN: Prolonged or repeated exposure may cause slight skin irritation. Material may stick to skin causing irritation upon removal. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. May stain skin.

INGESTION: Single dose oral toxicity is considered to be low. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

INHALATION: At room temperature, exposures to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause irritation. This material contains mineral and/or inorganic fillers. There is essentially no potential for inhalation exposure to these fillers incidental to industrial handling due to the physical state. Excessive exposure to solvent(s) may cause respiratory irritation and central nervous system depression. Signs and symptoms of central nervous system depression, in order of increasing exposure are headache, dizziness, drowsiness, and incoordination. Signs and symptoms of excessive exposure may be nausea and/or vomiting.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS

For the minor component, toluene. excessive exposure may cause irritation to upper respiratory tract. Signs and symptoms of excessive exposure may be central nervous system effects. Excessive exposure may cause neurologic signs and symptoms. Toluene has caused hearing loss in laboratory animals upon exposure to high concentrations. For the phthalate ester component, liver effects were observed in rats given high doses in their diet; no adverse effects were observed in repeated exposure inhalation studies in several animal species.

CANCER INFORMATION

Contains a phthalate ester which produced an increased incidence of leukemia in a 2-year animal feeding study: effects were not dose related. There were no carcinogenic effects observed in rats given 0.03 to 0.3% in their diet for 30 months. Contains toluene, which did not cause cancer in laboratory animals. For the minor component, MDI, lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

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 * A subsidiary of The Dow Chemical Company

MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 58702 Urethane Adhesive

PAGE 3 of 7 MSD#: 0434.04

TERATOLOGY (BIRTH DEFECTS)

Toluene has been toxic to the fetus in laboratory animals at doses toxic to the mother, and has caused birth defects in mice dosed orally but not by inhalation. The phthalate ester has caused birth defects in laboratory animals only at doses toxic to the mother.

REPRODUCTIVE EFFECTS

No relevant information found.

SECTION IV - FIRST-AID MEASURES

EYES: Flush eyes with plenty of water; mechanical effects only.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless

directed to do so by medical personnel.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If

breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

NOTE TO PHYSICIAN

No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

SECTION V - FIRE FIGHTING MEASURES

FLASH POINT: 105° F. METHOD USED: Setaflash

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam.

SPECIAL FIRE Fire fighters should wear self-contained

FIGHTING PROCEDURES: breathing apparatus.

UNUSUAL FIRE AND

EXPLOSION HAZARDS: None known.

SECTION VI - ACCIDENTAL RELEASE MEASURES

(See Section XV for Regulatory Information.)

STEPS TO BE TAKEN IF MATERIAL

Secure ignition sources. Cover and contain spill with absorbent material. Scoop material into container for disposal. Use non-sparking tools.

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 * A subsidiary of The Dow Chemical Company

MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 58702 Urethane Adhesive

PAGE 4 of 7 MSD#: 0434.04

SECTION VII - HANDLING AND STORAGE

HANDLING & STORAGE: Keep from heat, sparks and flame. Use appropriate

grounding equipment while handling this material.

Store indoors in tightly closed containers.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions with a high potential for exposure. handling procedures are such that there is only a low potential for exposure. less protection may be needed. Emergency conditions may require additional precautions.

> Provide general and/or local exhaust ventilation to ENGINEERING CONTROLS:

control airborne levels below the exposure

guidelines.

EYE/FACE PROTECTION: Use safety glasses. If there is potential for

exposure to particles which could cause mechanical

injury to the eye, wear chemical goggles.

Wear clean, long-sleeved, body-covering clothing. SKIN PROTECTION:

Use gloves impervious to this material.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the

exposure guideline. When respiratory protection is required, use an approved air-purifying or positivepressure respirator depending on the potential

airborne concentration

EXPOSURE GUIDELINES: Methylene bisphenyl isocyanate (MDI): ACGIH TLV is

0.005 ppm TWA and OSHA PEL is 0.02 Ceiling.

Toluene: ACGIH TLV is 50 ppm TWA, skin. OSHA PEL is

100 ppm TWA. 150 ppm STEL.

Although some of the fillers used in this product may have exposure guidelines, no exposure would be

expected under normal handling conditions because of

the physical state of the material.

A "skin" notation following the exposure guideline refers to the potential for dermal absorption of the material. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be

considered.

PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

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MANUFACTURER: Essex Specialty Products. Inc. PRODUCT NAME: Betaseal® 58702 Urethane Adhesive

PAGE 5 of 7 MSD#: 0434.04

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

VOC (LBS/GAL):

0.1863 EPA Method 24 Procedure B

SPECIFIC GRAVITY:

1.19 (+/-0.03)

SOLUBILITY IN WATER:

Insoluble

APPEARANCE AND ODOR:

Black paste: solvent odor

SECTION X - STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY: Will react slowly with atmospheric moisture.

HAZARDOUS

DECOMPOSITION PRODUCTS:

Carbon dioxide, carbon monoxide, smoke, fumes

HAZARDOUS POLYMERIZATION: Will not occur

SECTION XI - TOXICOLOGICAL INFORMATION

(See Section III for Potential Health Effect. For detailed toxicological data write or call The Dow Chemical Company.)

ACUTE

OIL Clade

Skin: The dermal LD50 has not been determined.

Ingestion:

Single dose oral LD50 has not been determined.

MUTAGENICITY:

For the phthalate ester component, in vitro

mutagenicity studies were negative. The majority and the most reliable of the many mutagenicity studies done on toluene, both in vitro (test tube) and in

animals, indicate it is not a mutagen.

SECTION XII - ECOLOGICAL INFORMATION

(For detailed ecological data, write or call The Dow Chemical Company.)

SECTION XIII - DISPOSAL CONSIDERATIONS

(See Section XV for Regulatory Information)

WASTE DISPOSAL METHOD: Dispose of in compliance with all applicable federal.

state/provincial and local statutes regarding the management.

use, handling, treatment, storage, disposal, and

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MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 58702 Urethane Adhesive

PAGE 6 of 7 MSD#: 0434.04

transportation of hazardous wastes. Customers having compliance questions should contact their local. state/provincial or federal environmental agency.

SECTION XIV - TRANSPORTATION INFORMATION

U.S. DOT CLASSIFICATION/DESCRIPTION: For DOT regulatory information, if required, consult transportation regulations or product shipping papers.

SECTION XV - REGULATORY INFORMATION

(Not meant to be all-inclusive--selected regulations represented.)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by OSHA Hazard Communication Standard 29CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA or SUPERFUND):

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

CHEMICAL NAME	<u>CAS#</u>	X IN PRODUCT	RQ (LBS)
Phthalate esters	Proprietary	25-35	1
Toluene	000108-88-3	< 5	1000

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:

An immediate health hazard A delayed health hazard

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III or the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Toluene CAS# % IN PRODUCT

CAS# % IN PRODUCT

CAS# % IN PRODUCT

MANUFACTURER: Essex Specialty Products, Inc. PRODUCT NAME: Betaseal® 58702 Urethane Adhesive

PAGE 7 of 7 MSD#: 0434.04

0.1.9

STATE RIGHT-TO-KNOW: The following product components are cited on certain state list as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS#	LIST
Carbon black	001333-86-4	NJ3 PA1
Toluene	000108-88-3	NJ1 NJ2 NJ3 PA1 PA3
Clay	001332-58-7	PAI

NJ1=New Jersey Special Health Hazard Substance (present at greater than or equal to 0.1%).

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PAl=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%). PA3-Pennsylvania Environmental Hazardous Substance (present at greater than or equal

CALIFORNIA PROP 65: This product contains a chemical(s) known to the State of California to cause reproductive toxicity.

The chemical(s) is/are: Toluene

<u>SELECTED INTERNATIONAL REGULATIONS:</u>

CANADIAN REGULATIONS: This product contains the following ingredients which are on Canada's Hazardous Ingredients List (WHMIS) in concentrations at or above the threshold.

CHEMICAL NAME	CAS#
Carbon black	001333-86-4
Methylene bisphenol isocyanate (MDI)	000101-68-8
Toluene	000108-88-3

SECTION XVI - OTHER INFORMATION

None

The information herein is given in good faith, but no warranty, expressed or implied Consult Essex Specialty Products. Inc. for further information.

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Page J

MATERIAL SAFETY DATA SHEET

FOR COATTNG, RESINS, AND RELATED MATERIALS

Date of Preparation- 08-29-96

Prepared by R. Smothers

Manufacturer: LILLY (NDUSTRIES, INC.

address : 235% Southwest 66th Terrace

Davie, Florida 33317

Telephone#: (305) 475-0150 Night: (305) 475-0150 Emergency# (305) 475-0150 Night: (800) 424-9300

SECTION T PRODUCT IDENTIFICATION

manufacturer's Code Edentification: 68~8107

Product Class: POLYESTER GRE KOTE

with a second control of the second control

Trude Nume: ORTHO BLACK GEL KOTE (68-8107)

YM1S Information: Health- 2* Flammability- 3
Reactivity- 2 Personal Protective Equipment- X

HAZARD INDEX: 4 Severe 3 Serious 2 Moderate 1 Slight 0 Least

* Chronic health hazard

hak your supervisor for specialized handling directions.

SECTION II HAZARDOUS INGREDIENTS

MICHAEL METHACKY LOTE:

CAS# 80~62~6

3 000 VAPOR PRESSURE: 29.00 MMHG @ 200 % HW WI

EXPOSURE LIMIT

100.00 PPM 100.00 PPM ACGIMITIV (TWA)
OSHO PEL (TWA)

STYPINE MONOMER

CAS# 100-42-5 O_{i}

T. BY WI 37,739 VAPOR PRESSURE: 9.50 MMHG @ 200

EXPOSIURE FIMAL.

50.00 PPM ACGIH HLV ((WA) -100.00 PPM OSHA PEL (IWA)

26, TARC Carcinogen.

. 1 - 1 - 1 - 1 - 1



MATERIAL SAFETY DATA SHEET

Page

AR 8107

ORTHO BEACK GER KOTE (68-8107)

this product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.

SECTION III PHYSICAL DATA

261.0 8 LOW" Boaling Range: Ha cita

Vapor Pressure: See Section II vapor bensity: Heavier Than Air

ryaporation Rate: Equal to Butyl Acetate

10,07 weight per Gallon: 40.87 s volarile by Weight:

Appearance: N/A

- par: N/A

SECTION IV FIRE AND EXPLOSION HAZARD DATA

rlammability classification: Class LC

88 0 Actual Flashpoint (CC)

Upper 1.1Explosion Level: Lowers

Lower Elammability Limit: N/A

HEAT PROTECTION PROCEDURES

configurers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture.

EXTINGUISHING MEDIA

use CO2 bry Chemical, or Foam extinguisher.

the National Fire Protection Association Class B extinguisher is designed

to extropoish tires originating from burning liquids.

SPECIAL LIME FLOREING PROCEDURES

water spray may be ineffective. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

UNDOUGL FIRE AND EXPLOSION HAZARD:

seep continues hightly closed. Isolate from heat, electrical equipment, spaces and open flame. Closed container may explode when exposed to estreme heat. On not apply to not surfaces. Never use welding or cutting torch or or near container (even empty) because product (even residue) may ignita explosively.

SEE DISCLAIMER ON REVERSE SIDE



MATERIAL SAFETY DATA SHEFT

3, Page

68-9107

URINO BLACK GEL KOTE (68-8107)

SECTION V HEALTH HAZARD DATA

Based on the presence of components (02) this product may cause coineal injury.

Based on the presence of components (02) this product may cause drying and dermatitis on repeated or prolonged exposure to the skin. Based on the presence of components (02) this product may cause skin jrritation.

based on the presence of components (0) this product may cause akin burns

based on the presence of components (02) this product is presumed to be moderately toxic

FIRST ATD

FIRE CONTACT: Flosh with Luke warm water for 15 minutes. Contact 3 physician immediately.

SKIN CONTACT: Flush wash with copious amounts of luke warm water. Remove contaminated clothing promptdy -- Contact a physician immediately.

INHALALIUM: Remove exposed individial to fresh air. Restore breathing Contact a physician immediately.

it required. Helstium - Binse mouth immediately. Give exposed individual 6 to 8 ounces (Neve: give anything by mouth to an unconscious person.) HOL induct vemiting unless advised by a physician. Contact a physician

enmedia Lety SECTION VT REACTIVITY DATA

COMPLIANS TO AVOID

Avoid exposure to sparks, open flame, hot surfaces, and all sources of hear and ramition.

may produce hazardous fumes when heated to decomposition as in welding. formes may contain carbon monoxide, carbon dioxide, and oxides of hitrogen.

INCOMPACEBLE (IN (Materials to Avoid)

Based on the presence of components (02) this product is incompatible with strong mineral acids, peroxides, and polymerization

this product is incompatible with strong acids.

HAZARDOUS POLYMERIZATION

Mary Coccum

STABILITY

this product is stable.

SEE DISCLAIMER ON REVERSE SIDE

P0 35MH

SBIBLSOOM ADDID

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88:80 966T/80/60



MATERIAL SAFETY DATA SHEET

68-8107

ORTHO BLACK GEL KOTE (68-8107)

SECTION VIT SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Stay upwind and away from spill unless wearing appropriate protective equipment. Stop and/or contain discharge if it may be done safely. Keep all sources of ignition away. Ventilate area of spill. Use non-sparking roots for cleanup. Cover with inert material to reduce fumes. Keep out of dearnes, sewers, or waterways. Contact fire authorities. Notify locat bealth and poliusion control agencies. Call spill response teams if large

WASTE DESPOSAL MUTHOD

DO NOT FILISH TO SEWER. WATERSHED, OR WATERWAY.

trispose of in accordance with local, state and federal regulations. Do not incinerate closed containers.

SECTION VIII SAFE HANDLING AND USE INFORMATION

PROTECTIVE TYPWEAR

avoid contact with eyes. Wear goggles it there is a likelihood of contact with eyes, eyewash stations and safety showers should be readily available in handling areas.

time mately eyewear with perforated sideshields.

RESPERATORY PROTECTION

In ofitions (a open aleas use (NIOSH/MSHA approved) mechanical filter respirator to remove solid airborne particles of overspray during Spray application. In restricted ventitation areas use (NIOSH/MSHA approved) chemical mechanical filters designed to remove a combination of particulate and gas and vapor. In confined areas use (NIOSH/MSHA approved) All line Lype respirators or hoods. Respiratory protection may also be necessary in any later manufacturing operations in which the product may become allborne in the form of vapor or dust.

VERLALLÜR

thse ventilation as required to control vapor concentrations. Avoid protonged or repeated breathing of vapors. If exposure exceeds TLV, use a NIOSM approved respirator to prevent overexposure.

Provide general dilution or local exhaust ventilation in volume and pattern to keep HV of the most hazardous ingredient in Section (I below acceptable limit, til in Section IV below stated limit, and to remove decomposition products during welding or flame outling on surfaces coated with this product.

DISCRETION ADVISED

firsty ladustries, too. takes no responsibility for determining what measures are required for personal protection in any specific application. The general information given should be used with discretion.



MATERIAL SAFELY DATA SHEET

Page

68-8107

-URINO BLACK GEL KOTE (68-810**7)** :

natural rubber, neoprene, buna N or mitrile. An apron should be worn to avoid Skin contact.

HYGIENIC PRACTICES

Wash hands thoroughly before eating and using washroom. Remove contaminated blothing immediately and do not wear again until it has been properly taundered.

SECTION IX SPECIAL PRECAUTIONS

HANDLING AND STORING PRECAUTIONS

keep product containers cool, dry, and away from sources of ignition. Use and store this product with adequate ventilation. Do NOT smoke in storage BURAS.

pursonnel should avoid inhalation of vapors. Personal contact with the product should be avoided. Should contact be made, remove saturated clothing and flush affected skin areas with water - Containers of this material may be hazardous when amptied. Since emptied containers retain ត្រាប់ការ៉ាប់ ខេត្តប្រជាព័ត្ន (vapor) ប្រើស៊ីប៉ីប៊ីប៊ី គឺតែd/or solid), all hazard precautions given in this sheet must be observed.

Section 313 Toxic Chemicals SECTION Y

this product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to Know Act of 1986 and of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material (* henotes percent parent metal contained in the preceding chemical compound):

Weight % CAS Number Clemical

3.000 80~62~6 METHYL METHACRYLATE

37,719 100-42-5 CITABLINE MOROMER

卫 电影车 打架 医毛术水子 医毛术比尔 化工程法 电压电 化水流电池 张此次说来,我小说是我们,我们的一个一个一个一个一个一个一个一个一个一个一个一个一个一个一

THE INFORMATION CONTAINED HEREIN IS INFORMATION RECEIVED TROM OUR RAW MATERIAL SUPPLIERS AND OTHER SOURCES AND ES BELLEVED TO BE RELEABLE. THIS DATA IS NOT TO BE TAKEN AS A WARPANTY OR REPRESENTATION FOR WHICH LILLY INDUSTRIES. THO. ASSUMES LEGAL RESPONSIBILITY.

LILL SEE DISCLAIMER, ON REVERSE SIDE CHERKERS FOR A CHERKER FOR THE CHERKER FOR

13024720125 28:20 9661/80/60



MAILEIAL SAFETY DATA SHEET FOR: SE6710

SEA RAY BOATS 100 Sea Ray Drive Merriti (sland) Fil 32952 ACTENTION OF LAURTE

SEE DISCLAIMER ON REVERSE SIDE

MATERIAL SAFETY DATA SHEET

RAABE CORPORATION N92 W14701 ANTHONY AVE. MENOMONEE FALLS, WI 53051-1630

INFORMATION TELEPHONE #: 414-255-9500

FOR CHEMICAL EMERGENCY SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CALL CHEMTREC - DAY OR NIGHT TELEPHONE #: 800-424-9300

MSDS #: 53

PREPARATION DATE: 03/12/91

REPLACES DATE: NEW MSDS

PREPARED BY: RMB

NO.257 P002

FRHUCINE

SECTION 1 - PRODUCT IDENTIFICATION

BOMAR

PAINT, CAMER CREAMITOUCH - UP BIL

RAABE PT.# 35319

50381202 CREAM

ACRYLIC ENAMEL TOUCH-UP PAINT

, 602. Bottle

SECTION II - HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS #	WT.% LEBS Than		OCCUPATIONAL KPOBURÉ LIMITS (TLY-STEL)	VAPOR PRESSURE many - 200	KNOWN OR Suspected Carcinode,	
SLIDON DIOXIDE	7831-88-9	0-8	10 mg/k/3	Total Duni	ao	NO	NO S
MINIERAL SPIRITS	64742-86-7	D-3	100 ppm	NO INFO	8.0	NO	A NOTE
PROPYLEME OLYCOL METHYL ETHER ACETATE	104-65-8	12-45	NONE EST.	NONE EST.	2.0	NO "	" NO
TYLENE ADDITABLE OF	1330-20-7	20-40	100 pp///	160 ppm	\$.1	NO	YES .
LIGHT AROMATIC SOLVENT NAPTHA	64742-95-6	0-10	50 ppm	NO NEO	10.0	NO '	NO H
ACRYLIC POLYMER	NONE	7-12	NOT HA	ZARDOUS	٥٥	NO	NO :
ALICYTY RESW	NO INFO	18-33	AOT HAZ	ZARDOUS	QÖ	NO	NO .
ALLIM NUM FLAKE	7420-008	0.5	IO ma/mJ	NO INFO	0.0	NO	YES
H-BUTYL ACETATE	120-86-4	0-1	160 PPM	200 parts	16,0	NO	NO
ET/FINADAQANIC PIGMENTS	NONE	0-22	NO INFO	NO INFO	Qo	DN.	NO.
MPERAL APIRITS	1052-11-0	0-5	100 PPM	NO INFO	26	NO	NO ;

THIS PRODUCT CONTAINS ONE OR MORE MATERIALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND THE COMMUNITY RIGHT-TO-KNOW ACTS OF 1888 AND OF 40 CFR 372

SECTION III - PHYSICAL DATA

BOILING RANGE: 248-396* F

VAPOR DENSITY: HEAVIER THAN AIR

SPECIFIC GRAVITY:

..9900-1,1827

13.1

EVAPORATION RATE: SLOWER THAN BUTYL ACETATE VOLATILE BY VOLUME: 50,2-78,7% OPOR: SOLVENT ODOR

APPEARANCE: OPAQUE LIQUID

BOLUBILITY: UNKNOWN

VOLATILE BY WEIGHT: 45.1770.0%

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: OBHA: FLAMMABLE LIQUID - CLASS IB FLASH POINT: 72" F (TAGUABUE CLOSED CUP)

그는 우리 학생 수는 그는 학교 등을 수 있고 하면 중요 한다.

LOWER EXPLOSIVE LIMIT: UPPER EXPLOSIVE LIMIT:

1.0% 10:0%

OT: OF FLAMMABLE LIQUID

XTINGUIBHING MEDIA: DRY CHEMICAL CARBON DIOXIDE FOAM

LINUSUAL. FIRE AND EXPLOSION HAZARDS: KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, SPARKS, AND OPEN FLAME, OSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. PRODUCT VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A DNG DISTANCE TO A SOURCE OF IGNITION AND FLASHBACK.

SPECIAL EIREFIGHTING PROCEDURES: FULL PROTECTIVE EQUIPMENT INCLUDING SELF-CONTAINED BREATHING APPARATUS TO OID INHALATION OF VAPORS SHOULD BE USED. WATER SPRAY SHOULD NOT BE USED EXCEPT TO KEEP DOWN VAPORS OR COOL CLOSED DISTAINERS TO PREVENT BUILD-UP OF PRESSURE. IF WATER IS USED, FOG NOZZLES ARE PREFERRED, WHEN FIGHTING A FIRE INVOLVING LUMINUM PASTE, DO NOT USE A WATER STREAM OR HALOGENATED EXTINGUISHING AGENTS.

SECTION V- HEALTH HAZARD DATA

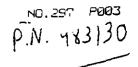
MARY FOUTES OF ENTRY: INHALATION DERMAL

EFFECT OF ACUTE OVEREXPOBURE: INHALATION: EXPOSURE TO HIGH CONCENTRATIONS OF VAPORS MAY CAUSE DIZZINESS . EATHING DIFFICULTY, HEADACHES OR RESPIRATORY IRRITATION. EXTREMELY HIGH CONCENTRATIONS MAY CAUSE DROWSINESS, GGERING, CONFUSION, UNCONSCIOUSNESS, COMA OF DEATH. HIGH CONCENTRATIONS OF VAPORS MAY BE IRRITATING TO THE ATIANDILLINGS. PROLONGED INHALATION OF DUSTS CONTAINING FREE SILICA MAY RESULT IN THE DEVELOPMENT OF A DISABLING DWARY (FIBROSIS (LUNG DISEASE) KNOWN AS SILICOSIS., SKIN. CONTACT: REPEATED AND PROLONGED CONTACT WITH THE SKIN. AUSEALLERGIC DERMATITIS, MAY CAUSE SKIN IRRITATION. EYE CONTACT: MAY CAUSE EYE IRRITATION. INGESTION: PERATELY TOXIC. MAY CAUSE STOMACH DISCOMFORT, NAUSEA, VOMITING, DIARRHEA, AND NARCOSIS.

ECTS OF CHRONIC OVEREXPOSURE: CHRONIC OVEREXPOSURE TO A COMPONENT OR COMPONENTS IN THIS MATERIAL HAS BEEN FOUND TO CAUSE THE FOLLOWING EFFECTS IN LABORATORY, NIMALS: KIDNEY DAMAGE, EYE DAMAGE, LIVER DAMAGE, ANEMIA PNIC OVEREXPOSURE TO A COMPONENT OR COMPONENTS IN THIS PRODUCT HAS BEEN SUGGESTED AS A CAUSE OF THE FOLLOWING CTS IN HUMANS: CARDIAC ABNORMALITIES. REPORTS HAVE AS. OCIATED PEPEATED AND PROLONGED OVEREXPOSURE TO MENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE.

MSDS #:53

PREPARATION DATE, 03/12/91



SECTION V- HEALTH HAZARD DATA

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: NONE GENERALLY RECOGNIZED.

EMERGENCY: AND FIRST AID PROCEDURES: INHALATION: OVEREXPOSUE... MOVE PERSON TO FRESH AIR. IF BREATHING STOPS, APPLY ARTIFICIAL RESPIRATION AND SEEK MEDICAL ATTENTION. EYE CONTACT: FLUSH WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES. SKIN CONTACT: WASH AFFECTED AREA THOROUGHLY WITH SCAP AND WATER. SEEK MEDICAL ATTENTION. REMOVE CONTAMINATED CLOTHING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.... INGESTION: SINCE THIS PRODUCT; MAY CONTAMINATERIALS WHICH CAN CAUSE LUNG DAMAGE IF ASPIRATED INTO THE LUNGS, THE DECISION WHETHER TO INDUCE VOMITING OR NOT, MUST BE MADE BY A PHYSICIAN AFTER CAREFUL CONSIDERATION OF ALL MATERIALS INGESTED.

SECTION VI - REACTIVITY DATA

STABILITY: THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR UNDER NORMAL CONDITIONS.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY PRODUCE CARBON DIOXIDE, CARBON MONOXIDE, AND UNIDENTIFIABLE ORGANIC MATERIALS.

CONDITIONS TO AVOID: AVOID CONTACT WITH HEAT, SPARKS, AND OPEN FLAME.

INCOMPATIBILITY: STRONG OXIDIZING AGENTS. ALUMINUM FLAKE CAN REACT VIOLENTLY WITH HALOGENATED HYDROCARBONS INCLUDING HALOGENATED FIRE EXTINGUISHING AGENTS. ALUMINUM PLAKE CAN AL TO REACT WITH SOME ACIDS, CAUSTIC SOLUTIONS.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: REMOVE ALL SOURCES OF IGNITION. AVOID HEAT SPARKS, FLAMES, AND ANYTHING WHICH COULD CAUSE FIRE. VENTILATE AREA OF SPILL AND ADJACENT LOW-LYING AREAS. AVOID BREATHING SOLVENT VAPORS. REMOVE WITH INERT ABSORBENT MATERIALS AND NON-SPARKING TOOLS.

WASTE DISPOSAL METHOD: PLACE IN CLOSED CONTAINERS. DISPOSE OF PRODUCT IN ACCORDANCE WITH LOCAL, COUNTY STATE, AND FEDERAL REGULATIONS.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: IF WORKPLACE EXPOSURE LIMITS ARE EXCEEDED FOR ANY COMPONENT (SEE SECTION 2 FOR HAZARDOUS COMPONENTS AND EXPOSURE LIMITS), A NIOSH/OSHA APPROVED RESPIRATOR SUITABLE FOR COMPONENTS LISTED IS THE RECOMMENDED.

ENTILATION: SUFFICIENT VENTILATION, IN VOLUME AND PATTERN, SHOULD BE PROVIDED TO KEEP AIR CONTAMINATION BELOW:
URRENT APPLICABLE OSHA PERMISSIBLE EXPOSURE LIMIT OR ACGINS TLV LIMIT.

PROTECTIVE GLOVES: CHEMICAL RESISTAN PLASTIC OF RUBBER GLOVES ARE RECOMMENDED FOR PROLONGED OF REPEATED OF TAXABLE PROLONGED OF TAXA

METPROTECTION: CHEMICAL GOGGLES WITH SIDE SHIELDS OR FACE SHIELD THE RECOMMENDED IF CONTACT WITH EYES IS LIKELY 💯 🧺

OTHER PROTECTIVE EQUIPMENT: APPROPRIATE IMPERVIOUS CLOTHING IS RECOMMENDED IF PROLONGED OR REPEATED CONTACT

TYGIENIC PRACTICES: WASH HANDS BEFORE EATING OR SMOKING, SMOKE IN DESIGNATED AREAS ONLY.

SECTION IX - SPEC AL PRECAUTIONS

والمراجع الأرام والمراجع المراجع المراجع المراجع المراجع المراجع المراجع والمراجع والمراجع المراجع والمراجع والم

ECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN A COOL DRY AREA WITH VENTILATION SUITABLE FOR STORING MATERIALS SHOWN IN SECTION II. STORE IN A COOL PLACE AWAY FROM DIRECT SUNLIGHT OR ANY SOURCE OF IGNITION! DO NOT STORE AT TEMPERATURES ABOVE 120 DEGREES F.

THE PRECAUTIONS: INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS OF THIS PRODUCT CAN BE HARNEY LOOK FATAL.

SECTION X - HMIS RATINGS

HEALTH: 2 FLAMMABILITY: -3 REACTIVITY: 0 PERSONAL PROTECTION: 6 G

SECTION XI - DISCLAIMER

THE NFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE, HOWEVER, SINCE THE CONDITIONS OF HANDLING AND USE AREIBEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY USE OF THIS IMTERIAL ITS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL APPLICABLE FEDERAL STATE AND LOCAL LAWS AND REGULATIONS,

ati ⊃44

JAN-27-1997 11:18 FROM AIM SUPPLY CO. 175.15.1004217 9140745320060579 P.02

LOCTITE CORPORATION

1001 TROUT BROOK CROSSING ROCKY HILL, CT 06067-3910 EMERGENCY PHONE: (860) 571-5100

ISSUED

ISSUED 1/27/97 9:16:25 FAX: (850) 571-5465

MATERIAL SAFETY DATA SHEET

Page 1 of

CLEANER, PVC KLEAN N-PRIME

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

. 88 OZ CAN

Product Name: Item No. roduct Type:

Permatex(R) Klean 'N Prime(TM) Activator

24163

Aerosol accelerator

COMPOSITION, INFORMATION ON INGREDIENTS

ngredients

CAS No.

%

CETONE

67-64-1 7**5-28-**5

75-80 20-25

1SOBUTANE 2-Ethylhexanoic acid rgano-copper compound rialky/ammonium Carboxylate

149-57-5 22221-10-9 58823-74-8

0.1-1 0.1 - 10.1-1

Ingredients which have exposure limits

posure Limits (TWA) ∏ngredienīs

ACGIH (TLV)

OSHA (PEL)

OTHER

RCETONE

None

gang-copper compound

750 ppm TWA 750 ppm TWA 1780 mg/m3 1800 mg/m3 Cu 0.2mg/m3fume Cu 0.1mg/m3 Cu 1 mg/m3 dust Cu 1 mg/m3 dust

None

posure Limits (STEL) gradients

ACGIH (TLV)

OSHA (PEL)

ACETONE

1000 ppm

1000 ppm

2380 mg/m3

2400 mg/m3

HAZARDS IDENTIFICATION

Taxicity:

Harmful if inhaled or swallowed.
Possible eye and respiratory irritant.
Narcotic at high concentrations.
Prolonged inhalation may cause headaches.
Moderately toxic by ingestion
Liquid may defat skin.
Inhalation ingestion souther.

Paimary Routes of Entry: gns and symptoms falxposure:

Înhalation, ingestion, contact.

Vapors irritate eyes, nose and throat. Liquid is an eye irritant and may irritate skin.

Existing Conditions

Expansion Conditions

None known ·

Ingredients

Literature Referenced Target Organ and Other Health Effects

Carcinogen NTP IARC OSHA

BLO CNS IRR CAR CNS LUN IRR

NO NO NO

ETONE DBUTANE Ethylhexanoic acid

200 NO NO NO NO.

Organo-copper compound Trialkylammonium Carboxylate

No Data No Data

NO NO NO NO NO NO

Appreviations

D Blood

Central nervous system

CAR Cardiac IRR Irritant

<u> FIRST AID MEASURES</u>

estion:

al'ation:

n Contact:

· Contact:

Give water to dilute. Do not induce vomiting. Keep individual calm. Obtain medical attention. Remove to fresh air. If symptoms persist, obtain medical attention.

Wash with soap and water.

Flush with water for at least 15 minutes. Obtain

medical attention.

JAN-27-1997 11:19 FROM AIM SUPPLY CO. 9140745320060579 P.03

OCTITE CORPORATION

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TO

MATERIAL SAFETY DATA SHEET

Page 2 of 3 ___

duct Name; m No.:

Permatex(R) Klean 'N Prime(TM) Activator 24163

FIRE FIGHTING MEASURES

sh Paint: Reproximately - (0000)
Reproximately - (0000)
Repromeded
Extinguishing Agents: Carbon dioxide, foam, dry
Razardous Products formed
by Fire or Therma! Decomp Irritating organic vapors
Integral Fire or
Explosion Hazards: Cans may burst in fires.

Approximately -4-F(Base) Method: Tag Closed Cup

Carbon dioxide, foam, dry chemical

Explosive Limits: by volume in air)Lower

Acetone: 2.5% Isobutane: 1.8 Acetone: 13% 1.8% Isobutane: 8.4%

ACCIDENTAL RELEASE MEASURES

to be taken in case spill or leak:

y volume in air)Upper

Avoid flame and sparks. Maintain adequate ventilation. Soak up in an inert absorbent and store in a closed container until disposal.

HANDLING AND STORAGE

afe Storage: Contiact Loctite Customer are:

Store away from flame and sparks and below 120F Service 1-800-243-4874 for shelf Life information) Avoid prolonged breathing of fumes. Avoid skin or eye contact. Do not use near heat, sparks, or open flame.

EXPOSURE CONTROLS, PERSONAL PROTECTION

Safety glasses or goggles. Rubber or plastic gloves. Sufficient to maintain vapor concentration

See Section 2 for Exposure Limits.

PHYSICAL AND CHEMICAL PROPERTIES

arance:

əlişling Point:

en<u>t</u>illation:

ƙi/na

Green liquid (Base only) Acetone 133 F (Base only) Does not apply

Miscible 0.791 (Base only)

dibility in Water:
selific Gravity
selific Gravity
compound
(EPA) Method 24)

99.48%; 787 grams per liter (Base only) Approximately 172 mm Hg at 58°F (Base only) Not available

ProBresure:
proBresure:
proBressity:
proBres

1.9 (Base only)

STABILITY AND REACTIVITY

apiljity: zandous Polymerization: 104

·Stable was shown not Will not occur

mpatibility: rdous Decomposition

Strong oxidizers, peroxides

ducts (non-thermal):

TOXICOLOGICAL INFORMATION

See Section 3.

ECOLOGICAL INFORMATION

No deta available

LOCTITE CORPORATION

1001 TROUT BROOK CROSSING ROCKY HILL, CT 06067-3910 1/27/97 9:16:25 571-5465 ISSUED AUCKY HILL, CT 06067-3910 EMERGENCY PHONE: (860) 571-5100 FAX: (860)

MATERIAL SAFETY DATA SHEET

Page 3 of

.uct Name: Memin No.:

DOT

Permatex(R) Klean 'N Prime(TM) Activator 24163

DISPOSAL CONSIDERATIONS

Recommended methods of isposal:

Use disposal service licensed to handle flammable aerosols.

Hazardous Waste Number

D001 - Hazardous waste per 40CFR 261.21

TRANSPORT INFORMATION

Domestic Ground Transport Proper Shipping Name: Hazard Class or

Consumer Commodity

Division: Identification Number: Marine Pollutant:

ORM-D None None

Proper Shipping Name: Class or Division: UN or ID Number:

Aerosols, flammable, n.o.s. Division 2.1 UN 1950

REGULATORY INFORMATION

Proposition 65:

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive

harm.

OTHER INFORMATION

Estimated NFPA(R) Code: saith Hazard: ire Hazard: Reactivity Hazard: Specific Hazard:

2 ũ Does not apply

Z

imated HMIS(R) Code: Healt/fi Hazard: Flammability Hazard: Reactivity Hazards: Personal Protection:

ŭ See Section 8.

NFPA is a registered HMIS is a registered trademark of the National Fire Protection Assn. trademark of the National Paint and Coatings Assn.

pared By: ie: bany: 24hr.) Phone:

Stephen Repetto Research Chemist, Environmental Health & Safety Loctite Corp., 1001 Tr Br Cr, Rocky Hill CT 06067 (860) 571-5100
January 22, 1996 Revision: 0004

TOTAL P 04

25-110-101923/ 1001 TROUT BROOK CROSSING ROCKY HILL, CT 06067-3910 EMERGENCY PHONE: (860) 571-5100 8/18/97 16:50:06 ISSUED FAX: (860) 571-5465 MATERIAL SAFETY DATA SHEET Page 1 of 3 Dml

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Item No.: Product Type:

Lock Nuts(TM) Removable Threadlocker 81788

Anaerobic

COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients	CAS No.	*
Polyglycol dimethacrylate Polyglycol oleate SACCHARIN CUMENE HYDROPEROXIDE* Propylene glycol	25852-47-5 9004-96-0 81-07-2 80-15-9 57-55-6	60-65 25-30 3-5 1-3 1-3
SILĨĆA, AMŎRPHOUS, FUMED, CRYSTALLINE-FREE N,N-Dialkyltoluidines TITANIUM DIOXIDE	112945-52-5 613-48-9 13463-67-7	1-3 0.1-1 0.1-0.5

This component is listed as a SARA Section 313 Toxic Chemical.

Ingredients which have exposure limits

Exposure Limits (TWA)	ACGIH	OSHA	OTHER
Ingredients	(TLV)	(PEL)	
SILICA, AMORPHOUS, FUMED, CRYSTALLINE-FREE	10 mg/m3 TWA	6 mg/m3 TWA	3 mg/m3 TWA
TITANIUM DIOXIDE	10 mg/m3 dust	15 mg/m3 dust 5 mg/m3 resp	resp. dust None
Exposure Limits (STEL)	ACGIH	OSHA	
Ingredients	(TLV)	(PEL)	

3. HAZARDS IDENTIFICATION

Toxicity:

Mild eye irritant. Propylene glycol is a mild skin irritant.

Eye, skin contact.

Primary Routes of Entry: Signs and symptoms of Exposure: May cause dermatitis on prolonged contact in sensitive individuals.

Existing Conditions
Aggravated by Exposure: Propylene glycol: dermatitis.

Ingredients	Literature Referenced Target Organ and Other Health Effects		cinog IARC	en OSHA
Polyglycol dimethacryla Polyglycol oleate SACCHARIN CUMENE HYDROPEROXIDE Propylene glycol SILICA, AMORPHOUS, FUME	No Data ALG CNS COR TRR MUT	NO NO YES NO NO	NO NO 2B NO NO	NO NO NO NO
CRYSTALLINE-FREE N,N-Dialkyltoluidines TITANIUM DIOXIDE	NUI No Data AC4 IRR NUI	NO NO NO	N/A NO NO	NO NO NO

Abbreviations

N/A Not Applicable
AC4 ACGIH-Unclassifiable as human carc.
CNS Central nervous system
IRR Irritant
NUI Nuisance dust

2B Possibly carcinogenic to humans ALG Allergen COR Corrosive MUT Mutagen

LOCTITE CORPORATION

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8/18/97 16:50:06 FAX: (860) 571-5465

ISSUED

MATERIAL SAFETY DATA SHEET

Page 2 of 3

Product Name: Item No.:

Lock Nuts(TM) Removable Threadlocker 81788

FIRST AID MEASURES

Ingestion:

Inhalation: Skin Contact: Eye Contact: Do not induce vomiting. Keep individue Obtain medical attention. Does not apply. Wash thoroughly with soap and water. Flush at least 15 minutes with water, medical attention. Keep individual calm.

Obtain

FIRE FIGHTING MEASURES

Flash Point: Recommended Extinguishing Agents: Special Firefighting Procedures:

Hazardous Products formed
by Fire or Thermal Decomp Irritating organic vapors; oxides of carbon.
Unusual Fire or

Explosion Hazards:

More than 200'F Method: Tag Closed Cup

Carbon dioxide, foam, dry chemical.

Not available

None

Explosive Limits: (% by volume in air)Lower (% by volume in air)Upper Propylene glycol: 2.6% Propylene glycol: 12.5%

ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak:

Soak up in an inert absorbant. Store in filled, closed container until disposal. Store in a partly

7. HANDLING AND STORAGE

Safe Storage: (Contact Loctite Customer Handling: Store below 100'F Service 1-800-243-4874 for shelf Life information) Avoid prolonged skin contact. Keep away from eyes.

EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Skin: Ventilation: Respiratory

Safety glasses or goggles, Neoprene, rubber, or butyl rubber gloves. Does not apply Not available

See Section 2 for Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Odor: Boiling Point: pH: Solubility in Water: Specific Gravity
Volatile Organic Compound
(EPA Method 24)
Vapor Pressure:
Vapor Density: Evaporation Rate (Ether = 1)

Blue liquid Mild
More than 300 F
Does not apply
Sight 1.1 at 75 F

13.3%; 146 grams per liter Less than 5mm at 80 F Not available

Not available

STABILITY AND REACTIVITY

Stability: Hazardous Polymerization: Incompatibility:

Conditions to Avoid: Hazardous Decomposition Products (non-thermal):

Stable Will not occur

Strong oxidizers, free radical initiators, inert gases. Not available

None

LOCTITE CORPORATION

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MATERIAL SAFETY DATA SHEET

3 of 3 Page

Product Name: Item No.:

Lock Nuts(TM) Removable Threadlocker 81788

TOXICOLOGICAL INFORMATION

Oral LD50 more than 10000 mg/kg. Dermal LD50 more than 5000 mg/kg.

ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal: EPA Hazardous Waste Number

Incinerate following EPA and local regulations.

NH - Not a RCRA Hazardous Waste Material

14. TRANSPORTATION INFORMATION

DOT (49 CFR 172)
Domestic Ground Transport
Proper Shipping Name:
Hazard Class or Division: Identification Number: Marine Pollutant:

Unrestricted Unrestricted

None

IATA Proper Shipping Name: Class or Division: UN or ID Number:

Unrestricted Unrestricted None

15. REGULATORY INFORMATION

CA Proposition 65:

This product contains Saccharin. No prop65 hazard warning is necessary if this product is used as reasonably anticipated.

OTHER INFORMATION

Estimated NFPA(R) Code: Health Hazard: Fire Hazard: Reactivity Hazard: Specific Hazard:

1 Does not apply

Estimated HMIS(R) Code: Health Hazard: Flammability Hazard: Reactivity Hazards: Dersonal Protection:

1* See Section 8.

Appeals of the action and reset

NFPA is a registered HMIS is a registered

trademark of the National Fire Protection Assn. trademark of the National Paint and Coatings Assn.

Prepared By: Title: Company:

(24hr.) Phone: Revision Date:

Stephen Repetto
Research Chemist, Health and Safety
Loctite Corporation
1001 Trout Brook Crossing, Rocky Hill CT 06067
(860) 571-5100
April 15, 1997 Revision: 0031



North American Group

1001 Trout Brook Crossing Rocky Hill, Connecticut 06067 Telephone: (203) 571-5100 Fax: (203) 571-5485

TO:

SELINA CANTELOU

FROM:

Mary

Coffey

TELEPHONE:

4072591525

DATE:

8/18/97

RE:

MSDS(S):

81788

PAGES:

4 (ALL INCLUSIVE)

FAX:

914079567533

STARBRITE

P.02/03

OSHA 174, Sept. 1985

10.30

Material Safety Data Sheet-May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor OS (Compational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072

IDENTITY (As Used on Label and List) STAR BRITE SILTON	JEP CEPAT Aken	Note: Blank en	ces are not permitte	d. If any kem is no	x applicable, or no
Section 1 Product #82101		- 401//405	of 12 washing and 12	· · · · · · · · · · · · · · · · · · ·	ed to indicate that,
· Water a strain.	C1021U2,021U3	France T-	82123 \82180 phone Number		
STAR BRITE		(800) 4			
Address (Number, Street, City, State, and ZIP C	ode)		ber for Information		
4041 S.W. 47 Avenue	· -	5	37-6280		
Th Yan 3-13-13		Date Prepared			
Ft. Lauderdale, FL 33314			er_6, 1996	ı	
		. Signature of Pre			
Post - M. J. I.		Jeff Ti∈	ger		<u> </u>
Section II Hazardous Ingredients/	identity informat	ion .		18 ± 9 =	
Hazardous Components (Specific Chemical Iden	tity: Common Name(s	i)) OSHA PEL	ACGIH TLV	Other Limits Flecom/liende	
Methyltriacetoxysilane CAS No. O	04253343				
Ethyltriacetoxysilane CAS No. 0	17689779				
Silica CAS No. CC	0763 1869			TLY IO MG/M	3 9
NON HAZARDOUS INCREDIENT: Polydin	methysilocene				
				·	85
	<u> </u>	4	·		
ection III — Physical/Chemical Chara		Specific Gravity (H			
ection III — Physical/Chemical Chara-	cteristics N/A	Specific Gravity (Hz	O ~ 1)		1.04 8.6
ection III — Physical/Chemical Chara	N/A	Specific Gravity (H ₂	(O ~ 1)		
ection III — Physical/Chemical Chara-	N/A <5 tun	Melting Point	O ~ 1)		1.04 8.6 N/A
ection III — Physical/Chemical Chara- oving Point apor Pressure (mm Hg.) apor Density (AIR = 1)	N/A	Melting Point Evaporation Rate	O ~ 1)		
ection III — Physical/Chemical Chara- oi/ang Point apor Pressure (rom Hg.) apor Density (AIR = 1)	N/A <5 tun	Melting Point	(O ~ 1)		
ection III — Physical/Chemical Chara- orang Point apor Pressure (rom Hg.) apor Density (AIR = 1) sublity in Water <0.17	N/A <5 tun	Mailing Point Evaporation Flate (ectier 1)	O ~ 1)		N/A
ection III — Physical/Chemical Chara- oi/ang Point apor Pressure (rom Hg.) apor Density (AIR = 1) Aubility in Water <0.17 pearance and Odor	N/A <5 tun	Melting Point Evaporation Rate	O ~ 1)		
ection III — Physical/Chemical Charactering Point apor Pressure (mm Hg.) apor Density (AIR = 1) sublity in Water <0.17 pearance and Odor cetic acid-Like paste	N/A <5 tich	Mailing Point Evaporation Flate (ectier 1)	(O ~ 1)		N/A
ection III — Physical/Chemical Charactering Point apor Pressure (mm Hg.) apor Density (AIR = 1) subility in Water <0.17 pearance and Odor cetic acid-like paste sction IV — Fire and Explosion Hazan	N/A <5 tich	Melting Point Evaporation Rate (ether 1) V.O.C.	O ~ 1)		N/A (58
ection III — Physical/Chemical Charactering Point apor Pressure (mm Hg.) apor Density (AIR = 1) substity in Water <0.17 pearance and Odor cetic acid-like paste action IV — Fire and Explosion Hazan sh Point (Method Used) >212°F/100°C Open cur	N/A <5 tich	Melting Point Evaporation Rate (ether 1) V.O.C.	O ~ 1)	LEL	
ection III — Physical/Chemical Charactering Point apor Pressure (mm Hg.) apor Density (AIR = 1) subsity in Water <0.17 pearance and Odor cetic acid-like paste action IV — Fire and Explosion Hazan sh Point (Method Used) >212°F/100°C Open cup inguishing Media	N/A <5 mm N/A rd Data	Melting Point Evaporation Rate (ether 1) V.O.C.	(O ~ 1)		N/A (58
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STITOOU GTO	kide, carbon d	ioxide	, and traces of i	ncompletely burne	d carbon produ	cts.	
Hazardous Polymerization	May Occur		Conditions to Avoid				
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Section VI	Health Hazard		•				
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Supplemental Services

PROPERTY CONTRACTOR CO

MATERIAL SAFETY DATA SHEET

T00207 1 00

1084912 PAINT, SpRAY ROYAL BLUE "GREAT DAY"

EMERGENCY TELEPHONE NO.

(216) 566-2917

NUFACTURER'S NAME SHERWIN-WILLIAMS DIVERSIFIED BRANDS, INC. 636 E. 40th Sc.

Holland, MI 49423

DATE OF PREPARATION 10-JUL-97

INFORMATION TELEPHONE NO.

(616) 392-7811

Section I -- PRODUCT IDENTIFICATION PRODUCT NUMBER HMIS CODES Health. I00207 Flammability 4 Reactivity 0

PRODUCT NAME

207 GD ROYAL BLUE

PRODUCT CLASS

Aerosol Specialty Product

Section II -- HAZARDOUS INGREDIENTS INGREDIENT ACGIH OSHA CAS No. TLV PEL UNITS V.P. % by WT 1000-PPM 1 760.00 74-98-6 Butane 13 800 800 PPM 760.00 106-97-8 4 100 100 PPM STEL 125 125 PPM 21 100 100 PPM STEL 150 150 PPM 36 750 750 PPM STEL 1000 1000 PPM ylbenzene 7.10 100-41-4 lene. 5.90 1330-20-7 cetone. 67-64-1

Section III -- PHYSICAL DATA

PRODUCT WEIGHT -- 6.14 lb./gal. EVAPORATION RATE -- Faster than Ether SPECIFIC GRAVITY -- 0.74 VAPOR DENSITY -- Heavier than Air BOILING POINT -- <0 -292 F MELTING POINT -- N.A. VOLATILE VOLUME -- 92 & SOLUBILITY IN WATER -- N.A. VOLATILE WEIGHT -- 52.24 * (less Federally Exempt Solvents) HMIS ~- 2 4 0

Section IV -- FIRE AND EXPLOSION HAZARD DATA

ASH POINT LEL Propellant < 0 F 1.0 12.8 EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

Page Subb

t-rom: 10; 9W1407-452-3508 IOO207 Date: //10/07 Time 109 24 ha

page 2

UNUSUAL FIRE AND EXPLOSION HAZARDS

Isolate from heat, electrical equipment, sparks, and open flame. Closed intainers 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 modical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water apray 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 -- HEALTH HAZARD DATA

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

A 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.

EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing.

Keep Warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clotning and launder before re-use.

If, in EYES: Flush eyes with large amounts of water for 15 minutes.

Get medical attention.

If SWALLOWED: Never give anything by mouth to an unconscious person.

DO NOT INDUCE VOMITING. Give conscious patient several glasses of water. Seek medical attention.

RONIC Health Hazards

No ingredient in this product is an IARC, NTF or OSHA listed carcinogen. Prolonged overexposure to solvent ingredients in Section II may cause the section of the liver, urinary and reproductive systems.

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

Section VI -- REACTIVITY DATA

STABILITY -- Stable CONDITIONS TO AVOID NODE known.
TO MEATIBILITY None known.

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100207

HAZARDOUS DECOMPOSITION PRODUCTS

By rire: Carbon Dioxide, Carbon Monoxide

ARDOUS POLYMERIZATION

Will not occur

Section VII -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED 🕟 Remove all mources of ignition. Ventitate and remove with inert absorbent.

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section VIII -- PROTECTION INFORMATION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray ist. Avoid contact with skin and eyes. Wash hands after using. ENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to paterials in Section II is maintained below applicable exposure limits. efer to OSHA Standards 1910.94, 1910.107, 1910.108. ESPIRATORY PROTECTION

Tripersonal exposure cannot be controlled below applicable limits by e-liation, wear a properly fitted organic vapor/particulate respirator oved by NIOSH/MSHA for protection against materials in Section II. TECTIVE GLOVES

None required for normal application of derosol products where minimal kin contact is expected. For long or repeated contact, wear chemical esistant gloves. EYE PROTECTION

Wear safety spectacies with unperforated sideshields.

Section IX -- PRECAUTIONS

OL'STORAGE CATEGORY

LA:

ECAUTIONS TO BE TAKEN IN HANDLING AND STORING Reap away from heat, sparks, and open flame. Vapors will accumulate madily and may ignite explosively.

During use and until all vapors are gone: Keep area ventilated - Do not oke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.
[Consult NFPA Code. Use approved Bonding and Grounding procedures. Contents under pressure. Do not puncture, incinerate, or expose to

temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take ompally. Keep out of the reach of children. TER PRECAUTIONS

undentional misuse by deliberately concentrating and inhaling the ncents can be harmful or fatal.

I00207 page 4 Section X -- OTHER REGULATORY INFORMATION VA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION CAS No. CHEMICAL/COMPOUND * by WT % Element 100-41-4 Ethylbenzene Markethalland 1330-20-7 Xylene. 21

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to this product as currently formulated, t is based on the information available at this time. Addition of ducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are side our control, we make no warranties, express or implied, and assume liability in connection with any use of this information.

SPECIFIC GRAVITY -- 0.81

BOILING POINT -- 222-416 F

VOLATILE VOLUME -- 85 & QSOLUBILITY IN WATER -- N.A.

VOC (Theoretical) -- 5.47 lb. 904 656 gm. (less Federally Exempt Solvents)

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FLASH POINT LEL UEL 95 F PMCC 0.9 7.0

LAMMABILITY CLASSIFICATION

RED LABEL -- Flammable, Flash below 100 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 -- HEALTH HAZARD DATA

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.

EDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

EMERGENCY AND FIRST AID PROCEDURES

If INHALED: If affected, remove from exposure. Restore breathing.

Keep warm and quiet.

If on SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before re-use.

If in EYES: Flush eyes with large amounts of water for 15 minutes.

Get medical attention.

If SWALLOWED: Never give anything by mouth to an unconscious person.

DO NOT INDUCE VOMITING. Give conscious patient

several glasses of water. Seek medical attention.

HRONIC Health Hazards

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.
Prolonged overexposure to solvent ingredients in Section II may cause
dwerse effects to the liver, urinary, cardiovascular and reproductive
vatems:

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

Section VI -- REACTIVITY DATA

CABILITY -- Stable NOITIONS TO AVOID None known.

INCOMPATIBILITY

None known.

AZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

ARDOUS POLYMERIZATION

Will not occur

Section VII -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Remove all sources of ignition. Ventilate and remove with inert absorbent.

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Waste must be tested for ignitability to determine the applicable EPA nazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section VIII -- PROTECTION INFORMATION

PRECAUTIONS TO BE TAKEN IN USE

Use only with adequate ventilation. Avoid breathing vapor and spray hist. Avoid contact with skin and eyes. Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section II) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section II, the applicable limits for nuisance dusts are ACGIH TLV 10 mg./m3 (total dust), 3 mg./m3 (respirable fraction), OSHA PEL mg./m3 (total dust), 5 mg./m3 (respirable fraction).

NOITALITY...

Local exhaust preferable. General exhaust acceptable if the exposure to mucerials in Section II is maintained below applicable exposure limits. efer to OSHA Standards 1910.94, 1910.107, 1910.108. ESPIRATORY PROTECTION

If personal exposure cannot be controlled below applicable limits by rentilation, wear a properly fitted organic vapor/particulate respirator pproved by NIOSH/MSHA for protection against materials in Section II.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, nderlying paint, or the abrasive.

ROTECTIVE GLOVES

Wear gloves which are recommended by glove supplier for protection against materials in Section II.

YE PROTECTION

Wear safety spectacles with unperforated sideshields.

Section IX -- PRECAUTIONS

OL STORAGE CATEGORY

1C

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Contents are FLAMMABLE. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

OTHER PRECAUTIONS

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Section X -- OTHER REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

CAS No. CHEMICAL/COMPOUND

% by WT % Element

108-88-3 Toluene.

3

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are butside our control, we make no warranties, express or implied, and assume to liability in connection with any use of this information.

Manufacturer: Star brite

4041 S. W. 47 Avenue

Emergency Phone: Information Phone:

1-800-424-9300 1-954-587-8280

09607

Ft. Lauderdale, FL 33314

Contact:

Jeff Tieger

Date: August 29, 1997

SECTION I - GENERAL INFORMATION

PRODUCT NAME: Star brite Silicone Sealant

PRODUCT NO: 82101, 82102, 82103, 82121,82122, 82123, 82182 - 24分

PROPER SHIPPING NAME: None D.O.T. HAZARD NAME (49.CFR 172.101): None

RCRA HAZARD CLASS (40 CFR 261) (IF DISCARDED): None E.P.A. PRIORITY POLLUTANTS (40 CFR 122.53) None

NFPA = NATIONAL FIRE PROTECTION ASSOCIATION - 704

HEALTH (NFPA): 1 FLAMMABILITY (NFPA): 1

REACTIVITY (NFPA): 0

GENERIC DESCRIPTION: SILICONE

SECTION II - HAZARDOUS INGREDIENTS DEFINED IN 29 CFR 1910.1200 (CARCINOGENS DEFINED WITH AN ASTERISK*)

CAS#

004253943

SILANE

017689779

007631869

INGREDIENT

CAS NO: MIXTURE

METHYLTRACETOXY-

ETHYLTRIACETOXY-

AMORPHOUS

SILANE

SILICA

T(%)

2

2

11

EXPOSURE

LIMITS

SEE COMMENT BELOW

SEE COMMENT BELOW

OSHA PELA: TWA 6MG/M3: ACGIH

TLV: TWA 10 MG/M3

TOTAL DUST

OMMENT:

OBSERVE LIMITS FOR ACETIC ACID FORMED DURING CURING ON EXPOSURE TO WATER OR

HUMID AIR.

SAH PEL:

TWA 10 PPM. ACGIH TLV: TWA 10 PPM, STEL 15 PPM.

SECTION III - EFFECTS OF OVEREXPOSURE

EYES: SKIN:

DIRECT CONTACT IRRITATES SLIGHTLY TO MODERATELY WITH REDNESS AND SWELLING.

A SINGLE SHORT EXPOSURE (LESS THAN 24 HOURS) MAY IRRITATE. REPEATED.

NHALATION: ORAL:

PROLONGED CONTACT (24 TO 48 HOURS) MAY IRRITATE MODERATELY.

VAPOR OVEREXPOSURE MAY IRRITATE EYES, NOSE AND THROAT.

SMALL AMOUNTS TRANSFERRED TO THE MOUTH BY FINGERS DURING USE, ETC., SHOULD

NOT INJURE. SWALLOWING LARGE AMOUNTS MAY CAUSE DIGESTIVE DISCOMFORT.

COMMENT:

NO INJURY FROM DUSTS SHOULD OCCUR DURING REASONABLE USE. IF USE CREATES RESPIRABLE PARTICLES, SOME RESPIRATORY SYSTEM INJURY MAY OCCUR. CURED SEALANT IS NONHAZARDOUS. THIS PRODUCT, AS WITH ANY CHEMICAL, MAY ENHANCE ALLERGIC CONDITIONS ON CERTAIN PEOPLE. WE DO NOT KNOW OF ANY MEDICAL

CONDITIONS THAT MIGHT BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

MATERIAL SAFETY DATA SHEET

Manufacturer:

en de la companya del companya de la companya del companya de la companya del la companya de la companya de la companya de la companya del la companya de la companya del la compa

4041 S. W. 47 Avenue Ft. Lauderdale, FL 33314

Emergency Phone: Information Phone:

1-800-424-9300 1-954-587-6280 Jeff Tieger

Contact:

SECTION IV - EMERGENCY FIRST AID PROCEDURES

EYES:

IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS.

SKIN: INHALATION:

REMOVE TO FRESH AIR.

ORAL:

NO FIRST AID SHOULD BE NEEDED.

COMMENTS:

NONE

SECTION V - FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED):

AUTO IGNITION:

FLAMMABILITY LIMITS IN AIR:

EXTINGUISHING MEDIA: SPECIAL FIRE PROCEDURES: OPEN CUP ABOVE 250F/120C NOT DETERMINED

LOWER: NOT DETERMINED

HIGHER: NOT DETERMINED WATER, WATER FOG, CO, DRY CHEMICAL, FOAM, OTHER SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE

CLOTHING SHOULD BE WORN IN FIGHTING FIRES INVOLVING

CHEMICALS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

COMMENTS:

NONE KNOWN TO STAR BRITE

NONE

SECTION VI - PHYSICAL DATA

PILING POINT (AT 780 MM HG):

ZECIFIC GRAVITY (AT 77° F/25° C):

MELTING POINT:

VAPOR PRESSURE (AT 77° F/25° C) VAPOR DENSITY (AIR=1 AT 77° F/25° C):

PERCENT VOLATILE BY WEIGHT (%): EVAPORATION RATE (ETHER)=1): SOLUBILITY IN WATER (%):

ODOR, APPEARANCE, COLOR:

NOT APPLICABLE

1.04

NOT APPLICABLE LESS THAN 5 MM

ABOVE 1 **LESS THAN 5 NOT APPLICABLE**

-- LESS THAN 0.1

ACETIC ACID-LIKE, PASTE, CLEAR

NOTE: The above information is not intended for use in preparing product applications. Contact Star brite before writing specifications.

SECTION VII - REACTIVITY DATA

STABILITY:

COMMENTS:

STABLE

INCOMPATIBILITY (MATERIAL TO AVOID):

CONDITIONS TO AVOID:

OXIDIZING MATERIAL CAN CAUSE A REACTION.

AIR OR MOISTURE CAUSES CURING AND ACETIC ACID VAPORS

FORM

HAZARDOUS DECOMPOSITION PRODUCTS:

SILICON DIOXIDE, CARBON DIOXIDE AND TRACES OF INCOMPLETELY BURNED CARBON PRODUCTS

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

CONDITIONS TO AVOID:

NOT APPLICABLE

NONE

MATERIAL SAFETY DATA SHEET

Manufacturer:

Star brite

4041 S. W. 47 Avenue

Ft, Lauderdale, FL 33314

Emergency Phone: Information Phone:

1-800-424-9300 1-054-587-6280

Contact:

Jeff Tieger

SECTION VIII - SPILL, LEAK, MAINTENANCE, REPAIR AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

REMOVE PRODUCT AND CONTAIN

FOR SALVAGE OR DISPOSAL

PROTECTIVE EQUIPMENT:

EYES: SKIN: USE PROPER PROTECTION - SAFETY GLASSES, AS A MINIMUM. WASHING AT MEAL TIME AND END OF SHIFT IS ADEQUATE. REMOVE

CONTAMINATED CLOTHING AND SHOES AS SOON AS PRACTICAL AND CLEAN THOROUGHLY BEFORE REUSE. RUBBER OR PLASTIC GLOVES

ARE RECOMMENDED.

INHALATION:

USE RESPIRATORY PROTECTION UNLESS LOCAL EXHAUST VENTILATION IS ADEQUATE OR AIR SAMPLING DATA SHOW

EXPOSURES ARE WITHIN TLV AND PEL GUIDELINES. ASTE DISPOSAL METHOD: STAR BRITE SUGGESTS THAT ALL LOCAL, STATE AND FEDERAL

REGULATIONS CONCERNING HEALTH AND POLLUTION BE REVIEWED TO DETERMINE APPROVED DISPOSAL PROCEDURES. CONTACT STAR

BRITE IF THERE ARE ANY DISPOSAL QUESTIONS.

D.O.T. (49 CFR 171.8)/E.P.A.(40 CFR 117) SPILL REPORTING INFORMATION

HAZARDOUS SUBSTANCE:

NONE

REPORTABLE QUANTITY:

NOT APPLICABLE

CONCENTRATION OF HAZARDOUS SUBSTANCE:

NOT APPLICABLE **NOT APPLICABLE**

REPORTABLE QUANTITY OF PRODUCT: YMMENTS:

PRODUCT CONTAINS NO INGREDIENT SUBJECT TO D.O.T. OR E.P.A.

CERCLA/SARA ENVIRONMENTAL RELEASE REPORTING REGULATIONS.

SEE SEC. XI FOR ADDITIONAL SARA COMPLIANCE INFORMATION.

SECTION IX - ROUTINE HANDLING PRECAUTIONS

PROTECTIVE EQUIPMENT:

EYES:

USE PROPER PROTECTION - SAFETY GLASSES AS A MINIMUM

SKIN:

WASHING AT MEAT TIME AND END OF SHIFT IS ADEQUATE. REMOVE CONTAMINATED CLOTHING AND SHOES AS SOON AS PRACTICAL AND CLEAN THOROUGHLY BEFORE REUSE. RUBBER OR PLASTIC GLOVES

ARE RECOMMENDED.

INHALATION:

USE RESPIRATORY PROTECTION UNLESS LOCAL EXHALIST VENTILATION IS ADEQUATE OR AIR SAMPLING DATA SHOW

EXPOSURES ARE WITHIN TLV AND PEL GUIDELINES.

VENTILATION:

LOCAL EXHAUST:

MAY BE NEEDED

MECHANICAL (GENERAL)

RECOMMENDED

SUITABLE RESPIRATOR:

ACID GAS/ORGANIC VAPOR TYPE

COMMENTS:

AVOID BREATHING VAPORS AND EYE AND SKIN CONTACT. USE ONLY

WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY.

These precautions are for room temperature handling. If used at elevated temperature, aerosol and soray applications may require added precautions. Good practice requires that gross amounts of any chemical be removed from the skin as soon as practical, especially before eating or smoking.

SEA RAY CORP/PURCH

F-625 T-159 P-004/004 JAN 22 '97 15:34

SECTION OF SPECIAL PROTECTION INFORMATION

SPRATORY PROTECTIONS

Use with adequate verdiation. Respirators with organic vapor cartridges or set? contained breefing apparatus may be used in confined areas.

VENTLATION:

Local exhaust or general mechanical sufficient to prevent accumulation of fumes.

PROTECTION GLOVES:

Weer resident gloves such as BLNA-N, plastic, or rubber.

EYE PROTECTION:

Gooden.

OTHER PROTECTIVE EQUIPMENT:

Protective clothing to prevent skin contact.

SECTION 09 SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING: Protest containers from physical damage. Keep container closed when not in use. For sufety, store at temperature not exceeding 180-F away from spaces or flume. For maximum storage the store at less from 90-F. Do not broude vapors. Avoid slan and eye contact. Do not take intermed

THIS IMPORMATION IS FURNISHED WITHOUT WARRANTY, REPRESENTATION, INDUCEMENT OR LICENSE OF ANY KIND, EXCEPT THAT IT IS ACCURATE TO THE SHEET OF STAR BRITES KNOWLEDGE OR OSTAINED FROM SOURCES BELIEVED BY STAR BRITE TO BE ACCURATE. STAR BRITE ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THESE DATA.

FEB-03-1997 10:58 FROM AIM SUPPLY CO. 1111

> UNOCAL 76 UNOCAL CHEMICALS DIVISION PETROCHENICALS GROUP

TO

9140745565650579 P.01%

'uct Name: ETHANOL D-2 190

uct Code No: 26456

Page Issue Date: 11/28/90

MANUFACTURER

UNOCAL CHEHICALS DIVISION UNION OIL COMPANY OF CALIFORNIA 1345 N. HEACHAM SCHAUMBURG, ILLINOIS 60196

CONTACTS FOR FURTHER INFORMATION: SEE LAST PAGE

Transportation Emergencies: Call CHEMTREC (800) 424-9300 Cont. U.S. (202) 483-7616 (Collect) from Alaska & Hawaii

Health Emergencies: CALL LOS ANGELES POISON INFORMATION CENTER (24 hrs.) (800) 356-3129

MSHA

CAL OSHA

PPH

PPM

TWA

PRODUCT IDENTIFICATION

PRODUCT NAME:

ETHANOL D-2 190

GENERIC NAME:

VOLATILE SOLVENT

DOT PROPER SHIPPING NAME:

DENATURED ALCOHOL

(BOAT STOVE ALCOHOL)

1104.843

ID_NUMBER:

NA1986

DOT HAZARD

CLASSIFICATION:

TETED INCREASENAN

FLAMMABLE LIQUID

HAZARDOUS INGREDIENTS	CAS NUMBER	TLV/PEL	2TINU	AGENCY	TYPE
METHANOL	67-36-1	200 (SKIN)	PPH	OSHA	TWA
e e e e e e e e e e e e e e e e e e e	ote, decisión.	250 (SKIN)	PPH	ACGIH	STEI
		250 (SKIN)	PPH	OSHA	STEL
		200 (SKIN)	PPM	ACGIH	TWA
		1000 200	PPH PPH	CAL OSHA CAL OSHA	CEIL
DISTILLED WATER	7732 - 18-5	NONE		•	
ETHANOL SDA-3A	NONE	NONE		•	
ETHANOL	64-17-5	1000 1000 1000 1000	PPM PPM PPM PPM	OSHA ACGIH MSHA CAL OSHA	AWT AWT AWT AWT
KETHYL ISOBUTYL KETONE	108-10-1	50 50 75 75	ррм ррн ррн ррн ррн	OSHA ACGIH ACGIH OSHA	TWA TWA STEL STEL

ECTION IA - THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA 313 AND 40 CFR 372:

PISIED INCKEDIENTS	CAS NUMBER	WEIGHT PER	CENT RANG
HETHANOL	67-56-1	15.16 -	
METHYL ISOBUTYL KETONE	108-10-1	0.99 -	1.00

FEB-03-1997 10:58 FROM AIM SUPPLY CO. roduct Name: ETHANOL D-2 190 roduct Code No: 26456

ΤÜ 9140745565650579 P.02 Page 2

Issue Date: 11/28/90

N II - EMERGENCY AND FIRST AID PROCEDURES

+** EMERGENCY ***

Have physician call Los ANGELES POISON

INFORMATION CENTER (24 hrs.) (800) 356-3129

'EYE CONTACT:

Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek medical attention. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

SKIN CONTACT:

Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention.

INHALATION (BREATHING):

If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek immediate medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INCESTION (SWALLOWING):

If swallowed, seek omergency medical attention. If victim is drowsy or unconscious, place on the left side with the head down and do not give anything by mouth. If victim is conscious and alert, vemiting should be induced for ingestions of more than 1 swallow (1-2 tablespoons for an adult) preferably with syrup of ipecac under direction from a physician or poison center. If syrup of ipecac is not available, vemiting can be induced by gently placing 2 fingers in the back of the throat. If possible, do not leave victim unattended.

DEMENTS:

Note to Physicians: This product contains methanol. Methanol is metabolized to formaldehyde and formic acid. This in turn may cause metabolic acidosis, visual disturbances and blindness. Because metabolism must occur before the toxic effects, the onset of toxic symptoms may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used as an antidote. Methanol is effectively removed by hemodialysis.

TION III - HEALTH HAZARDS/ROUTES OF ENTRY

One or more components of this material is an eye irritant. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing, redness and swelling.

SKIN CONTACT:

One or more components of this material may cause mild skin irritation. Prolonged or repeated contact or exposure to vapors or mists may cause redness, burning and drying and cracking of the skin.

SKIN ABSORPTION:

Contact may result in skin absorption but symptoms of toxicity are not anticipated by this route alone under normal conditions of use. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INHALATION (BREATHING):
While this material has a low degree of toxicity, breathing high concentrations of vapors or mists may cause: Irritation of the nose and throat.

Signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination and fatigue).
Nausea and vomiting.

Respiratory symptoms associated with pre-existing lung disorders (e.g., asthma-like conditions) may be aggravated by exposure to this material.

9140745565650579 P.03

FEB-03-1997 10:59 FROM AIM SUPPLY CO.

Product Code No: 26456

Page 3 Issue Date: 11/28/90

ON III - HEALTH HAZARDS/ROUTES OF ENTRY

(Continued)

INGESTION (SWALLOWING):

One or more components of this material is toxic and may be harmful if

swallowed. Effects of overexposure may include: Irritation of the digestive tract.

Signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination, and fatigue).

Visual disturbances. (Including blindness).

Convulsions.

Сопа.

Death. Vomiting.

Drunkenness.

Stupor.

COMMENTS:

Hethanol, a component of this product, causes harm to the fetus in laboratory animal studies. The relevance of these findings to humans is uncertain.

Consumption of alcoholic beverages has been identified as a human cancer hazard by IARC. Ethanol, a component of this product, is the same alcohol found in alcoholic beverages. However, the alcohol in this product has been denatured making it unfit to drink. Long term ingestion of large quantities of ethanol has also been associated with liver damage. irreversible changes in the genetic material (DNA) of a cell, and adverse effects on the reproductive system and developing fetus. Such effects have not been reported nor are expected from normal occupational exposures to ethanol.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (sometimes referred to as Solvent or Painters' Syndrome). Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

TION IV - SPECIAL PROTECTION INFORMATION

VENTILATION:

If current ventilation practices are not adequate to maintain airborne concentrations below established exposure limits (see Section I), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

RESPIRATORY PROTECTION:

The use of respiratory protection is advised when concentrations exceed the established exposure limits, (See Section I). Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and cannisters (NIOSH approved, if available) or supplied air equipment.

ROTECTIVE GLOVES:

The use of gloves impermeable to the specific material handled is advised to prevent skin contact and possible irritation.

YE PROTECTION:

Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

THER PROTECTIVE EQUIPMENT:

It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

FEB-03-1997 10:59 FROM AIM SUPPLY CO. Product Code No: 26456

9140745565650579 P.04 TO

Issue Date: 11/28/90

ON V - REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY (MATERIALS TO AVOID):
This product forms combustible and/or explosive mixtures with air and/or

oxygen.
This product is incompatible with:

Oxidizing Agents Strong Acids or Bases Alkali Metals

Anhydrides

Isocyanates

Halogens

Organometallic Contaminants

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition in the presence of air may yield carbon monoxide

and/or carbon dioxide.

HAZARDOUS POLYMERIZATION: Will Not Occur

CTION VI - SPILL OR LEAK PROCEDURES

*** HIGHWAY OR RAILWAY SPILLS ***
Call CHEMTREC (800) 424-9300 Cont. U.S.
(Collect) (202) 483-7616 from Alaska & Hawaii

PRECAUTIONS IN CASE OF RELEASE OR SPILL:

Keep all sources of ignition and hot metal surfaces away from spill/
release. Stay upwind and away from spill/release. Isolate hazard area and
limit entry to emergency crew. Stop spill/release if it can be done
without risk. Wear appropriate protective equipment including respiratory
protection as conditions warrant (see section IV). Prevent spilled
material from entering sewers, storm drains, other unauthorized treatment
drainage systems, and natural waterways. Dike far ahead of spill for later
recovery or disposal. Spilled material may be absorbed into an appropriate recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material. Notify fire authorities and appropriate federal, state and local agencies. Immediate cleanup of any spill is recommended. If spill/release in excess of EPA reportable quantity is made into the environment, immediately notify the national response center (phone number 800-424-8802).

(METRANOL) DOT/CERCLA Reportable Quantity 31056 LB.

WASTE DISPOSAL METHOD:

Dispose of product in accordance with local, county, state, and federal regulations.

ECTION VII - STORAGE AND SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS:

Keep containers tightly closed, cool, dry and away from all sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Use good personal hygiene practice. Bond and ground equipment when transferring to another container. "Empty" containers rotain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental requenvironmentally mafe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this product, refer to occupational safety and health administration regu-lations, ANSI Z49.1 and other governmental and industrial references per-taining to cleaning, repairing, welding or other contemplated operations.

FEB-03-1997 11:00 FROM AIM SUPPLY CO.

TO 9140745565650579 P.05

roduct Name: ETHANOL D-2 190

roduct Code No: 26456

Issue Date: 11/28/90

ON VIII - FIRE AND EXPLOSION HAZARD DATA

HEALTH HAZARD: 1

HAZARD FLAMMABILITY: 3 CLASS REACTIVITY: 0 OTHER: -

HAZARD RANKING

NAZARO KANAZINO

0 = LEAST HMIS

1 = SLIGHT HAZARD

2 = HODERATE CLASS 3 = HIGH 4 = EXTREME

HEALTH HAZARD: 2* FLAMMABILITY: 3 REACTIVITY: 0

OTHER: -

LOWER - UPPER EXPLOSIVE LIMIT (% VOL.): 1.4 - 36.0 FLASH POINT (Deg. Fahr.): 52 * Long Torm Health Effect (ESTIMATED)

EXTINGUISHING MEDIA:

Extinguish with dry chemical, CO2 or a universal type foam.

FIRE AND EXPLOSION HAZARDS:

This material is flammable and may be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment). Vapors may transl considerable distances to a source of ignition where they may ignite, flashback, or explode. Hay create vapor/air explosion hazard indoors, outdoors, or in sewers. Vapors are heavier than air and may accumulate in low areas. If container is not properly cooled, it may explode in the heat of a fire.

FIRE FIGHTING PROCEDURES:

Wear appropriate protective equipment including respiratory protection as conditions warrant (see section IV). Stop spill/release if it can be done without risk. Move undamaged containers from fire area if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

TION IX - PHYSICAL DATA

APPROX. BOILING POINT (Dec Fahr)

RELATIVE EVAP. RATE

(n-BuOAc = 1)

YAPOR PRESSURE

148 - 242

2.00 (Estimated)

he is a single

1 1 1 1 1 1 1 1 2 2 2

50.4 mm Hg @20 C (Est.)

* VOLATILE

SOLUBILITY IN WATER

VAPOR DENSITY

100.0 (Estimated)

99.0 (Estimated)

1.50

SPECIFIC GRAVITY (60F/60F)

APPEARANCE

The second of th

ODOR

0.805 (Estimated)

Clear, little if any color

Characteristic

FEB-03-1997 11:01 FROM AIM SUPPLY CO. Product code No: 26456

TO 9140745565650579 P.01

Issue Date: 11/28/90

CTION X - DOCUMENTARY INFORMATION

(216) 425-4600

ISSUE DATE: 11/28/90 ISSUE # 5

PREV. DATE: 05/14/90

PREV. #

COEVELAND

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HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.

This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

FOR FURTHER INFORMATION, CONTACT YOUR LOCAL SALES OFFICE

ATLANTA	(404) (800)	934-0343 633-2362	DALLAS/FT.WRT	H(214)	298~8233	NY/NJ	(201)	574-9890 [*]
HORE			DETROIT	(313)	772-0870	(NY Only)	(800)	
ide MD)	(301) (800)	355-2737 638-7676	HOUSTON	(713)	643-3517	Philadelphia Conshohocken	(215) (215)	753-1903 828-1010
BIRMINGHAH Butside AL)	(205) (800)	995-9776 328-1611	Kansas CITY	(816)	231-7600	NEW ENGLAND	(401)	438-7240
utside AL) nside AL)	(800)	328-1610	LOS ANGELES	(714)	228-4700		(800)	523-0725
CHARLOTTE (NC Only) (C, CA, VA)	(704) (800)	588-2633 532-6103	FLA. (HIAMI) (FL Only)	(305) (800)	634-2411 621-3841	SAN FRANCISCO/ OAKLAND AREA	(707)	437-4000
•	(800)	438-2968	(FL Only)	(800)	282-0537	TWIN CITIES	(612)	227-8020
CHICAGO	(708)	257-9300	NASHVILLE	(615)	320-5474	WICHITA ,	(316)	838-3335
CHCINNATI	(513)	422-0176	(TM Only)	(800)	325-7685	··	(-20)	044-5333

Post-It brand fax transmittal metric 75/1 of pages > Q.5

To Prom J M

Co. Co. CAR TOUL

Dept. Phone 8

Fax #

. . !

APPROVED CHEMICAL MRP NUMBER REQUEST

MODEL YEAR AFFECTED
(1104843) NEW MRP NUMBER
194415 CURRENT/CLONE FROM
025/030 COMM/SUB-COMM
DESCRIPTION: Alcabal, Denatured
VENDOR NUMBER/NAME
6156 / Aim Supply
Q_ UOM / MODELS AFFECTED
COST: \$ 5.32
VEND PART NO: MP - 505022
PLEASE FILL IN FIRST INITIAL OF INVENTORY TYPE CODE
() (A)SSEMBLED PART; (C)LEANERS; (E)NGINES; (F)UEL/GAS/OIL; (H)EALTH& SAFETY; FORK(L) EXP; REPAIR&(M)AIN; (O)FFICE; (R)AW MAT'L; (S)&E PERISHABLE (T)OOLS; (U)NIFORMS & RAGS
REASON FOR REQUEST: Change
\mathcal{L}

MATERIAL SAFETY DATA SHEET Gruber Care X-Wax [02213] [02214] [02215] [02216]



Page 2 of 2

7-09-1997 6:53AM

X-WAX

FROM GRUBER EAST 407 639 0437

pages . Post-it® Fax Note 7671 TOSalac 50 C Fax · US 3 Far #

25636 Avenue Stanford

Tel: (805) 257-4060

Telex: 691419

FAX: (805) 257-4791

Valencia, CA 91355 U.S.A.

MATERIAL SAFETY DATA SHEET

Page 1 of 2

HANUFACTURER'S NAME: Gruber Systems, Inc. ADDRESS:

25636 Avanue Stanford Valencia, CA 91355 USA EMERGENCY TELEPHONE: 1-800-255-3924 (CHEM-TEL) TELEPHONE NUMBER FOR INFORMATION: 1-805-257-4060

January 14, 1993

DATE:

Hazard Rating Minimal....0 Slight.....1

Moderate...2 Serious....3 Severe....4

Health	0
Plammability	2
Reactivity	0

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME & NUMBER: Gruber Care X-Wax [02213] [02214] [02215] [02216]

CHEMICAL NAME: Wax Mixture

CHENTCHT HAVE

X-Wax is a blend of bee's and vegetable waxes to make it usable as an extrudable tooling wax fillet material. The product is essentially inert but will burn like candle wax.

SECTION II - HAZARDOUS INGREDIENTS/IDENTIFY INFORMATION

CHENT CAL NAME	CAS NO.	Percent
 Castor Wax Castor Oil Mineral Oil 	123-26-2 8001-79-4 8042-47-5	<2 <10 <5

SECTION III - PHYSICAL/CHENICAL CHARACTERISTICS

BOILING POINT: >500°F. VAPOR PRESSURE: N/A VAPOR DENSITY: N/A SPECIFIC GRAVITY: 0.95 MELTING POINT: 150-160°F. EVAPORATION RATE: N/A SOLUBILITY IN WATER: INSOLUBLE APPEARANCE AND ODOR:

SOFT PLIABLE SOLID - SLIGHT WAX ODOR

SECTION IV - FIRE AND EXPLOSION HATARD DATA

FLASH POINT: FLAMMABLE LIMITS:

COMBUSTIBLE - WILL BURN LIKE CANDLE WAX



FAX MEMORANDUM

DATE:	7-10-97
TO:	Kevin Thompson Director of Environmental Management APPROVED DATE 1/1/971 CODE 2
FROM:	George David SRB PART NUMBER 1105485
SUBJECT:	Hazardous Material Approval / Justification for Delisting Material
PAGES (Includi	ng Cover Sheet):
	HAZARDOUS MATERIAL APPROVAL REQUEST
MATERIAL DES	SCRIPTION (trade name, chemical name, etc.): Gruber Care X-Wax
PACKAGING (5	5 gal. drum, 16 oz. spray can, bulk, etc.): 2/2 Gal. Container
JUSTIFICATION existing material, i	[include specific area in plant, whether or not material is a sample, how material pray, brush, etc.), and anticipated usage (lb/mo.)]: (1) be use in real act, to be use in a regular basis, by hand, to be use in a regular basis, by hand, to be use in a regular basis, by hand, to be use in a regular basis, by hand, to be used in a regular basis, by hand, to be used in a regular basis, by hand, to be used in a regular basis, by hand, to be used in the cost while warfing an area and uill cost while warfing and to be used in the performance.
MATERIAL DES	JUSTIFICATION FOR DELISTING MATERIAL CRIPTION (Sea Ray Part #, Part Description):
	specific area in plant):
JUSTIFICATION:	1910.1200(b)(6) including untreated wood products which will not be cut or applies, consumer products used for their intended ourspass and durature, and

1998 18:29AH P3

MATERIAL SAFETY DATA SHEET



TES SEERWIN - WILLIAMS CO. 101 PROSPECT AVE. N.W. CLEYBLAND, OB 44115

EMERGENCY TELEPHONE NO. (216) 566-2917 INFORMATION TELEPHONE NO. (216) 568-2502 DATE OF PREPARATION 15 - Nov - 95

01995, The Stermin-Williams Co.

Strippable Coating, White

CAS NA.	ECTION II— HAZARDON MUNICIPALITY (percent by welpting	ACCORN DONAL Yaper TLY PEL Units Promote STELL STELL (see Hg)	MES W 1 Brigadic Confra Make	REKE Assigne
64742-48-8	V. M. & F. Nuplete	900 500 PPM 12.0	22	
104-42-3	Tatuene	60 (150) PPM (Skirt) 22.0	4	
07-84-1	Apelone.	750 780 FPM 190.0	24	100
78-23-3	Mobiji Eliyi Katane.	200 200 PPM 70.0	10	
106-10-1	Methyl feebulyl Kalone.	60 80 PPM 16.0	10	
671-34-1	Caldism Codenate	to topic Marks ascust Plans. Fraction)	12	
3483-47-7	Titerrium Clicalde.	99 10(5) Highes as Dust	2	-
	Waight per Gallen (for.)		7.84	6.52
<u> </u>	Solds by Walght (%)		90.0	0.0
	Sabde by Volume (%)		17.4	4.0
	Volatile Organic Compounds	(VOC - HaJget.)	J. 34	1.51
	Photocharically Reactive		Yao	No
	Fish Point (T)		•	1
	HARS PIFFAL Rating (Peath	- Remmability - rescilying	230	130
•		The majorant of the threat of the		

GEAL CONTAINER M69W1
CLATING, STRIPPABLE WHITE

Numbers In South Are Percent By Weight

Bugredient subject to the reporting requirements of the Superfund Amendments and Resulterization Act (SARA) Section 313, 40 DFR 372.65 C

Section E - PHYSICAL DATA

PROPERTY ONLINE - 200 TABLE PROTECT CHAPTER - 0.39-0.93 . SOLLING ANNEX - 231-222 My . VELOTILE CLUME - 23-242 G STREETS ANT - Slower than School tend Street to the Street - Secret than his material solution is a

EDUCATION OF MATER - P.A.

Section IV — FIRE AND EXPLOSION HAZARD DATA

PLANESCRIPT CLIFFFF PLANE FORT See VALUE CON LAST. - Extraorly Planeshie, Flant below 21 PP (artificial property processing)

AR. 0.7 ME 12.0

Darbon Diverse, Bry Charlest, Foun

Service of the Land Service of the Land

Rosy containous tightly closed. Insists from heat, obscrized equipment, sparter, and open fluor. Closed contrinous may emplote when exposed to entremy heat. Application to bet nelform requires special presentions. Daving starquency conditions overcommons to decomposition products may come a health hazard. Symptoms may not be invedigally apparent, there are investigal experient.

SPECIALIFEE Program processing and continuity followed by the process of the confidence of the confide

Section Y -- HEALTH HAZARD DATA

MOTHER OF EUROPEAN

| Imposure only but by initiation under: MIP or SYS sectors, depending on conditions of una. To steinize exposure, follow recommendations for proper use, suntileties, and personal protection equipment.

ACUTE Health Management

BITTETT OF EMPLEMENTS

Erriaction of eyes, whis and pumpiratory system. May cover socrets eyester depression, Berrone corresponds may result in minimal armous and good billy death.

27 mm And 27:007-00 or Securiosism.

before and exching or beroim semetim may indicate sys or encorder ohis especies. Seedache, distincts, names, and loss of coordination are indications of ourseries anyther to report or spray plats.

HER THE CO-DITTORY ADDRESS BY BEFORES

Shee generally recognised.

PROPERTY WE FIRST AND PROCESSING

If PREALTS: It offerted, receive from empoure. Acctors breathing, hosp were and quiet. If on \$130. Mach afforted even thereughly with peop and under.

became sentucioned elected and locales before to-one.

If in 178: Plush more with large execute of unter for 13 adouter, for radical attention, of CACAC House Houseline.

Pr improclast in these products is an IMC, NYP, or own histor environment. Bothy? Bully! Second may leavened the narrows system offects of other selvents.

Prolonged overseponers is selected impredients in Section II may coope adverse offerty to the liver, arisery, blood-forming, ducklorsersing, and supreductive systems.

hate expected to bitanium district there at 250 mg And devaluped long treats, he-ever, such reporter ferries not extended in the saving large.

Separts have resociated reported and prolonged overesponents to solvents with personent brain and service system desires.

Section VI - REACTIVITY DATA

STAPLIFT - Stable COMPTIONS TO AVOID Money Sugar. DECOMMENTELLIFY Sume Sugar.

BALLIBORS BECOMESTIVE PROPERTY

Py firm; Corbon Dismide, Carbon Symeride, Sydropen Chicoide SALAMONS SOLVESS SLATTON - Will But Booms

BOOKIN YK - SPILL OR LEAK PROCEDURES

PROPERTY OF THE THE CASE PARTIES IN MERCHANIC OR PUBLIC

Passes all sparses of Symition. Ventilate and reache with inert absorbant.

White from those products may be hammelous as defined under the hosester (uneversities and Journary Act. 1878a) 40 CFR 361. Heats must be tested for ignitability to determine the applicable SFA hammelous numbers. Shots from products containing Notice Internal States and Also require testing for entractability.

Incidents in approved facility. Do not incidently closed container, Dispuse of in accordance with Pedaral, State, and Local regulations reporting pollution.

Section Vill -- PROTECTION INFORMATION

MUCAPITORS TO ME TAKEN IN MICE

Use only with adequate wastlistics, decid breathing vapus and spray mist. Avoid contact with shin and eyes, 'hash beack after owing.

There existings may convents returned a classified as malesace particulates (Moted "as Dust" in Section III which may be greated to therefore lively only surfag sanding or absorbing of the dried film. If no specific dusts are lived in Section II, the applicable limits for malesace facts are ACCIR to 18 mg./m3 (total dust), DMM PIX 15 mg./m1 (total dust), 5 mg./m3 (respirable fraction).

Coral ambaset profession. Conversi andmost promptable if the augosure to extrait in Section II is maintained below applicable exposure limits. Refer to CSFA Standards 1916.94, 1910.107, 1910.108.

Approximately Provincion

Ef personal imposure mannet be quatrolled befor applicable linits by vertilation, went: o properly fitted expanic expan/particulate suspirator approved by \$7000/8500 for protection against seteriols in Section 35.

When stroking or shruking the dried file, were a destroist requirator approved by NYOSE/HECK for that have be generated from this product, underlying paint, or the absorber. Respective decine:

That gloves which are recovereded by glove supplier for protection against naturalle (s Section 13, Not motorroom

Wear safety spectocias with assurfaceted sideshields.

Section IX -- PRECAUTIONS

DOL ETHEAGE CATHDONY - 19

MECANTIONS TO ME TAKES IN MANUALINO AND STOPING

Contents are EXTENSITY PLANTABLE. However, from heat, sparks, and upon Flance. Buring use and until all vapors are genes. Kanp area vestifold. He hat smale minimplish all Flances, pilot lights, and bestore - Sure off staves, sportric tools and appliances, and any other occurrence of fastion.

Contail With Code. See approved Sanding and Grounding procedures.

New container closed what not in use. Transfer only to approved containers with complete and appropriate lebeling. Do not take internally. Rong not of the reach of calldon.

OFFER PERSONTIONS

Intentional misses by deliberately concentrating and lebaling the concents can be harmful or fetal

SICTION X -OTHER REGULATORY INFORMATION

CASTTORIA PROPOSITION 65

MAXHIMS: M594] execution chamicals known to the firsts of Catifornia to exam cancer and bigsh decise or 91/ac reproductive haze. BEXE contains a chamical(a) hower to the State of California to course tenegar.

The above information portains to those products as correctly formulated, and is based on the information swallbudge at this time. Indicine of endocast as other additives to those () products may selectantially after the composition and herests of the products. Since conditions of we are outside our montrel, us under an expression, suggests or implied, and known as illubility in connection with any sea of this information.

Me Cooting White, Mee W 1 is a fact dry viryl strippeble coaling designed to keep surey booths cleaner, brighest, earler, and for lawnarery protection of polished or plated surfaces.

Labor savings on clean up of spray booths, conveyor hampers, etc.

 Temporary protection of polished, plated or unpainted metal and gless surfaces during storage and shipment. Can be peeled off when ready to market or use.

White. Improves brightness of work area such as apray booths and conveyor lines.

Retains stripping and film strangth properties after recoeting with point, enamel, varrish, and incquers,

· Easy apraying.

Easy stripping.

Low to serral-cabes Volume Solida:

17.3%

Viacoeliv: 972 Zohn 25 to 30* Spreading Kets: 280 sq. ft. at 1 mit, no application loss

Package Life: 2 years Drying:

Tack Frame:

All dry at 77" F. (45%

AH)

20-30 minutes, Recommended 8 mile dry.

To Pack: To Recout:

No critical recoat.

Force Dry:

Do not apply heat, Caution - Hast can destroy strippable

property.

6°F Pensity-Martens Closed Cup.

Air Quality Date:

Flash Point:

Non-Photochemically reactive. Volatile Organic Compounds (VOC) as packaged (maximum) 5.33 lb/gal. (640 gms/ltr). No reduction required. Free of lead and chromate hazards.

Product Limitations:

- Not imended for "MOTHBALLING".
- 2 For interior use only.
- 3 Do not bake or apply heat.
- 4. Should not be applied over surfaces finished with paint, enemel, vernish or lacquer if the appearance of the undersurface is to be preserved.
- 5 Do not apply over plastic substrate unless thoroughly tested.
- 6 Not suitable as a masking material if the product is to be subjected to high and prolonged heat.

Gurtace:

Motale:

No treatment or cleaning required when intended use is for clean-up and stripping such enjood varge ni ##

Other Surfaces:

When the surface to be coated is not bare metal or glass, but has a protective coaling like paint. enamel, vamish or lacquer, before applying M69 W 1 it should be checked on a small area for end results. The appearance of the undersurface might change due to the strong solvency of Strippable Coating, M89 W 1.

Application:

Recommended Film Thickness: DRY: 8 mile.

Sorey.

No reduction required. Acetone R8 K 9 can be used up to 25% by volume. Use multiple passes to achieve minimum 8 mil dry film to achieve the necessary film strength for fast and complete stripping at end of service life.

Clean Up:

Acetone AB K 9

Safety Cautions:

Contents are EXTREMELY FLAMMABLE. Vispors may cause flash fires. Hermful if inheled - may affect the brain or nervous system, causing disziness, headache or nausos, irrilates eyes, skin and respiratory tract. Harmful or fatal if awailowed. Keep away from heat, sparks and open flame. Vapore will accumulate reactly and may ignite explosively. During use and until all vapors are gone: Keep area ventilated. Do not smoke - Extinguish all tames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

CONTAINS KETONES AUPHATIC HYDROCARBONS

VAPOR HARMFUL. Use only with sciequete vantilation. Wear an appropriate properly fitted: Vapor/particulate respirator (NIOSHV MSHA epproved) during and after application, unless air monitoring demonstrates vapor/mist levels are below applicable levels. Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contains to other containers for storage.

FIRST AID:

If INHALED: If affected, remove from exposure. Restore breathing. Keep warm and quiet. if on SKIN: Wash affected area thoroughly with scap and water. Remove contaminated clothing. Launder before re-use.

(continued on back)

10.11.

FROM: 5-N N2062 0808A FL

PHONE NO. : 407 639 4377

الك فيتستخيص الع الصفاحي

Jan. 05 1998 10:29AH P2

(continued from column 3)

If in EYES: Pluch eyes with large amounts of water for 15 minutes. Get medical attention. II SWALLOWED: On not induce varieting. Get

madical approion immediately.

SPILL AND WASTE

Remove all sources of ignition. Vanitate and remove with inest absorbers, incinerase in approved tecthy. Do not incinerate alread container. Dispuse of in accordance with Federal, State, and Local regulation regarding pollution.

DELAYED EFFECTS PROM LONG TERM OVERNOFORUNE

Contains achieves which can deues parthenent titule and nervous system derivage. Intentional missis by deliberately concernsing and inhaling the consume can be harmful or falst.

DO NOT TAKE INTERNALLY KEEP OUT OF THE REACH OF CHILDREN FOR INDUSTRIAL USE ONLY

Notor to material Substy Data Shoot for fur-ther Information.

The information, rating and opinions stated above here pertain to the Meterial ourserily offered and represent the results of tests befored to be religies. However, due to versitions in oursprings handing and methods of application which are not known at not under our control. The Shervin-Williams Company cannot make any warrantees of guarantees as to the end moults.

Date/Time Rec.:

Sea Ray Boats

Merritt Island Traffic Division Lead Form

Phone Number: (407) 452-6710 Fax Number: (407) 452-3568

To:	SELINA CANTELON		
From:			
For:			
Instructions:		•	
			-
,			
Pages To Follow:			
Date/Time Sent:			

09/08 '98 06:25 NO.198 U2

1151 588

SOLVENT, SAFETY KLEEN FREMIUM

SAFETY-KLEEN PREMIUM GOLD SOLVENT MATERIAL SAFETY DATA SHEET FOR USA AND CANADA



SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

SAFETY-KLEEN PREMIUM GOLD SOLVENT

1151588

SYNONYMS:

(Also known as SAFETY-KLEEN PREMIUM GOLD

SOLVENT - CALIF. and SAFETY-KLEEN PREMIUM SOLVENT.) Parts Washer Solvent; Petroleum Distillates; Petroleum Naphtha;

Naphtha, Solvent; Stoddard Solvent; Mineral Spirits.

PRODUCT PART

NUMBERS:

(Also known as 6639.) 6638.

PRODUCT USE:

Cleaning and degreasing metal parts.

If this product is used in combination with other chemicals, refer to

the Material Safety Data Sheets for those chemicals.

24-HOUR EMERGENCY TELEPHONES

MEDICAL:

TRANSPORTATION (SPILL):

These numbers are for emergency use only. If you desire non-emergency

1-800-752-7869 (USA) Extension 2

1-800-468-1760 (USA)

information about this product, please call a telephone number listed

1-312-942-5969 (CANADA) 1-613-996-6666 (CANADA)

below.

MANUFACTURER/SUPPLIER:

Safety-Kleen Corp.

1000 North Randall Road Elgin, IL, 60123-7857 USA

1-800-669-5740 _____ (cont # 14. 2)321 - 6050

TECHNICAL INFORMATION: 1-800-669-5740 Extension 7500

MSDS FORM NUMBER: 82658 (also formerly 82657) ISSUE: April 4, 1997

ORIGINAL ISSUE: January 26, 1995

SUPERSEDES: September 18, 1996

PREPARED BY: Product MSDS Coordinator

APPROVED BY: MSDS Task Force

H-1 F-2 R-1 P-B

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

L				— О\$Н	N PEL	ACGII	H TLV			_
W1%	NAME	SYNONYM	CAS NO.	TWA	STEL	TWA	STFL	ľĎ _a	řCρ	
100	Distillates (petroleum).	N.Av.	64742-47-8	500°.	N Av	100 ^C	N.Av.	>5000 ^d	>2000	
	hydrotreated light	Elizabeth de la companya de la compa	and the reference of the	ppm	`	ppm		٧٠	mg/m ³ / 4 hours	•

N Av. - Not Available

⁰Based on Stoddard Solvent

^MOral Rat LD50 (mg/kg)

⁴Skin-Rat I D50>2000 mg/kg

Dinhajanon-Rat LC50

See 29 CFR 1910-100Xxdx2) and ACGIH Threshold Limit Values for Chemical Substances and Physical Argury thringical Expression tradescaled (Appendix C) for the determination of exposure limits for mixtures. Consult an industrial hygienist or similar professional to confirm that the calculated

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING!

APPEARANCE

Liquid, clear, colorloss to pale yellow, mild hydrocarbon odor.

IMMEDIATE HAZARDS

Combustible liquid and vapor.

Harmful if inhaled.

Eye and skin irritant.

May be harmful if swallowed. ...

DELAYED HAZARDS

Contains material which may cause central nervous system damage.

POTENTIAL HEALTH EFFECTS

INHALATION

High vapor or mist concentrations may be harmful if inhaled. High

(BREATHING): concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea and

vomiting. High concentrations of vapor or mist may cause headaches, dizziness, incoordination, numbness, irregular heartbeat, and other central nervous system effects. Massive acute overexposure may result in rapid

central nervous system depression, sudden collapse, deep coma, and death.

EYES: Direct contact with materials or exposure to vapors may cause irritation.

> Direct contact with materials or exposure to vapors may cause irritation. A single, prolonged exposure is not likely to cause the material to be absorbed

through the skin in harmful amounts.

INGESTION (SWALLOWING):

SKIN:

May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under INHALATION (BREATHING). Breathing material into the lungs during ingestion or vomiting may cause lung injury and possible death.

MEDICAL CONDITIONS

AGGRAVATED BY **EXPOSURE:**

Individuals with pre-existing lung, cardiac, central nervous system, or skin disorders may have increased susceptibility to the effects

of exposure.

CHRONIC:

Prolonged or repeated inhalation may cause toxic offocts. Prolonged or repeated eye contact may cause inflammation of the membrane lining the evelids and covering the eyeball. Prolonged or repeated skin contact may cause drying, cracking, redness, itching, swelling, or burns.

CANCER INFORMATION: No known carcinogenicity. For more information, see SECTION 11:

CARCINOGENCITY.

Also see SECTION 15: CALIFORNIA.

SECTION 4: FIRST AID MEASURES

INHALATION: (BREATHING) Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Someone should stay with victim. Get medical

attention if breathing difficulty persists.

EYES:

For direct contact, immediately flush eyes with plenty of water, holding ayalids apart, for 15 minutes. If irritation or rednoss from exposure to vapor or mist develops, move away from exposure into fresh air. Get medical attention if irritation or pain persists.

SKIN:

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain persists.

INGESTION: (SWALLOWING)

Immediately get medical attention. Do NOT induce vomiting. If spontaneous vomiting occurs, keep head below hips to avoid broathing material into the lungs.

NOTE TO PHYSICIANS:

No specific antidote available. Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Call medical emergency telephone number (see SECTION 1) for additional information.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT:

148"F (64"C) Tag Closed Cup (minimum)

FLAMMABLE LIMITS IN AIR:

LOWER: 0.5 VOL% (minimum) UPPER: 9.3 VOL% (maximum)

AUTOIGNITION TEMPERATURE:

440°F (227°C) (minimum)

HAZARDOUS COMBUSTION

PRODUCTS:

Burning may produce carbon monoxide.

CONDITIONS OF FLAMMABILITY:

Heat, sparks, or flame.

SAFETY-KLEEN PREMIUM GOLD SOLVENT

MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

EXTINGUISHING MEDIA:

Carbon dioxide, foam, dry chemical, water spray, or water

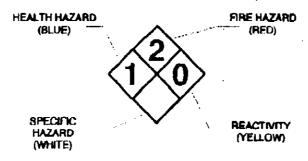
fog

NFPA 704 HAZARD

IDENTIFICATION:

This information is intended solely for the use by individuals

trained in this system.



FIRE FIGHTING INSTRUCTIONS:

Keep storage containers cool with water spray.

Positive-pressure, self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing may provide

limited protection.

FIRE AND EXPLOSION HAZARDS:

Decomposition and combustion products may be toxic.
"Empty" containers may retain residue and can be dangerous.
Heated containers may rupture. Vapors can travel to ignition source and flash back. Vapor explosion hazard indoors, outdoors, or in sewers. Run-off to sewer may create fire or explosion hazard. Not sensitive to mechanical impact.
Material may be sensitive to static discharge, which could result in fire or explosion.

EMERGENCY RESPONSEGUIDE NUMBER:

128

Reference North American Emergency Response Guidebook

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Wear protective equipment specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain away from surface waters and sewers. Contain as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, non-sparking tool into sealable container for disposal.

Additionally, for large spills: isolate hazard area. Keep unnecessary and unprotected personnel from entering. Dike far ahead of liquid spill for collection and later disposal.

SECTION 7: HANDLING AND STORAGE

HANDLING:

Keep away from heat, sparks, or flame. Where explosive mixtures may be present, equipment safe for such locations should be used. Use clean, non-sparking tools and explosion-proof equipment. When transferring material, metal containers, including trucks and tank cars, should be grounded and bonded. Avoid contact with eyes, skin, clothing, and shoes. Use in well ventilated area. Do not broathe vapor or mist.

SHIPPING AND STORING:

Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat, flame, sparks, static electricity, or other sources of ignition; containers may explode and cause injury or death. Empty product containers may retain product residue and can be dangerous. See SECTION 14: TRANSPORT INFORMATION for Packing Group information.

PERSONAL HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco products. Clean contaminated clothing, shoes, and protective equipment before reuse. Discard contaminated clothing, shoes, or protective equipment if they cannot be thoroughly cleaned.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limit. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limit. Where explosive mixtures may be present, equipment safe for such locations should be used.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION:

Use NIOSH/MSHA-approved respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limit. A self-contained breathing apparatus (SCBA) and full protective equipment are required for large spills or fire emergencies. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4-M1982

EYE PROTECTION:

Where eye contact is likely, wear chemical goggles; contact lens uso is not recommended.

SKIN

PROTECTION:

Where skin contact is likely, wear nitrile, Viton⁽ⁱ⁾, or equivalent protective gloves; use of butyl rubber, natural rubber, or equivalent gloves is not recommended.

OTHER

PROTECTIVE

Where spills and splashes are likely, wear appropriate chemical-resistant boots, apron, or other protective clothing.

EQUIPMENT:

Clean water should be available in work areas for flushing the eyes

and skin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE,

APPEARANCE, AND ODOR:

Liquid, clear, colorless to pale yellow, mild hydrocarbon odor.

ODOR THRESHOLD:

30 ppm (based on Stoddard Solvent)

SPECIFIC GRAVITY:

 $0.78 \text{ to } 0.82 60^{\circ}\text{F}/60^{\circ}\text{F} (15.6^{\circ}\text{C}/15.6^{\circ}\text{C}) \text{ (water = 1)}$

DENSITY:

6.5 to 6.8 lb/US gal (780 to 820 g/l)

VAPOR DENSITY:

5 (air = 1) approximately

VAPOR PRESSURE:

0.2 mm Hg at 68°F (20°C) (approximately) 0.6 mm Hg at 100°F (38°C) (approximately)

BOILING POINT:

350°F (177°C) (initial)

FREEZING/MELTING POINT:

less than -45°F (-43°C)

pH:

Not applicable.

EVAPORATION RATE:

0.1 (butyl acetate ≈ 1)

SOLUBILITY IN WATER:

Insoluble.

MOLECULAR WEIGHT:

160 (approximately)

SECTION 10: STABILITY AND REACTIVITY

STABILITY:

Stable under normal temperatures and pressures.

Avoid heat, sparks, or flame.

INCOMPATIBILITY:

Avoid acids, alkalies, exidizing agents, reducing

agents, or reactive halogens.

REACTIVITY:

Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

HAZARDOUS DECOMPOSITION

PRODUCTS:

None under normal temperatures and pressures. See

also SECTION 5: HAZARDOUS COMBUSTION

PRODUCTS.

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION:

Based on best current information, there is no known human

sonsitization associated with these materials.

CARCINOGENICITY:

IARC classifies chemicals by their carcinogenic risk, including agents that are known, probable, or possible carcinogens. NTP classifies chemicals as either known carcinogens, or for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals. ACGIH recognizes several categories of carcinogens, including confirmed human carcinogens and suspected human carcinogens.

Based on best current information, there is no known carcinogenicity associated with those materials.

Also see SECTION 15: CALIFORNIA.

REPRODUCTIVE TOXICITY:

Based on best current information, there is no known reproductive toxicity associated with those materials.

Also see SECTION 15: CALIFORNIA.

TERATOGENICITY:

Based on best current information, there is no known terategenicity

associated with these materials.

MUTAGENICITY:

Based on best current information, there is no known mutagenicity

associated with these materials.

TOXICOLOGICALLY SYNERGISTIC PRODUCT(S): Based on best current information, there are no known toxicologically synergistic products associated with these

materials.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:

A Static Acute Bioassay as per the California Department of Fish and Game WPCL, was done using fathead minnows,

and up to 750 ppm of the products in water.

The material passed the bioassay with only 1 out of 10 minnows dying. To fail the bioassay, more than 40% of the

fish would die in 750 ppm.

OCTANOL/WATER
PARTITION COEFFICIENT:

Not available.

VOLATILE ORGANIC COMPOUNDS:

100 WT%; 6.5 to 6.8 lb/US gal; 780 to 820 g/l

Photochemically reactive as per 40 CFR Part 51.100(s).

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL:

Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

USEPA WASTE

CODE(S):

Not regulated.

Based on available data, this information applies to the material as supplied to the user. Processing, use, or contamination may make

this information inappropriate, inaccurate, or incomplete.

SECTION 14: TRANSPORT INFORMATION

DOT:

COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA),

NA1993, PGIII

TDG:

Not regulated.

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS 311 AND 312:

Materials pose the following physical and health hazards as defined in 40 CFR Part 370 and are subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986:

> Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard

Fire Hazard

SARA SECTION 313:

These products do not contain toxic chemicals subject to the requirements of section 313 of Title III of the Superfund

Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

TSCA:

All the components of these products are listed on the TSCA

Inventory.

,CALIFORNIA:

Those products may contain a detectable amount of benzene CAS 71-43-2. This material is listed by the State of California as a known carcinogen.

Our testing of these products indicates that this compound is not always detectable. However, when detected, the benzene level is at or below the product specification of 0.4 mg/l,

These products may contain a detectable amount of p-dichlorobenzene CAS 106-46-7. This material is listed by the State of California as a known carcinogen.

Our testing of these products indicates that this compound is not always detectable. However, when detected, the p-dichlorobenzene level is at or below 7.5 mg/l.

These products may contain a detectable amount of toluene CAS 108-88-3. This material is listed by the State of California as known to cause reproductive toxicity.

Our testing of these products indicates that this compound is not always detectable. However, when detected, the toluene level is at or below 500 mg/l.

CANADIAN REGULATIONS

These products have 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.

WHMIS:

B3. D2B

CANADIAN ENVIRONMENTAL PROTECTION ACT

(CEPA):

All the components of these products are listed on the Canadian

Domestic Substances List.

SECTION 16: OTHER INFORMATION

REVISION INFORMATION:

New format.

LABEL/OTHER INFORMATION:

These products are Underwriters Laboratories (UL)

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsonyor for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, or merchanishility, filness for a particular numero or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on the choot apply to the material as supplied to the user.



F-319 T-875 P-002 OCT 13 '98 07:21

Aug. 18. 1998 8:59AM IMPERIAL ADHES! VES 5133511994 DATA SHEET No. 3/02 P. 1/8AGE

6315 WIEHE RD. CINCINNATI, OHIO 45237

INFORMATION & EMERGENCY NOS: IMPERIAL (513) 351-1300, CHEMTREC (800) 424-930

PRODUCT IDENTITY 158200 NON-FLAMMABLE WHISPER SPRAY

1209303

ADHESIVE, SPRAY WHISPER

TO: SEA RAY BOATS, ATTN: ROSALIE

Sylvia

INVOICE NO: ORDER DATE: 8/17/98 LAST REVISION DATE: REVISION NUMBER: 001 6/02/98

HMIS RATING

ACUTE HEALTH:

FLAMMABILITY:

REACTIVITY: 0

HAZARD RATING: 0-MINIMAL 1-SLIGHT

2-MODERATE

3-HIGH 4-EXTREME

SECTION I - PRODUCT IDENTIFICATION

PRODUCT IDENTITY: 158200 NON-FLAMMABLE WHISPER SPRAY

CHEMICAL NAME/FAMILY: N/A - MIXTURE

SECTION II - HAZARDOUS COMPONENTS

HAZARDOUS COMPONENTS ARE LISTED IN THIS SECTION IF THEY ARE PRESENT AT OR ABOVE 11 IN THE MIXTURE. NTP, IARC AND OSHA CARCINGENS ARE LISTED AND POOTNOTED IF THEY ARE PRESENT AT OR ABOVE 0.11 IN THE MIXTURE. ADDITIONAL INFORMATION MAY BE FOUND IN SECTION VI. OTHER COMPONENTS MAY BE LISTED IF DERMED APPROPRIATE. THE PERCENT BY WEIGHT GIVEN IS AN APPROXIMATE FORMULATION VALUE FOR THE COMPONENT IN THE FINISHED PRODUCT AND NOT A SPECIFICATION. COMPONENTS NOT LISTED ARE DEEMED TO BE NON-HAZARDOUS UNDER THE CRITERIA OF THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200. COMPONENTS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313 AND 40 CFR PART 372 ARE IDENTIFIED IN THIS SECTION.

CODES: N/R = NOT REQUIRED, N/A = NOT APPLICABLE, N/D = NOT DETERMINED, < = LESS THAN, > = GREATER THAN, MG/CUM = MILLIGRAMS PER CUBIC METER OF AIR

ACGIH

OSHA

COMPONENTS	* WT.	TLV-TWA	TLV-STEL	PEL-TWA	PEL-STRL	NOTES	
1-BROMOPROPANE SYNONYM: N-PROPYL CAS NO. 106-94-5	BROMIDE	N/D	מ/מ	N/D	N/D	(1,2)	
ALIPHATIC HYDROCAR COMMON NAME: MINER	BONS (S'	TODDARD TY	'PE)		; ·	,	
CAS NO. 8052-41-3	1	100 PPM	N/D	500 PPM	N/D	(3)	
DIACETONE ALCOHOL CAS NO. 123-42-2	1	50 PPM	N/D	50 PPM	N/D	(4)	

NOTES: THIS PRODUCT CONTAINS NO COMPONENTS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III SECTION 313 AND 40 CFR PART 372 IN QUANTITIES GREATER THAN THE "de minimis" LEVEL.

(1) SUPPLIER RECOMMENDS AN EXPOSURE GUIDELINE OF 100 PPM 8-HOUR TWA.

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F-319 T-875 P-003 OCT 13 '98 07:21
     Aug. 18. 1998 9:00AM IMPERIAL ADHESIVES 5133511994 DATA SHEET
                                                                                                                                                     No. 5762 P. 2/8 AGE
   IMPERIAL ADHESIVES, INC.
6315 WIEHE RD. CINCINNATI, OHIO 45237
INFORMATION & EMERGENCY NOS: IMPERIAL (513) 351-1300, CHEMTREC (800) 424-930
 PRODUCT IDENTITY 158200 NON-FLAMMABLE WHISPER SPRAY
                                      SECTION II - HAZARDOUS COMPONENTS ( CONTINUED )
    NOTES: (CONT'D)
(2) CONTAINS 4.0% 1.3-DIOXOLANE CAS NO. 646-06-0 WHICH HAS NO ESTABLISHED EXPOSURE LIMITS. THE AMOUNT OF 1.3-DIOXOLANE IN THE FINAL PRODUCT IS APPROXIMATELY 3% BY WEIGHT. ALSO CONTAINS 0.5% 1.2-BUTYLENE OXIDE WHICH HAS NO ESTABLISHED EXPOSURE LIMITS. THE AMOUNT OF 1.2-BUTYLENE OXIDE IN THE PINAL PRODUCT IS APPROXIMATELY 0.3% BY WEIGHT. SEE SECTION VI.
    (3) EXPOSURE LIMITS AS FOR STODDARD SOLVENT. NIOSH RECOMMENDS LIMITS OF 350 MG/CUM, 8-HOUR TWA, 1800 MG/CUM 15-MIN TWA CHILING.
     (4) NIOSH RECOMMENDS A LIMIT OF 50 PPM, 8-HOUR TWA.
                                                  SECTION III - PHYSICAL DATA
   APPEARANCE: CLEAR LIQUID
APPROXIMATE BOILING POINT/RANGE (DEG.F): 160-315
APPROXIMATE DENSITY: 9.89 LBS/GAL
APPROXIMATE PERCENT VOLATILE BY WEIGHT: 70
  SOLUBILITY IN WATER:
FOR PRODUCT: N/D
FOR 1-BROMOPROPANE: VERY SLIGHTLY SOLUBLE
FOR 1,3-DIOXOLANE: COMPLETELY SOLUBLE
FOR MINERAL SPIRITS: NEGLIGIBLE
FOR DIACETONE ALCOHOL: COMPLETELY SOLUBLE
           FOR OTHER COMPONENTS: N/D
  VAPOR DENSITY (AIR = 1); >1
 VAPOR PRESSURE (MM HG @ 68 DEG.P):
FOR PRODUCT: N/D
FOR 1-BROMOPROPANE: 135
FOR 1,3-DIOXOLANE: 70
FOR MINERAL SPIRITS: 2.0
FOR DIACETONE ALCOHOL: 0.80
FOR OTHER COMPONENTS: N/D
EVAPORATION RATE (N-BUTYL ACETATE = 1):

FOR PRODUCT: N/D

FOR 1-BROMOPROPANE: 6.0

FOR 1.3-DIOXOLANE: >1

FOR MINERAL SPIRITS: 0.12

FOR DIACETONE ALCOHOL: 0.14

FOR OTHER COMPONENTS: N/D
FLASH POINT (DEG.F): FOR PRODUCT: NONE PENSKY-MARTENS CLOSED CUP (SEE SECTION IV); FOR 1-BROMOPROPANE: NONE PENSKY-MARTENS CLOSED CUP, TAGLIABUE CLOSED CUP, AND CLEVELAND OPEN CUP, HOWEVER HIGH INTENSITY IGNITION SOURCES MAY IGNITE CONCENTRATED VAPORS. SEE SECTION IV FOR MINERAL SPIRITS: 105 TAGLIABUE CLOSED CUP FOR DIACRTONE ALCOHOL: 133 TAGLIABUE CLOSED CUP FOR 1,3-DIOLOXANE: 35 OPEN CUP
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APPROXIMATE AUTOIGNITION TEMPERATURE (DEG.F):

POR PRODUCT: N/D

POR 1-BROMOPROPANE: 914

FOR MINERAL SPIRITS: 445

FOR DIACETONE ALCOHOL: 1118

FOR OTHER COMPONENTS: N/D

CLAMMABLE/EXPLOSIVE LIMITS (% VOLUME IN AIR):

OWER: 1.0

UPPER: 8.0

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:
THE SOLVENT IN THIS PRODUCT IS A MIXTURE OF NON-FLAMMABLE BROMINATED SOLVENT AND A SMALL AMOUNT OF FLAMMABLE AND/OR COMBUSTIBLE SOLVENT AND SHOWS NO FLASH POINT IN THE PENSKY-MARTENS CLOSED CUP TESTER.

CAUTION! THE FLASH POINT CHARACTERISTICS MAY CHANGE UPON PARTIAL EVAPORATION DUE TO THE HIGHER EVAPORATION RATE OF THE BROMINATED SOLVENT(S).

FLAMMABLE LIMITS: SBE BELOW UNDER "UNUSUAL FIRE AND EXPLOSION HAZARDS."

EXTINGUISHING MEDIA: WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES:
WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIGHTING FIRES. WATER MAY
BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL UNTIL FIRE IS OUT. AVOID
SPREADING BURNING LIQUIDS WITH WATER USED FOR COOLING PURPOSES.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
AS PRODUCED THIS MATERIAL IS NOT PLAMMABLE. HOWEVER, IF EXPOSED TO AIR
FOR EXTENDED PERIODS OF TIME, THE SOLVENT MAY EVAPORATE TO LEAVE MATERIA.
WHICH WILL FLASH AND/OR BURN WHEN INTRODUCED TO OPEN FLAME.

THIS PRODUCT SHOULD NOT BE USED WHERE INADEQUATE VENTILATION IS LIKELY OR WHERE VAPOR CONCENTRATIONS MAY BECOME FLAMMABLE.

ALTHOUGH 1-BROMOPROPANE HAS NO FLASH POINT WHEN TESTED BY CONVENTIONAL MEANS, VAPORS CONCENTRATED IN A CONFINED OR POORLY VENTILATED AREA CAN BE IGNITED UPON CONTACT WITH A HIGH ENERGY SPARK, FLAME OR HIGH INTENSIT SOURCE OF HEAT. THIS CAN OCCUR AT CONCENTRATIONS RANGING FROM 31 TO 81

THE SOLIDS PORTION OF PRODUCT IS COMBUSTIBLE AND WILL DECOMPOSE DURING COMBUSTION OR UNDER PYROLYSIS CONDITIONS GIVING OFF TOXIC FUMBS.

CLOSED CONTAINERS MAY BURST DUE TO PRESSURE BUILD-UP IF EXPOSED TO TEMPERATURES AT OR NEAR THE BOILING FOINT OF THE PRODUCT. CLOSED CONTAINERS MAY RUPTURE EXPLOSIVELY IF EXPOSED TO EXTREME HEAT OR FIRE.

NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) MAY IGNITE EXPLOSIVELY.

SECTION V - REACTIVITY DATA

STABILITY: STABLE UNDER NORMAL CONDITIONS

CONDITIONS TO AVOID:
AVOID CONTACT WITH OPEN FLAME BLECTRIC ARCS HOT GLOWING SURFACE OR
OTHER HIGH TEMPERATURE SOURCES WHICH INDUCE THERMAL DECOMPOSITION.

INCOMPATABILITY (MATERIALS TO AVOID):
AVOID CONTACT WITH STRONG OXIDIZING AGENTS, STRONG ALKALIES, STRONG ACIDS, AND CHEMICALLY ACTIVE METALS SUCH AS SODIUM, POTASSIUM, BARIUM POWDERED ALUMINUM, MAGNESIUM, ZINC. AVOID PROLONGED CONTACT WITH, OR STORAGE IN, ALUMINUM OR ITS ALLOYS. AVOID WATER CONTAMINATION. BARIUM,

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SECTION V - REACTIVITY DATA

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:
CARBON MONOXIDE, CARBON DIOXIDE, ACRID (CHOKING) SMOKE AND FUMES,
OXIDES OF NITROGEN, HYDROGEN BROMIDE, BROMINE, OTHER UNIDENTIFIED
ORGANIC COMPOUNDS AND TOXIC SUBSTANCES

SECTION VI - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: INHALATION, EYE CONTACT, SKIN CONTACT

EFFECTS OF ACUTE OVEREXPOSURE: FOR EACH POTENTIAL ROUTE OF EXPOSURE

BYE CONTACT:
VAPORS ARE IRRITATING. DIRECT CONTACT WITH THE LIQUID OR OVEREXPOSURE
TO ITS VAPORS OR MISTS CAN CAUSE MODERATE IRRITATION, PAIN, BURNING,
TEARING, REDNESS. EYE EFFECTS MAY BE ACCENTUATED IF MATERIAL IS NOT,
PROMPTLY REMOVED.

SKIN CONTACT: IN CONTACT:

CONTACT MAY CAUSE IRRITATION. PROLONGED OR REPEATED CONTACT CAN CAUSE IRRITATION, PAIN, BURNING, REDNESS, DEFATTING (DRYING, CRACKING OR PLAKING OF SKIN) AND DERMATITIS (INPLAMMATION OF SKIN). SKIN EFFECTS MAY BE ACCENTUATED BY LIQUID BECOMING TRAPPED AGAINST THE SKIN BY CONTAMINATED CLOTHING SHORS. PERSONS WITH PRE-EXISTING SKIN DISORMAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS MATERIAL.

SKIN ABSORPTION: ALTHOUGH ABSORPTION OF LIQUID THROUGH INTACT SKIN IS POSSIBLE, RESULTING IN SYSTEMIC EFFECTS (INJURY TO OTHER BODY SYSTEMS), A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE ABSORPTION OF HARMFUL AMOUNTS OF MATERIAL.

INHALATION: EXCESSIVE INHALATION OF VAPORS OR MISTS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, HEADACHE, NAUSEA, SIGNS OF NERVOUS SYSTEM DEPRESSION (SUCH AS LIGHTHEADEDNESS, DIZZINESS, LOSS OF COORDINATION AND ROUILIBRIUM, DROWSINESS, WEAKNESS, FATIGUE), AND POSSIBLE UNCONSCIOUSNESS IN CONFINED OR POORLY VENTILATED AREAS.

EXPOSURE TO HIGH DOSES OF 1-BROMOPROPANE MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION (ANESTHETIC-LIKE EFFECTS). DOSES WHICH CAUSE ANESTHETIC-LIKE EFFECTS MAY ALSO CAUSE ADVERSE EFFECTS IN THE LIVER, LUNGS, AND KIDNEYS.

INGESTION:
MAY CAUSE IRRITATION OF THE DIGESTIVE TRACT, HEADACHE, NAUSEA, VOMITING, DIARRHEA AND SIGNS OF NERVOUS SYSTEM DEPRESSION AS FOR INHALATION.
ASPIRATION OF MATERIAL INTO THE LUNGS DURING SWALLOWING OR VOMITING CAN CAUSE CHEMICAL PNEUMONITIS (LUNG INFLAMMATION AND DAMAGE) WHICH CAN BE FATAL. IF ASPIRATED, MAY BE RAPIDLY ABSORBED THROUGH THE LUNGS AND RESULT IN INJURY TO OTHER BODY SYSTEMS.

ADDITIONAL EFFECTS OF ACUTE OVEREXPOSURE:
INHALATION OF AEROSOL OR SPRAY MIST MAY CAUSE SEVERE IRRITATION OF THE
RESPIRATORY SYSTEM (NOSE, THROAT, LUNGS, ETC.), CHEMICAL PNEUMONITIS
(LUNG INFLAMMATION AND DAMAGE), AND INJURY TO OTHER BODY SYSTEMS FROM
ABSORPTION OF SOLVENT THROUGH LUNGS.

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SECTION VI - HEALTH HAZARD DATA

EMERGENCY AND FIRST AID PROCEDURES:
GET IMMEDIATE MEDICAL ATTENTION IF ANY SYMPTOMS OF OVEREXPOSURE OCCUR.

- IF IN EYRS: IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, LIFTING UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION
- ON SAIN:
 REMOVE CONTAMINATED CLOTHING. THOROUGHLY WASH EXPOSED SKIN AREA WITH
 SOAP AND WATER. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. DISCARD
 CONTAMINATED SHOES. SEE A PHYSICIAN IF IRRITATION OR INJURY DEVELOPS.
- IF BREATHED: IF AFFECTED, REMOVE INDIVIDUAL TO PRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.
- IF SWALLOWED: SWALLOWED:

 IF MATERIAL HAS BEEN CONFINED TO MOUTH, RINSE OUT MOUTH WITH WATER.

 DO NOT SWALLOW WATER USED FOR RINSING PURPOSES.

 IF MATERIAL HAS BEEN SWALLOWED, IMMEDIATELY DRINK TWO GLASSES OF WATER.

 NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DO NOT INDUCE

 VOMITING. ASPIRATION OF MATERIAL INTO THE LUNGS DUE TO VOMITING CAN CAUSE

 CHEMICAL PNEUMONITIS AND/OR SYSTEMIC EFFECTS WHICH CAN BE FATAL. KEBP

 PERSON WARM, QUIET AND GET MEDICAL ATTENTION.
- THERE IS NO SPECIFIC ANTEDOTE. TREATMENT OF OVEREXPOSURE SHOULD BE THERE IS NO SPECIFIC ANTEDOTE. TREATMENT OF OVEREXPOSURE SHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITION OF THE PATIENT. INGESTION CREATES A HIGH RISK OF ASPIRATION AND SUBSEQUENT CHEMICAL PNEUMONITIS. CAREFUL LAVAGE MAY BE INDICATED AFTER INGESTION. IF LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL AND/OR ESOPHAGEAL CONTROL.
- EFFECTS OF CHRONIC OVEREXPOSURE:

 LONGTERM OVEREXPOSURE TO 1-BROMOPROPANE MAY CAUSE ADVERSE EFFECTS IN THE
 LIVER, RESPIRATORY SYSTEM, KIDNEYS, AND CENTRAL NERVOUS SYSTEM.
 - 1,2-BUTYLENE OXIDE HAS BEEN SHOWN TO PRODUCE BENIGN AND MALIGNANT TUMORS IN RATS BUT NOT IN MICE. THESE TUMORS OCCURRED FOLLOWING HIGH EXPOSURE LEVELS WHICH FIRST PRODUCED CHRONIC UPPER RESPIRATORY TRACT IRRITATION.
 1,2-BUTYLENE OXIDE IS NOT BELIEVED TO POSE A CARCINOGENIC RISK TO MAN WHEN HANDLED AS RECOMMENDED.
 - OVEREXPOSURE TO ALIPHATIC HYDROCARBONS CAS NO.8052-41-3 (MINERAL SPIRITS) HAS BEEN SUGGESTED AS A CAUSE OF CENTRAL NERVOUS SYSTEM EFFECTS IN HUMANS

OVEREXPOSURE TO DIACETONE ALCOHOL HAS APPARENTLY BEEN FOUND TO CAUSE ANEMIA, LIVER ABNORMALITIES, AND KIDNEY DAMAGE IN LABORATORY ANIMALS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: PICAL CONDITIONS AGGRAVATED BY EXPOSURE:
RESPIRATORY SYMPTOMS ASSOCIATED WITH PRE-EXISTING LUNG DISORDERS (e.g.,
ASTHMA-LIKE CONDITIONS) MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL.
SKIN CONTACT MAY AGGRAVATE PRE-EXISTING SKIN DISORDERS (e.g. DERMATITIS).
VAPORS AND LIQUID MAY AGGRAVATE PRE-EXISTING EYE DISORDERS.

THIS PRODUCT CONTAINS ROSIN OR A ROSIN DERIVATIVE. ROSIN AND SOME OF ITS DERIVATIVES HAVE BEEN REPORTED TO CAUSE SKIN SENSITIZATION OR AN ALLERGIC SKIN REACTION SUCH AS A RASH IN SUSCEPTIBLE INDIVIDUALS AFTER REPEATED OR PROLONGED SKIN CONTACT. SKIN CONTACT WITH THIS OR OTHER ROSIN DERIVATIVES AFTER SENSITIZATION MAY CAUSE AN ALLERGIC SKIN REACTION.

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SECTION VI - HEALTH HAZARD DATA (CONTINUED)

OTHER HEALTH INFORMATION:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE
TO ORGANIC SOLVENTS WITH VARIOUS NEUROTOXIC EFFECTS INCLUDING PERMANENT
BRAIN AND NERVOUS SYSTEM DAMAGE. SYMPTOMS INCLUDE LOSS OF MEMORY, LOSS OF
INTELLECTUAL ABILITY AND LOSS OF COORDINATION. CHRONIC SKIN EXPOSURE TO
SOLVENTS MAY CAUSE SIMILAR EFFECTS. INTENTIONAL MISUSE BY DELIBERATELY
CONCENTRATING AND INHALING THE CONTENTS OF THIS PRODUCT MAY BE HARMFUL

IF THIS MATERIAL IS USED IN A MANNER THAT COULD GENERATE PARTICULATES (DUST) AFTER SOLVENT EVAPORATION, IT IS RECOMMENDED THAT THE DUST BE TREATED AS A NUISANCE PARTICULATE ACCORDING TO THE AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH). TLV-TWA 10 MG/CUM OF

ANY PROPOSED USE OF THIS PRODUCT IN ELEVATED-TEMPERATURE PROCESSES OR IN SPRAY APPLICATIONS SHOULD BE THOROUGHLY EVALUATED TO ASSURE THAT SAFE OPERATING CONDITIONS ARE ESTABLISHED AND MAINTAINED.

SECTION VII - SPILL, LEAK AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
WEAR APPROPRIATE SKIN AND EYE PROTECTION DURING CLEANUP. USE RESPIRATORY
PROTECTION IF NEEDED.

ABSORB LIQUID ON PAPER, RAGS, VERMICULITE, PLOOR ABSORBENT OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD. ALLOW VOLATILE PORTION TO EVAPORATE IN HOOD. ALLOW SUFFICIENT TIME FOR VAPORS TO COMPLETELY CLEAR HOOD DUCT WORK. AFTER VOLATILE PORTION HAS EVAPORATED, TRANSFER REMAINING MATERIAL TO APPROPRIATELY MARKED CONTAINER.

LARGE SPILLS:

ÉLIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, BLECTRICAL 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 CONTAINER. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO WATER. IF RUN-OFF OCCURS, NOTIFY PROPER AUTHORITIES AS REQUIRED, THAT A SPILL HAS OCCURRED.

WASTE DISPOSAL METHOD:
DISPOSE OF MATERIAL IN ACCORDANCE WITH APPLICABLE LOCAL, COUNTY, STATI
AND FEDERAL REGULATIONS. AS PRODUCED, THIS MATERIAL IS A PRODUCT AND
NOT A WASTE.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

IF THE TLV OF THE PRODUCT OR ANY COMPONENT IS EXCEEDED, OR IF THE PRODUCT IS USED IN SUCH A MANNER AS TO GENERATE PARTICULATES (FUME, DUST, MIST), A NIOSH APPROVED RESPIRATOR IS ADVISED IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROL (SEE YOUR SAFETY BOULPMENT SUPPLIER). REDUCE EXPOSURE.

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SECTION VIII - SPECIAL PROTECTION INFORMATION (CONTINUED)

GENERAL MECHANICAL VENTILATION MAY BE SUFFICIENT TO KEEP PRODUCT VAPOR AND/OR MIST CONCENTRATIONS WITHIN SPECIFIED TLV RANGES.

IF GENERAL VENTILATION PROVES INADEQUATE TO MAINTAIN SAFE VAPOR AND/OR MIST CONCENTRATIONS, SUPPLEMENTAL LOCAL EXHAUST MAY BE REQUIRED.

PROTECTIVE GLOVES:
THE USE OF IMPERMEABLE GLOVES ARE ADVISED TO PREVENT POTENTIAL SKIN CONTACT, IRRITATION OR INJURY (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER).

EYE PROTECTION:

CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE RECOMMENDED TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY. HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER).

OTHER PROTECTIVE EQUIPMENT:
FOR OPERATIONS WHERE CONTACT CAN OCCUR, COVERALLS, APRON AND RUBBER
FOOT COVERING ARE RECOMMENDED. A SAFETY SHOWER AND EYEWASH FACILITY
SHOULD BE AVAILABLE.

SECTION IX - SPECIAL PRECAUTIONS AND OTHER COMMENTS

STORAGE AND HANDLING PRECAUTIONS:
PRACTICE SAFE WORKING PROCEDURES AND GOOD PERSONAL HYGIENE.
USE PROTECTIVE EQUIPMENT WHEN NECESSARY. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

HANDLE WITH REASONABLE CARE. STORE IN A COOL, DRY, VENTILATED AREA. KEEP AWAY FROM HEAT AND OPEN FLAME. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USB. USB PRODUCT ONLY WITH ADEQUATE VENTILATION. AVOID BREATHING VAPORS AND SPRAY MIST. AVOID EYE AND SKIN CONTACT. IN CONFINED OR POORLY VENTILATED AREAS, VAPORS WHICH READILY ACCUMULATE CAN CAUSE UNCONSCIOUSNESS AND DEATH. CONCENTRATED VAPORS OF THIS PRODUCT ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS SUCH AS PITS, DEGREASERS, STORAGE TANKS AND OTHER CONFINED AREAS. DO NOT ENTER AREAS WHERE VAPORS OF THIS PRODUCT ARE SUSPECTED UNLESS BREATHING APPARATUS IS USED AND AN OBSERVER IS PRESENT FOR ASSISTANCE. WHEN OPENING CONTAINERS, REMOVE TOP SLOWLY TO RELIEVE ANY PRESSURE BUILD-UP. DO NOT TRANSPER PRODUCT TO UNMARKED CONTAINER. FOR INDUSTRIAL USE ONLY.

ALUMINUM, MAGNESIUM AND THEIR ALLOYS ARE NOT ACCEPTABLE MATERIALS OF CONSTRUCTION FOR PUMPS, MIXERS, FITTINGS OR STORAGE TANKS BECAUSE SOLVENT DECOMPOSITION MAY OCCUR (ESPECIALLY IN PRESSURIZED OR ENCLOSED SYSTEMS) GENERATING HEAT, PRESSURE AND CORROSIVE GASES.

WHEN EXPOSED TO DIRECT HEAT, BROMINATED SOLVENT LIQUID AND VAPORS FORM HYDROGEN BROMIDE AND OTHER TOXIC AND CORROSIVE GASES WHICH WILL CORRODE METALS AND IRRITATE EYES, SKIN, AND RESPIRATORY SYSTEM. LONG TERM CONTACT WITH WATER CAN DEPLETE STABILIZERS FOLLOWED BY SLOW HYDROLYSIS PRODUCING CORROSIVE ACID.

OTHER PRECAUTIONS:

PRODUCT MAY CORRODE, DEGRADE OR OTHERWISE REACT WITH SOME METALS AND PLASTICS UPON PROLONGED CONTACT. CONSULT WITH EQUIPMENT SUPPLIER FOR PROPER CONSTRUCTION MATERIALS FOR STORAGE TANKS, MIXERS, FITTINGS, PIPES AND OTHER STORAGE AND HANDLING EQUIPMENT.

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SECTION IX - SPECIAL PRECAUTIONS AND OTHER COMMENTS (CONTINUED)

OTHER PRECAUTIONS:
CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. BECAUS EMPTIED CONTAINERS RETAIN RESIDUES (VAPORS, LIQUIDS AND/OR SOLIDS) ALL HAZARD PRECAUTIONS GIVEN IN THIS DATA SHEET MUST BE OBSERVED. SOLIDS),

OTHER COMMENTS:
THE RESPONSIBILITY TO PROVIDE A SAPE WORKPLACE REMAINS WITH THE USER.
THE USER SHOULD CONSIDER THE HEALTH HAZARDS AND SAPETY INFORMATION
CONTAINED HEREIN AS A GUIDE AND SHOULD TAKE THOSE PRECAUTIONS
REQUIRED IN AN INDIVIDUAL OPERATION TO INSTRUCT EMPLOYEES AND TO
DEVELOP WORK PRACTICE PROCEDURES FOR A SAPE WORK ENVIRONMENT.

THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. HOWEVER, BECAUSE THE CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS, AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY THE USE OF THIS MATERIAL. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

THE OSHA PERMISSIBLE EXPOSURE LIMITS (PEL'S) CONTAINED IN THIS MATERIAL SAFETY DATA SHEET ARE THE CURRENT LIMITS AS LISTED IN THE JUNE 1993 AIR CONTAMINANTS PINAL RULE, SPECIFIED IN TABLES 2-1, Z-2, AND Z-3 (FEDERAL REGISTER, 58:35338-35351, JUNE 30, 1993; CORRECTED IN FEDERAL REGISTER, 58:40191, JULY 27, 1993; AND SUBSEQUENT AMMENDMENTS).



Material Safety Data Sheet

MEDS No. 0205V1

WHME (Pictograms)



NFPA (USA)



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On the TSCA Set.

CHEMTREC (US 24 hours

Everyday) (800) 424-8300

Manufacturer (Barn to 5pm

workdays) (901) 854-2800

W.

Modure

La remod CANUTEC (Canada 24 hours Lawrence Everyday) (613) 996-6666

Sucpon to C	aemicai Produ	CF AVIS (<i>-</i> ongoan	cation:
reduct Name	Polyester			

Trade Name
Code: Type TT)
Contensor Product
Hydropel A 35 15.65640
Name
Repplier
AOC, LLC
BGO Highway 57 East
Collierville, Tennessee U.S.A. 38017
Phone Number: (901) 854-2890
Remayor
Not available.

Not available.

Chemical Name Not applicable.

Chemical Family (Arometic.)

Innufacturer AOC, LLC

860 Highway 57 East Collorville, Tennesses U.S.A. 38017 Phone Number: (901) 854-2890 Material Uses Industrial applications: Used in the manufacture of fiber reinforced plants parts.

Balling M. Composition and Information on Ingredents

Cobalt 2-Ethylhexanoste 136-52-7 0.1+1
Styrene 100-42-5 30-35

Bon III Gerroris Identife 1900

of Paris

relential Acute relth Effects

inhalation of the spray mist may produce severe initation of respiratory tract, characterized by coughing, choking, or shortness of breath. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. May cause skin sensitization. May cause eye initation.

dential Chronic alda Ethetz CARCINOGENIC EFFECTS: Classified 28 (Possible for human.) by IARC [Styrene]. An increased incidence of lung tumors was observed in mice from a recent inhalation study. The relevance of this finding is uncertain since data from other long-term animal studies and from epidomiology studies of workers exposed to styrene do not provide a hasis to conclude that styrene is carcinogenic. Lung effects have been observed in the mouse following repeated exposure. Classified 28 (Possible for human.) by IARC [Cobalt 2-Ethylhexanoate]. MUTAGENIC EFFECTS: Not available.

Polyetter Resin Soluti	on in Styrena (MSD9 Code: Type 11)	MSDS No. 9295V1 Page: 2				
Section IV. First A.						
Eye Contact	MAY CAUSE EYE IRRITATION. Check for and remove any contact lanses. DO NOT us eye obtainent. Fluch with plenty of water for at least 15 minutes, occasionally lifting the used lower eyelids. Sack medical attention.					
Silón Comtact	West gently and thoroughly the contaminated skin with running water and non-obresive sea if initiation persists, seek medical attention.					
Heterdous Skin Cuntuct	No additional Intermetten.					
Inhalation	Allow the victim to rest in a well ventilated area. Se	ek immediate medical attention.				
Hourdons Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen light clothing such as a collar, tie, bett or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-in-mouth resuscitation. Seek immediate medical attention.					
Legisties	DO NOT induce variting. If ingested, seek medical advice immediately and show the container or the label. Prevent expiration.					
Haverdous Layestian	No additional information.					
The Product is:	Flammable.	The state of the s				
The Predest is:						
Temperature	490°C (914°F) (Styrene).					
Cauls Points	CLOSED CUP: 31°C (87.4°F)					
Planusble Limits	LOWER: 1.1% UPPER: 6.1% (Styrene)					
reducts of Combustina	Not enrallable					
Pity Hazards in Presence of Various Substances	Slightly faminable to faminable in presence of oper	n Sames and sparks, of heat.				
iplotise Herords in Presence of Various Substances	Risks of explosion of the product in presence of static discharge: Not available. No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.					
ra Fighting Media d Instructions	Flammable liquid, insoluble in water. SMALL FIRE: Use DRY chemicals, CO2, alcohol for LARGE FIRE: Use water spray or fog. Never din prevent any splaching of the product which could covered with water jet in order to prevent processe by	ect a water jet in the container in order to suce spreading of the line. Conf containing				
Special Hauszrks en Par Haturds	No edificanal remark.					
odal Remarks un	No additional remark.					

chan VI, Accidental Release Measures ::

Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Fixmmable liquid, insoluble or very slightly soluble in water.

Keep away from heat. Keep away from sources of ignifion. Stop leak if without tiek. Absorb with DRY earth, sand or other non-combustible material. DO NOT get water inside container. DO NOT touch spilled material. Prevent entry into sewers, basements or confined areas; oliop if needed. Etiminate all sources of ignition. Gott for sessiptance on dispussel.

lacion Hazards

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Palyester Resin Salu	idon in Styrena (MSDS	Code: Type TT)		MSD	8 No. 0205V1	Page: 3
Section VII. Hang	lary and Storage					(1) 10 10 10 10 10 10 10 10 10 10 10 10 10
Proceedings	Keep locked up. Keep locked	g material. DO N Sive clothing. If in	OT ingest.	Do not breathe or	s of ignition.	Consumo all
Sterage	Keep away from he Keep in a cool, well-	at. Keep away fro rentilated place. G	om source Fround all c	s of ignition. Keep	container tight	by closed.
Section VIII type	stere Controls Pers	onal Property		TOTAL CONTRACTOR OF THE PARTY O	الأنام المراجعة ويستعدد المراجعة المراجعة ويستعدد	
Expense Limits	Cobalt 2-Ethylhese Styrunia	TWA:	0.05 (mg/ 10 (ppm) 50 (ppm)	mi) from OSHA (m) from ACGIH from ACGIH / 8 hours from OSH) from ACGIH.	A	特性
Engineering Contrals	Provide extraust vent vapors below their re showers are proximal	lation or other engapective threshold to the work-station	incering c limit valu location.	antrols to keep the are. Ensure that eye	wash stations :	and sufety
Personal Protection	Splach goggles. Lab ventilation is Inadequ Organic vapor respira	me Besure to	r respirato use a MSI	r. Gloves, Wear ap LAVNIOSH approved	propriete respir l respirator or e	ator when quivalent
Personal Protection in Case of a Large Spill	Splach goggles. Full used to avoid inhalation	suit. Boots. Glo n of the product.	ves. A se	ontained breath	ng apparatus s	hould be
SACTION IX Physics	dana Commen P	operties		is an an office of the second	man, and and a second	
Physical State and Appearance	Liquid. (Viscous liquid	Alakas (manifilm) (manifilm)	Oder	Aromatic.		
Melecular Weight (g/mail)	1000 to 12000		Taste	Not available,	•	
pH (1% solu/water)	~7.0	*	Color	Clear to Amber.		
Heiling Paint	>35°C (96.8°F)				***************************************	
Melting Point	Not applicable.		-, -, -, ,	······································	· · · · · · · · · · · · · · · · · · ·	
Critical Temperature	Not available.		· · · · · · · · · · · · · · · · · · ·			
Specific Gravity	1.1 (Water = 1)				**************************************	
Vapor Pressure	4.5 mm of Hg (@ 2010) (Styrene)	· · · · · · · · · · · · · · · · · · ·			
Vaper Density	3.59 (Aire1) (Styrena)					:
Velotility	Not available.					
Odor Threshold	0.14 ppm (Styrene)					
Evaporation rate	Not available.		····			
Vienecity	Varice			·		
Vater/Oil Dist. Coeff.	Not mailable					~
isperden Properties	is not dispersed in cold	water, hot water.				
Andrew .						l l

Slightly soluble in cold water, hot water (0.1 to 1.0 %)

	tution in Styrene (MSDS		MSDS No. 0205V1 Page: 4
Section X. Stabi	hely and the county t		
Stubility	The product is stabil	R.	and the second s
Instability Temperatu			
Conditions of Instabili	₹ >77 °C	:	
Intermpetibility with various tubeteness	Polymerizes in the p	resence of organic permides.	
Comunity	No specific informati presence of various r	on is available in our detabase.	regarding the corresivity of this product in
Special Remarks on Renotivity	Polymerizes in the pr	sence al organic permides.	
Special Remarks on Corresivity	No additional remark		
Section 22 Trans	ing interprete	plant to preside all property of the last and the	
Routes of Datry		And the second s	A THE RESERVE OF THE PARTY OF T
	Ingestion.		
Tunicity to Amunch	Cobalt 2-Ethylheranout Styrane		Acute: 2050 morky [Rul].
Special Remarks on Tenicity to Anhuals	Lung effects have been	observed in the mouse following	Repeated exposure.
Special Remarks on Thronic Effects on Incomes	No additional remark.		
Special Remarks on Other Toxic Effects on Somens	of coordination. Direct in human carcinogen (IAFC of the eyes. Prolonged	ontact may produce initiation to contact may produce initiation to comp 28). Prolonged eye exposure may result in nausea by, and peripheral and central of	Inhalation may cause uppor respiratory ag headache, names, vomiting and loss of eyes and skin. Styrene is a possible pesure may cause imitation to the lining a, loss of appetite, general weakness, servous system effects. Prolonged skin
erien XV Ecolog	est internation	manufacture and the second sec	
entericity	Not available.	And the second s	
OUS and COD	Not mrailable.		
wikin Mil Dispos	a Considerations		
nto Dispusal	The last territory of the last territory of the last	sult your local or regional authorit	Constitution of the state of th
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							: 77
				Code: Type TT)		MSDS No.: 0205V1	Page: 5
Sociory	IV. Fran		inter.	TAT MUNICIPALITY	de la		No. ATTO
Frepor Shipy Name (TDG)		Rocky Solution		!	Mary State of the Control of the Con	HINAN MARKATANA TANA	
TOG Charife	antion.	TOG CLASS	3: Flatren	phia liquid.			
PIN		UN1866		T			· ,
Packing Gree		la i	·				
Special Provis Transport		109 The cone	IONO! ITELS	t determine legal limit	(Styrene)		74
TDG (Pletogr	ties)						
Proper Shippin (DOT)	ng Name	Resin Solution	1				
DOT Claudice	LG(P)	DOT CLASS	: Flamma	ble liquid.			- · · · · · · · · · · · · · · · · · · ·
DOT Identifica Number	the ty	UNISEE	i				
DOT Parking (111			***		
Hammione Sub Reportable Que		Styrene 454.5	:				
ipocial Previsio rampert	and flye	No additional r	emark.				
OT (Pictogram	.						
Mar Regulada		ATA Classificat	ion: flerin	n solution (styrene), 3 AG Table 310 I solution, 3, UN1868, IOT-2006 Picknurs	PG III, Pkg inst pass		
Mar.							
agnisticas.	On the D	OSL Est,	BANKACA: CI	Hazard Constanted	on Standard (29 CF	R 1910.1200).	
	On the T		:	•			1
				: List (MSL) Hazardou dentified when presen ct at a lavel which cou			
•	Massachi Hazardou	iselia Right-To- s Substances o	Know Su	ibstance List (MSL) H Limust be identified w t at a lovel which cou	azadous Substance	s and Edwordinally	
-	Styrene.		:			रूपम् भ स्ट क्यां स्टाहर हा हि	
APPEN IN SE							100 225
							······································

MSD& No. (0285V1 Page: # Holyester Resin Solution in Styrene (MSDS Gode: Type YT) Minesota Right-To-Know, Substance List (MSL) Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: Styrene. New Jersey Right-To-Know. Substance List (MSL) Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: Styrenc. Pennsylvania Right-To-Knov, Hazardous aubstance List. Hazardous Substances and Special hazzerious Substances on the list must be identified when present in products. Components present in this product at a level which could require reporting under the statute are: Styrene. This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: NONE WHIMIS (Camelle) WHIMIS CLASS B-2: Frammable liquid with a flesh point lower than 37.8°C (100°F). WHIMIS CLASS D-28: Material causing other texte effects (TOXIC). HCS (U.S.A.) HCS CLASS: Flammable liquid having a fash point lower than 37.5°C (100°F). HCS CLASS: Toxic. DSCL (EEC) R10-Flammable:

R18- In use, may form transmatric/explosive vapor-or mixture.

Section My	Other Internation	Company of the second s		
Haftrences	Transportation of Dangerous and transporting of dangerous - Canada Gazette Part II, Har - Menufucturer's Material Sul 29 CFR 1810,10000, Z - Table ACGIH 1995-1996 TLVs for C	Goods Act - "Regulations respecting the handling, offering for transport is goods." Extract from the Canada Gazette Part II zardous Products Act "Ingredient Disclosure List". Into Data Sheet. Its Data Sheet. Chemical Substances and Physical Agents. Themical Substances (RTECS)		
Other Special Consderations	No additional remark			
Validated by Lynn Campbell an 7/1/97.		Verified by Muris Roshler.		
<u> </u>		Printed 19/1/98.		
Prepared by:	epared by: LEHDER Environmental Services Limited 704 Maria Street Pt. Edward, Ontaria H7V 1X4 (519) SSE-1101 ed. 24			
DECAMPLE CIAL	MEG			

The information contained in this data about is furnished in good feith and without warranty, representation, or inducement or licenter of any kind, except that it is accurate to the best of AOC, LLCs knowledge, or was obtained from sources believed by AOC, LLC to be reliable. The accuracy, adequacy or completeness of health and sufuty precuminant out forth herein control be remained, and the huper is solely responsible for country that the product is used, handled, stored, and disposed of nighty and compliance with applicable factoris, muse or producted, and secut laws. AOC, LLC discounts Hability for any loss, damage or mand injury that arises from, or is in any way related to, use of the information contained in this data about.

JAN-96-99 WED 11:02 DBF, Inc. 7342851481 DBF Inc. MATERIAL SAFETY DATA SHEET Propared: August 1998 P.O. Box 2385 1235316 24 hr EMERGENC GUNE, LT WT BONDING PUTTY (800) 424-9300 (6 LOW VISCOSITY BY: Cliff Danville Riverview, MI 48192-1385 24 IV EMERGENCY PHONE (734) 285-1480 (800) 424-9300 (Chamtreo) Section 1 - IDENTITY Product Name: 60138-LV DOT SHIPPING DESCRIPTION: Resin Solution, 3, UN1866, POIJI NOTE: May be reclassed an ORM_D, Consumer Commodity in gallon size containers or smaller for DOMESTIC SHIPMENTS ONLY. See 49CFR173.150 CAS NUMBER: Mixture. HMIS/NFPA Rating: Health 2 Fire 3 Reactivity 1 Section 2 - COMPONENTS INGREDIENT CAS NUMBER PERCENT ACCIH/TLV OSHA/PEL - RO Polyester Resin Mixture 33-35 Styrene Monomer 100-42-5 15-17 50 ppm 50 ppm 1000 lbs thert Fillers Mixture 49-51 Section 3 - PHYSICAL DATA Boiling Point Vapor Pressure N/D Melting Point N/A Vapor Density (air=1) 3.6 (for styrene) Specific Gravity(H2O=1) 0.92 - 0.98Percent Volatile 13-15 (by weight) Solubility in Water Negligible Appearance & Odor . Thick paste with pungent odor Evaporation Rate (Bulyl Acetate=1) Less than 1 (for styrene) Section 4 - SUPPLIER NOTIFICATION This product contains toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. CAS# 100-42-5 CHEMICAL NAME: Styrene PERCENT: 13-15 California Proposition 65: Styrene Oxide is listed as known to the State of California to cause caucer. Styrene Oxide is a metabolite of styrene monomer. Section 5 - FIRE AND EXPLOSION DATA PLASH POINT(for styrene): 89-90 Deg.P. METHOD USED: Closed oup (SETA) FLAMMABLE LIMITS BY VOLUME (for styreno): LEL 1.1% UEL 6.1% ЕКТІНСІЛЬНІКІ MEDIAI Water or Foam or Carbon dioxide or Dry chemical SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH/MIAHS approved self-contained breathing apparatus to avoid inhalation of smoke. Section 6 - HEALTH HAZARD DATA EFFECTS OF ACUTE OVEREXPOSURE: Can cause skin and eye irritation. Excessive inhalation of vapors can cause nasal and respiratory irritation; central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation. Ingestion can cause gastrointestinal initation, vomiting, diarrhea. EFFECTS OF CHRONIC OVEREXPOSURE: The International Agency for Research on Cancer(IARC) has classified styreng in Group 213 (possibly carcinogerule to humans). This classification is not based on styrene oxide. A number of lifetime animal; studies with styrene including those conducted in the NCI Bioassay Program have not shown styrene to be carcinogenic. There is currently not sufficient evidence to indicate that styrene is cardinogen to humans. NOTE: Overexposure to styrene has been found to cause the following effects in laboratory animals; liver abnormalities. kidney damage and lung damage. PRIMARY ROUTES OF ENTRY: Inhalation, skin contact. WIRST AID: EYES: Flush with large amounts of water, lifting upper and lower hids occasionally. Get medical attention. SKIN WASH: Wash skin & contaminated clothing thoroughly with soap and water. INHALATION: Remove to fresh air. If breathing is difficult administer oxygen. If breathing has stopped, give CPR. Keep person warm, quiet and get medical attention. INGESTION: Do not induce vomiting. Aspiration into lungs can cause chemical pneumonitis. See a physician. Section 7 - REACTIVITY DATA HAZARDOUS FOLYMERIZATION: Can occur. Avoid exposure to excessive heat peroxides and polymerization oatalysts. STABILITY: Stable INCOMPATIBILITIES: Avoid contact with: strong alkalies, strong mineral acids and oxidizing agents. CONDITIONS TO AVOID: Exposure to excessive heat or open flame, storage in open container; long exposure to intense sunlight, contamination with oxidizing agents. Section 8 - PRECAUTIONS FOR SAFE HANDLING AND USE STORAGE: Avoid temperature of 100 deg. F. WASTE DISPOSALA Dispose in accordance with local, state and federal regulations. VENTILATION: Provide sufficient ventilation to maintain exposure below TLV for styrene.

PROTECTIVE EQUIPMENT: Normal work clothes covering arms and legs. Gloves and eye protection should also be worn. If concentration levels for styrene are above recommended exposure, organic vapor respirator should be worn. Use appropriate

distinack and eva protestion when condition and an all a land

JAN-06-99 WED 11:03 DBF, Inc. 7342851481 Prepared; August 1998 MATERIAL SAFETY DATA SHEET DBF Inc. BY: Cliff Danville P.O. Hox 2385 24 hr EMERGENCY PHONE 1235324 Riverview, MI 48192-1385 (800) 424-9300 (Chemtree) (734) 285-1480 GUNK, LTWY BONDING PUTTY Section 1 - IDENTILY Product Name: 60138-50 DOT SHIPPING DESCRIPTION: Resin Solution, 3, UN1866, PGIII NOTE: May be reclassed an ORM_D, Consumer Commodity in gallon size containers or smaller for DOMESTIC SHIPMENTS ONLY. See 49CFR173.150 CAS NUMBER: Mixture. HM1S/NFPA Rating: Health 2 Fire 3 Reactivity 1 Section 2 - COMPONENTS ACCITATION OSHAPEL RQ CAS NUMBER PERCENT INGREDIENT 30-32 Mixture Polyester Resul 1000 lbs 13-15 50 ppm 50 ppm Styrene Monomer 100-42-5 Mixture 54-56 Inert Fillers Section 3 - PHYSICAL DAYA N/D Vapor Pressure N/D **Boiling Point** 3.6 (for styrene) Vapor Density (air-1) N/A Melting Point 13-15 (by weight) Percent Volatile Specific Gravity(H2O~1) 0.92 - 0 98 Thick paste with pungent odor Appearance & Odor Solubility in Water Nagligible Evaporation Rata (Butyl Acetate=1) Less than 1 (for styrene) Section 4 - SUPPLIER NOTIFICATION This product contains toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. PERCENT: 13-15 CHEMICAL NAME: Styrene CAS# 100-42-5 California Proposition 65: Styrene Oxide is listed as known to the State of California to cause cancer. Styrene Oxide is a metabolite of styrene monomer. Section 5 - FIRE AND EXPLOSION DATA METHOD USED: Closed cup (SRTA) MASH POINT (for Myrens): 89-90 Deg.F. FLANIMABLE LIMITS BY VOLUME (for styrene): LEL 1.1% UEL 6.1% EXTENDUISHING MEDIA: Water or Foam of Carbon dioxide or Dry chamical SPECIAL FIRE FIGHTING PROCEDURES: West NIOSH/MAHS approved self-contained breathing apparatus to avoid inhalation of smoke. Section 6 - HEALTH HAZARD DATA EFFECTS OF ACUTE OVEREXPOSURE: Can cause skin and eye irritation. Excessive inhalation of vapors can cause nasal and respiratory initation; central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and even asphyxiation. Ingestion can cause gastrointestinal imitation, vomiting, diarrhea. EFFECTS OF CHRONIC OVEREXPOSURE. The International Agency for Research on Cancer (IARC) has classified styrene in Group 2B (possibly carcinogenic to humans). This classification is not based on styrene oxide. A number of lifetime animal; studies with styrene including those conducted in the NCI Bioassay Program have not shown styrene to be carcinogenic. There is currently not sufficient evidence to indicate that styrene is carcinogen to humans. NOTE: Overexposure to styrene has been found to cause the following effects in laboratory animals; liver abnormalities, kidney damage and lung damage. PRIMARY ROUTES OF ENTRY: Inhalation, skin contact. FIRST AID: EYES: Phish with large amounts of water, lifting upper and lower lide occasionally. Get medical attention. SKIN WASU. Wash skin & contaminated clothing thoroughly with somp and water. INHALATION: Remove to fresh air. If breathing is difficult administer oxygen. If breathing has stopped, give CPR. Keep person warm, quiet and get medical attention." INGESTION: Do not induce vomiting. Aspiration into lungs can cause chemical pneumonitis. See a physician. Section 7 - REACTIVITY DATA MAZARDOUS POLYMERIZATION: Can occur. Avoid exposure to excessive heat peroxides and polymerization cutalysts. STABULITY: Stable INCOMPATIBILITIES. Avoid contact with: strong alkalies, strong mineral acids and oxidizing agents. CONDITIONS TO AVOID: Exposure to excessive heat or open flame; storage in open container; long exposure to intense studight; contamination with oxidizing agents. Section 8 - PRECAUTIONS FOR SAFE HANDLING AND USE STORAGE: Avoid temperature of 100 deg. F. WAS IN DISPOSAL. Dispose in accordance with local, state and federal regulations.

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