



# HUMAN CREMATORY



## COMPLIANCE INSPECTION CHECKLIST

**INSPECTION TYPE:** ANNUAL (INS1, INS2)  COMPLAINT/DISCOVERY (CI)   
 RE-INSPECTION (FUI)  ARMS COMPLAINT NO:

**AIRS ID#:** 0530039 **DATE:** 10312007 **ARRIVE:** 1155 **DEPART:** 1241  
**FACILITY NAME:** BREWER & SONS FUNERAL HOME  
**FACILITY LOCATION:** 1190 S. BROAD STREET  
 BROOKSVILLE 34601-3110  
**RESPONSIBLE OFFICIAL:** BARRY BREWER **PHONE:** (352)796-4991  
**CONTACT NAME:** Tammy Talbert/ Bob Senecal **PHONE:** (352)796-4991  
**REMITTANCE YEAR:** **ENTITLEMENT PERIOD:** 3/29/2004 / 3/29/2009  
 (effective date) (end date)

**PART I: INSPECTION COMPLIANCE STATUS** (check  only one box)

IN COMPLIANCE  MINOR Non-COMPLIANCE  SIGNIFICANT Non-COMPLIANCE

**PART II: TESTING/RECORDKEEPING REQUIREMENTS – Rule 62-296.401, F.A.C.**

(check  appropriate box(es))

1. Were there any objectionable odor(s) detected?-----  Yes  No
2. Was a visible emissions test conducted during this site visit according to EPA Method 9 (Ref.: Chapter 62-297, F.A.C.)?-----  Yes  No
3. In order to demonstrate individual source compliance, was an annual visible emissions test conducted 60 days prior to the AGP Notification form submission, and within 60 days prior to each anniversary date? (Rule 62-296.401(5)(i), F.A.C.)-----  Yes  No
4. In order to demonstrate individual source compliance were the remaining applicable standards testing completed within 60 days prior to the AGP Notification form submission? (Rule 62-210.300(4), F.A.C.)  Yes  No
  - a) Carbon Monoxide (CO) emissions equal to or below the requirements of 100 parts per million by volume, dry basis, corrected to 7% O<sub>2</sub> on an hourly average basis and tested according to EPA Method 10 (Ref.: Chapter 62-297, F.A.C.)?-----  Yes  No
  - b) Oxygen test performed according to EPA Method 3 (Ref.: Chapter 62-297, F.A.C.)?-----  Yes  No
  - c) Particulate matter emissions test with results equal to or below the requirements of 0.080 grains per dry standard cubic foot (ft<sup>3</sup>) of flue gas, corrected to 7% O<sub>2</sub> and tested according to EPA Method 5 (Ref.: Chapter 62-297, F.A.C.)?-----  Yes  No
5. Was all emissions testing conducted with the source operating at the manufacturers recommended capacity?-----  Yes  No
6. Was CO & PM compliance demonstrated by submission of a test report for an identical crematory unit?  Yes  No
7. Was the Department notified at least 15 days prior to the date of the last formal compliance test?-----  Yes  No
8. Was the required test report filed with the Department as soon as practical, but no longer than 45 days after the test was completed?-----  Yes  No

**PART III: OPERATING/RECORDKEEPING REQUIREMENTS – Rule 62-296.401, F.A.C.**

(check  appropriate box(es))

1. Is there **Continuous Emissions Monitoring System (CEMS)** equipment installed on each unit to record temperatures in the primary and secondary chambers where there is a 1.0 second gas residence time in the secondary chamber combustion zone in accordance with the manufacturer's instructions?-----  Yes  No
  - a) Do temperature probes seem to be properly placed?-----  Yes  No
  - b) Are the following records kept on file, available for inspection for at least two years following the recording of such measurements, maintenance, reports and records?
    - 1) All measurements (including CEMS)-----  Yes  No
    - 2) Monitoring device-----  Yes  No
    - 3) Performance Testing Measurements -----  Yes  No
    - 4) CEMS Performance Evaluation-----  Yes  No
    - 5) All CEMS or monitoring device calibration checks-----  Yes  No
    - 6) Adjustments-----  Yes  No
    - 7) Preventive maintenance performed on systems/devices-----  Yes  No
    - 8) Corrective maintenance performed on systems/devices-----  Yes  No
2. Was this crematory unit constructed: (check only one  box)
  - a)  **BEFORE** August 30, 1989? (If this box checked, continue on to #3 and skip #4)
  - b)  **ON** or **AFTER** August 30, 1989? (If this box checked, skip #3 and continue on to #4)
3. If constructed **BEFORE** August 30, 1989 is the:
  - a) secondary chamber combustion zone providing at least a 1.0 second gas residence time @ 1600°F?  Yes  No
  - b) actual operating temperature of the secondary chamber combustion zone no less than 1400°F throughout the combustion process in the primary chamber?-----  Yes  No
  - c) cremation in the primary chamber begun after the secondary chamber combustion zone temperature is equal to or greater than 1400°F?-----  Yes  No
  - d) required monitoring equipment installed and operational, and providing continuous monitoring to record the temperature at the point or beyond where 1.0 second gas residence time is obtained in the secondary chamber combustion zone according to the manufacturer's instructions?-----  Yes  No
4. If constructed **ON** or **AFTER** August 30, 1989 is the:
  - a) volume in the secondary combustion zone sufficient to provide at least a 1.0 second gas residence time @ 1800° F?-----  Yes  No
  - b) the actual operating temperature of the secondary chamber combustion zone no less than 1600°F throughout the combustion process in the primary chamber?-----  Yes  No
  - c) secondary chamber combustion zone temperature equal to or greater than 1600°F before the cremation process begins in the primary chamber?-----  Yes  No
5. Are appropriate cremation containers containing no more than 0.5 % (percent) by weight chlorinated plastics used during the cremation of dead human bodies?-----  Yes  No
  - a) If the answer to question 4 above is YES, is certifying documentation from the manufacturer that they are composed of 0.5% or less by weight chlorinated plastics kept on file at the site for the duration of their use and for at least two years after their use?-----  Yes  No
  - b) Are there any other materials, including biomedical wastes (Rule 62-210.200, FAC) incinerated at this location?-----  Yes  No
6. Have all crematory operators been trained and certified by a Department-approved training program?  Yes  No
  - a) Are copies of the training certificates for all crematory operators kept on file at the facility for the duration of the operator's employment & for an additional two years after termination of employment?-----  Yes  No

**PART IV: SPECIAL CONDITIONS AND PROCEDURES – Rule 62-296.401, F.A.C.**

**A. New or Modified Process Equipment**

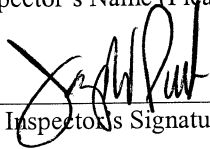
1. Since the last inspection has there been
  - a) installation of any new process equipment?-----  Yes  No
  - b) alterations to existing process equipment without replacement?-----  Yes  No
  - c) replacement of existing equipment substantially different than that noted on the most recent notification form?-----  Yes  No
  - d) If you answered **YES** to any of the above, did the owner submit a new and complete notification form and appropriate fee (Rule 62-4.050, F.A.C.) to the appropriate DEP or local program office?-----  Yes  No
2. If a crematory unit has been modified to the extent that a Department air construction permit was required, have all operators been retrained to operate the modified unit?-----  Yes  No
3. In the case of new or modified equipment, where a Department air construction permit was required, has the owner submitted copies of all operator training certificates?-----  Yes  No
  - a) submitted within the 15 day required window following the training?-----  Yes  No

Joseph V Panetta

10/31/2007

Inspector's Name (Please Print)

Date of Inspection



2008

Inspector's Signature

Approximate Date of Next Inspection

**COMMENTS:** Spoke with Tammy Talbert and Bob Senecal about new rules. Went over new rules explaining maintenance schedules and how the new January 10, 2007 Rule change addresses the operation of crematories according to manufacturer's specifications. Left him a copy of the new rules. Highlighted areas of rules we went over. Left examples of preventive schedules.

Explained that a complete file of all temperature measurements; all continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; and all adjustments, preventive maintenance, and corrective maintenance performed on these systems or devices, shall be recorded in a permanent legible form available for inspection. Continuous temperature monitoring documentation shall include operator name, operator indication of when cremation in the primary chamber was begun, date, time, and temperature markings. Pollutant monitoring system documentation shall include indication of when the opacity measurement system was cleaned and checked for proper operation in accordance with the manufacturer's recommended maintenance schedule. The file shall be retained for at least two (2) years following the recording of such measurements, maintenance, reports, and records.

Pre-heating crematory at time of inspection.

Explained allowed Materials. Human crematory units shall cremate only human or fetal remains with appropriate containers. The remains may be clothed. The containers shall contain no more than 0.5 percent by weight chlorinated plastics as demonstrated by the manufacturer's data sheet. If containers are incinerated, documentation from the manufacturers certifying that they are composed of 0.5 percent or less by weight chlorinated plastics shall be kept on-file at the site for the duration of their use and for at least two (2) years after their use. No other material, including biomedical waste shall be incinerated. Talked about Startup, shutdown and malfunction procedures.

Viewed Records from 08/13/2006 to 10/10/2007

VE was conducted 03/05/2007

# VISIBLE EMISSION OBSERVATION

Method Used: Method 9 Other: \_\_\_\_\_

Company Name: Brewer + Sons Funeral Home  
 Facility Name: \_\_\_\_\_  
 Street Address: 1190 S. Broad St  
 City: Brooksville State: FL Zip: 34601

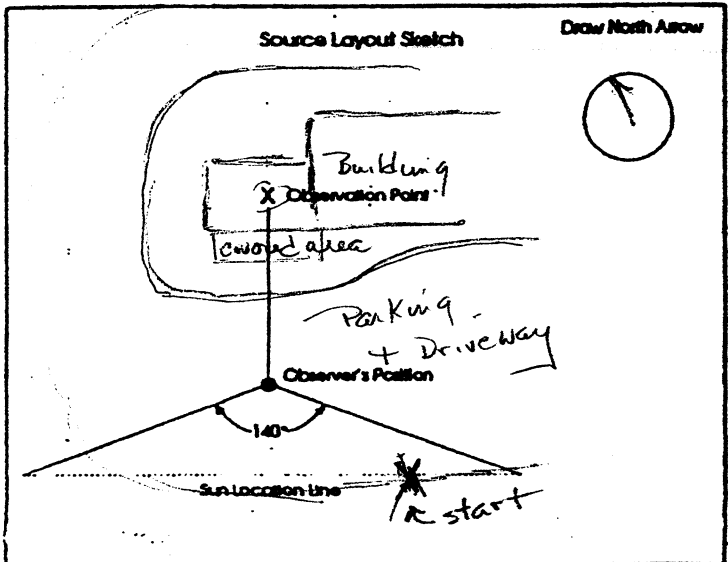
Process: Crematory Unit #: \_\_\_\_\_ Operating Mode: in operation  
 Control Equipment: after burner Operating Mode: ~ + 1600°F

Describe Emission Point: stack  
 Height of Emis. Pt.: ~ 18ft Height of Emis. Pt. Rel. to Observer: ~ 15ft  
 Distance to Emis. Pt.: ~ 30ft Direction to Emis. Pt. (Degrees): ~ 70

Power Pak II - Industrial Equipment Eng Co  
 WT: 450lbs Operator Robert Sevecal

Describe Emissions: NA  
 Emission Color: NA Water Droplet Plume: Attached  Detached  None

Describe Plume Background: sky  
 Background Color: blue Sky Conditions: clear  
 Wind Speed: 0-5 mph Wind Direction: NE  
 Ambient Temp.: 56°F ~26% RH



Additional Information: Permit No: 0530039-002-A6. EU001  
 weight ~ 150lbs

Observation Date		Start Time		End Time		Comments
3/5/07		10:40 AM		11:10 AM		
Sec Min	0	15	30	45		
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11	0	0	0	0		
12	0	0	0	0		
13	0	0	0	0		
14	0	0	0	0		
15	0	0	0	0		
16	0	0	0	0		
17	0	0	0	0		
18	0	0	0	0		
19	0	0	0	0		
20	0	0	0	0		
21	0	0	0	0		
22	0	0	0	0		
23	0	0	0	0		
24	0	0	0	0		
25	0	0	0	0		
26	0	0	0	0		
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print): Jim Estler  
 Observer's Signature: [Signature] Date: 3/5/07  
 Organization: Clean Air Consulting, Inc.  
 Certified By: ETA/FDEP Date: Feb. 2007

# VISIBLE EMISSION OBSERVATION

Method Used: Method 9 Other: \_\_\_\_\_

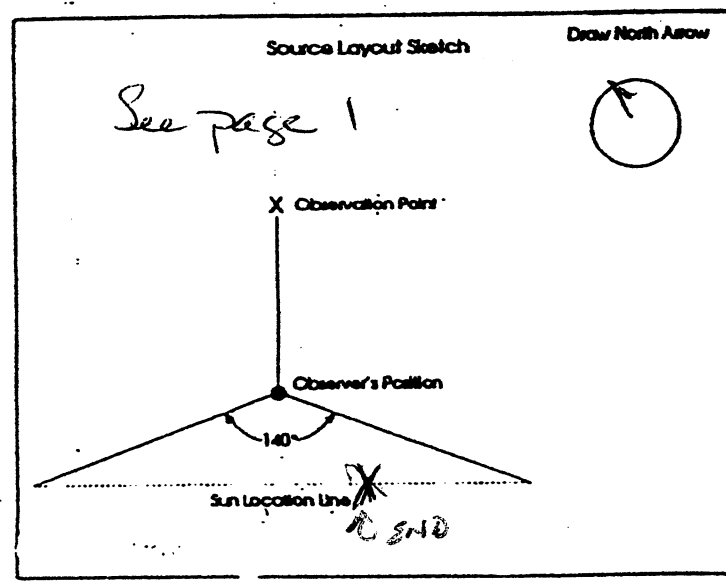
Company Name: Brewer + Sons Funeral Home  
 Facility Name: \_\_\_\_\_  
 Street Address: SAME AS PAGE 1  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Process: SAME AS PAGE 1 Unit #: \_\_\_\_\_ Operating Mode: \_\_\_\_\_  
 Control Equipment: \_\_\_\_\_ Operating Mode: \_\_\_\_\_

Describe Emission Point: SAME AS PAGE 1  
 Height of Emis. Pt.: \_\_\_\_\_ Height of Emis. Pt. Rel. to Observer: \_\_\_\_\_  
 Distance to Emis. Pt.: \_\_\_\_\_ Direction to Emis. Pt. (Degrees): \_\_\_\_\_

Describe Emitters: NA  
 Emission Color: NA Water Droplet Plume: \_\_\_\_\_  
 Attached  Detached  None

Describe Plume Background: sky  
 Background Color: blue Sky Conditions: clear  
 Wind Speed: 0-5 mph Wind Direction: NE  
 Ambient Temp: ~61°F ~ 37% RH



Additional Information: \_\_\_\_\_

Observation Date: <u>3/5/07</u>					Start Time: <u>11:10 AM</u>	End Time: <u>11:40 AM</u>
Sec Min	0	15	30	45	Comments	
1	0	0	0	0		
2	0	0	0	0		
3	0	0	0	0		
4	0	0	0	0		
5	0	0	0	0		
6	0	0	0	0		
7	0	0	0	0		
8	0	0	0	0		
9	0	0	0	0		
10	0	0	0	0		
11	0	0	0	0		
12	0	0	0	0		
13	0	0	0	0		
14	0	0	0	0		
15	0	0	0	0		
16	0	0	0	0		
17	0	0	0	0		
18	0	0	0	0		
19	0	0	0	0		
20	0	0	0	0		
21	0	0	0	0		
22	0	0	0	0		
23	0	0	0	0		
24	0	0	0	0		
25	0	0	0	0		Max. 6 minutes
26	0	0	0	0		average = 0 %
27	0	0	0	0		
28	0	0	0	0		
29	0	0	0	0		
30	0	0	0	0		

Observer's Name (Print): Jim Estler  
 Observer's Signature: \_\_\_\_\_ Date: 3/5/07  
 Organization: Clean Air Consulting, INC  
 Certified by: ETA/FDEP Date: Feb. 2007



**Clean Air Consulting, Inc.**

18218 N. 30th. St., Lutz, FL 33559  
Phone: (813) 948-6025 Fax: (813) 949-0659

April 7, 2007

Mr. Christopher Bradley  
Air Compliance Section  
Division of Air Resources Management  
Florida Dept of Environmental Protection  
13051 N. Telecom Parkway  
Temple Terrace, FL 33637-0926

RE: Hernando County - AP  
Brewer & Sons Funeral Homes and Cremation Services  
Permit No. 0530039-002-AG  
Visible Emission Testing

Dear Mr. Bradley:

Attached is the visible emission test report for the crematory that was conducted on March 5, 2007. A copy of the afterburner temperature chart is also attached. Results indicate compliance with the visible emission standards.

If you have any questions, please call me at (813) 948-6025.

Sincerely,



James Wm. Estler, Q.E.P.  
President

cc: Tammy Tolbert with attachment ✓

Dept. of Environmental  
Protection  
APR 13 2007  
Southwest District

DEC-19-03 FRI 10:33

**7 - Health Hazard Data**

**Primary route(s) of exposure:**

- Ingestion
- Skin
- Inhalation: Dust

**ACUTE HEALTH HAZARDS**

Signs and symptoms of exposure/emergency and first aid procedure:

**Ingestion:**

Not applicable under normal use.

**Eye contact:**

Dust may mechanically irritate the eyes, resulting in redness or watering.

Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

**Skin contact:**

Not applicable under normal use.

**Skin absorption:**

Not applicable under normal use.

**Inhalation:**

Excessive dust concentrations may cause unpleasant deposit/obstruction in the nasal passages.

Remove to fresh air. Get medical help if persistent irritation, severe coughing, or breathing difficulty occur.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

Cellulose dust may aggravate preexisting respiratory conditions or allergies.

**CHRONIC HEALTH HAZARDS:**

Paper (cellulose) dust is a biologically inert dust which has little or no effect on the lungs and does not produce significant organic disease or toxic affect when allowable exposure limits are met.

**CARCINOGENICITY LISTING:**

<input type="checkbox"/> National Toxicology Program	Not listed
<input type="checkbox"/> IARC Monographs	Not listed
<input type="checkbox"/> OSHA Regulated	Not listed

**8 - Control Measures**

**PERSONAL PROTECTIVE EQUIPMENT**

**Respiratory protection:**

Not applicable for product in purchased form. A NIOSH/MSHA approved respirator is recommended when the allowable exposure limits may be exceeded.

**Protective gloves:**

Not applicable for product in purchased form.

**Eye protection:**

Not applicable for product in purchased form. Safety glasses are recommended when the allowable exposure limits may be exceeded.

**Other protective clothing or equipment:**

Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.

**8 - Control Measures (continued)**

**Work/hygiene practices:**

Not applicable for product in purchased form. Minimize compressed air blow-down or other practice(s) which generate high dust levels.

**VENTILATION**

**Local exhaust:**

Provide local exhaust as needed so that exposure limits are met.

**Mechanical (general):**

Provide general ventilation in processing and storage areas as needed so that exposure limits are met.

**Special:**

Self-contained breathing apparatus (SCBA) recommended when fighting fire.

**Other: NA**

**9 - User's Responsibility**

The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the users' responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

**10 - Additional Information**

**DEFINITION OF COMMON TERMS:**

- ACGIH= American Conference of Governmental Industrial Hygienists
- CAS#= Chemical Abstracts System Number
- IARC= International Agency for Research on Cancer
- MSHA= Mining Safety and Health Administration
- NA= Not Applicable
- NAV= Not Available
- NIOSH= National Institute for Occupational Safety and Health
- NTP= National Toxicology Program
- OSHA= Occupational Safety and Health Administration
- PEL= Permissible Exposure Limit
- STEL= Short Term Exposure Limit (15 minutes)
- TLV= Threshold Limit Value
- WA= Time-Weighted Average (8 hours)

*Completed*

*Pg 2 of 2*



Product name: VYDYNE® Nylon 6.6 Plus Additives (Class 100)  
 Solutia Inc. Material Safety Data Sheet  
 Reference Number: 000000005417

Page 4 / 6  
 Date: 01/14/2003  
 Version 4.4/E

stringent exposure limits applicable to dusts.  
 OSHA PEL: 15mg/m3 (total dust) 8-hr TWA  
 OSHA PEL: 5mg/m3 (respirable) 8-hr TWA  
 ACGIH TLV: 10mg/m3 (total dust) 8-hr TWA  
 ACGIH TLV: 3mg/m3 (respirable) 8-hr TWA

Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Density: 1.13 - 1.15 g/cm3  
 Melting point: 257 - 267 C

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

## 10. STABILITY AND REACTIVITY

Conditions to avoid: None known  
 Materials to avoid - None known  
 Hazardous reactions: Hazardous polymerization does not occur.  
 Decomposition: Decomposition occurs above temperature listed below :  
 Decomposition temperature: > 300 C  
 Hazardous decomposition products: carbon monoxide (CO); carbon dioxide; ammonia (NH3); hydrogen cyanide (HCN); nitrogen oxides (NOx)

## 11. TOXICOLOGICAL INFORMATION

Solutia has not conducted toxicity studies on this material and no toxicological information was obtained in a reasonably extensive search of the available scientific literature. Results of single exposure (acute) toxicity studies conducted on similar materials indicate that these products are practically nontoxic orally (rats) and after skin application (rabbits). These products are practically non irritating to rabbit skin and are practically non irritating to slightly irritating to rabbit eyes. No adverse effects noted following repeated oral administration.

## 12. ECOLOGICAL INFORMATION

Solutia has not conducted environmental toxicity or biodegradation studies with this material.

## 13. DISPOSAL CONSIDERATIONS

US EPA RCRA Status: This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261.

Disposal considerations: Incineration

4 of 6

Product name: VYDYNE® Nylon 6,6 Plus Additives (Class 100)  
Solutia Inc. Material Safety Data Sheet  
Reference Number: 000000005417

Page 3 / 6  
Date: 01/14/2003  
Version 4.4/E

form an explosive mixture if dispersed in a sufficient quantity of air.

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: Use personal protection recommended in section 8.  
Product may cause a slip hazard.
- Environmental precautions: Keep out of drains and water courses.  
Pellets may present a physical ingestion hazard to wildlife due to resemblance to grains.  
Clean up spills immediately.
- Methods for cleaning up: In case of spill, sweep, scoop or vacuum and remove. Flush spill area with water.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

### 7. HANDLING AND STORAGE

#### Handling

Handle in accordance with good industrial hygiene and safety practices.  
These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Emptied containers retain vapour and product residue. Observe all recommended safety precautions until container is cleaned, reconditioned or destroyed. The reuse of this material's container for non industrial purposes is prohibited and any reuse must be in consideration of the data provided in this material safety data sheet.

#### Storage

General: Stable under normal conditions of handling and storage.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Eye protection: Does not cause significant eye irritation or eye toxicity requiring special protection.  
Use good industrial practice to avoid eye contact.
- Hand protection: This product does not present significant skin concern requiring special protection.
- Body protection: Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice.
- Respiratory protection: Avoid breathing dust.  
Use approved respiratory protection equipment when airborne exposure limits are exceeded.  
Consult the respirator manufacturer to determine the appropriate type of equipment for a given application.  
Observe respirator use limitations specified by the manufacturer.
- Ventilation: Provide natural or mechanical ventilation to minimize exposure.  
If practical, use local mechanical exhaust ventilation at sources of air contamination such as processing equipment.
- Airborne exposure limits: (ml/m3 = ppm)
- VYDYNE® Nylon 6,6 Plus Additives (Class 100) OSHA and/or ACGIH have not established specific exposure limits for this material. However, they have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) respectively, which are the least

3 of 6



*The Standard of Excellence in Cremation Solutions*

**MANUFACTURE'S DATA SHEETS (MDS)**  
Containers Used for Cremation

Date	January 2, 2001
Manufacturer	Matthews Cremation, Elder Davis Plant
Telephone	765-966-7679
Fax	765-962-1507
Container Trade Name	Veneers
Container Model Number (s)	All Veneer units
Company Name and Address	Matthews Cremation, Elder Davis Plant 1010 Industries Road Richmond, IN 47374
Contacts	Kathy West or Dwayne Heeler

NOTE: This MDS is to be furnished to each crematory for each separate container used for cremation.

The crematory will maintain copies for a period of two (2) years. In lieu of this procedure, a crematory may maintain copies in a permanent three ring binder.

This is to certify that this product does not contain more than .05% by weight of chlorinated plastics.

By: Ron Roberts  
 Title: Purchasing



**Matthews**  
CREMATION DIVISION

*The Standard of Excellence in Cremation Solutions*

**MANUFACTURE'S DATA SHEETS (MDS)**  
Containers Used for Cremation

Date: January 2, 2004

Manufacturer: Matthews Cremation, Elder Davis Plant

Telephone: 765-966-7679

Fax: 765-962-1507

Container Trade Name: Eldelite & Woodcloth

Container Model Number (s): All corrugated / particle board units

Company Name and Address: Matthews Cremation, Elder Davis Plant  
1010 Industries Road  
Richmond, IN 47374

Contact: Katly West or Dwayne Heeter

NOTE: This MDS is to be furnished to each crematory for each separate container used for cremation.

The crematory will maintain copies for a period of two (2) years. In lieu of this procedure, a crematory may maintain copies in a permanent three ring binder.

This is to certify that this product does not contain more than .65% by weight of chlorinated plastics.

BY: *Ron Roberts*  
Title: *Purchasing*



Product name: VYDYNE® Nylon 6,6 Plus Additives (Class 100)  
Solutia Inc. Material Safety Data Sheet  
Reference Number: 00000005417

Page 6 / 6  
Date: 01/14/2003  
Version 4.4/E

	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	1	0	0	
Suggested HMIS Rating:	1	0	0	A

Other Information: This product may contain other copolymers, colour additives, heat stabilizers, flame retardants and/or other performance additives. Under normal use conditions, these additives are contained within the polymer matrix and occupational exposures are expected to be minimal.

Prepared by the Solutia Hazard Communication Group. Please consult Solutia @ 314-674-6661 if further information is needed.

TM, ® is a registered trademark of Solutia Inc.  
SOLUTIA is a trademark of Solutia Inc.  
Responsible Care® is a registered trademark of the American Chemistry Council.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Solutia Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Solutia Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

6 of 6

Product name: VYDYNE® Nylon 6,6 Plus Additives (Class 100)  
Solutia Inc. Material Safety Data Sheet  
Reference Number: 00000005417

Page 5 / 6  
Date: 01/14/2003  
Version 4.4:E

Recycle  
Landfill

Miscellaneous advice: Local, state, provincial, and national disposal regulations may be more or less stringent. Consult your attorney or appropriate regulatory officials for information on such disposal.  
This product should not be dumped, spilled, rinsed or washed into sewers or public waterways.

### 14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

US DOT

Other: Not regulated for transport.

Canadian TDG

Other: Not regulated for transport.

### 15. REGULATORY INFORMATION

All components are in compliance with the following inventories: U.S. TSCA, Canadian DSL, Japanese ENCS, Australian AICS, Korean, Phillipine PICCS, Chinese

Canadian WHMIS classification: Not Controlled

SARA Hazard Notification:

Hazard Categories Under Title III Rules (40 CFR 370): Not applicable

Section 302 Extremely Hazardous Substances:

Section 313 Toxic Chemical(s):

CERCLA Reportable Quantity:

Not applicable

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation and the MSDS contains all the information required by the Canadian Controlled Products Regulation.

Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

Safety data sheet also created in accordance with Brazilian law NBR 14725

### 16. OTHER INFORMATION

Product use: Plastic resins

Reason for revision: Significant changes to the following section(s): Section 1

5 of 6

Product name: VYDYNE® Nylon 6,6 Plus Additives (Class 100)  
 Solutia Inc. Material Safety Data Sheet  
 Reference Number: 000000005417

Page 2 / 6  
 Date: 01/14/2003  
 Version 4.4/E

No significant hazards associated with this material

#### POTENTIAL HEALTH EFFECTS

Likely routes of exposure: eye and skin contact  
 inhalation

Eye contact: No more than slightly irritating to eyes.  
 Dust may cause eye irritation as would any foreign material.

Skin contact: No more than slightly irritating to skin.  
 No more than slightly toxic if absorbed.

Inhalation: No more than slightly toxic if inhaled.  
 Elevated processing temperatures may cause release of vapours which are irritating if inhaled.

Ingestion: No more than slightly toxic if swallowed.  
 Significant adverse health effects are not expected to develop if only small amounts (less than a mouthful) are swallowed.

Refer to Section 11 for toxicological information.

#### 4. FIRST AID MEASURES

If in eyes: Immediate first aid is not likely to be required.  
 This material can be removed with water.

If on skin: Immediate first aid is not likely to be required.  
 This material can be removed with water.  
 Wash heavily contaminated clothing before reuse.

If inhaled: Immediate first aid is not likely to be required.  
 If symptoms occur, remove to fresh air.  
 Remove material from eyes, skin and clothing.

If swallowed: Immediate first aid is not likely to be required.  
 A physician or Poison Control Center can be contacted for advice.  
 Wash heavily contaminated clothing before reuse.

#### 5. FIRE FIGHTING MEASURES

Flash point: > 371 C Estimated

Hazardous products of combustion: carbon monoxide (CO); carbon dioxide; ammonia (NH<sub>3</sub>); hydrogen cyanide (HCN); nitrogen oxides (NO<sub>x</sub>)

Extinguishing media: Water spray, foam, dry chemical, or carbon dioxide

Unusual fire and explosion hazards: None known

Fire fighting equipment: Firefighters, and others exposed, wear self-contained breathing apparatus.  
 Equipment should be thoroughly decontaminated after use.

Miscellaneous advice: If this material is milled or the process generates fines, the fines could

2 of 6

Product name: Cable Tie  
 Material Safety Data Sheet  
 Reference Number: 00000005417

Date: 01/14/2003  
 Version 4.4/E

*Plastic Zip Ties*

*for Corrosion Protection Box*

## Material Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: VYDYNE® Nylon 6,6 Plus Additives (Class 100)  
 10V, 20M, 20NSP, 21, 21M, 21SPC, 21Z, 22H, 22HSP, 22X, 24NSL, 2800, 50BW,  
 64C, 800, 805, 810, 820, 830, 870, 65A, 66B, 24NSPF, CG Nylon, 66J, 66R,  
 2330M

Reference Number: 00000005417

Date: 01/14/2003

Distributor Information:

Uline Shipping Supplies

2200 S. Lakeside Drive  
 Waukegan, IL 60085-8361  
 Emergency telephone: Chemtree: 1-800-424-9300  
 Non-Emergency telephone: 1-800-295-5510

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS No.</u>	<u>Average concentration</u>	<u>Concentration range</u>	<u>Units</u>
adipic acid - hexamethylenediamine resin (nylon 6/6)	32131-17-2		>=98.0 - <=100.0	%

### 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Form: pellets  
 Colour: cream to tan  
 Odour: odourless

WARNING STATEMENTS

6 pages

/ of 6



DEC-19-03 FRI 10:32

P. 02

# Shipping Containers/Boxes/Cartons/Packages

Date printed: 9/1/89

*Corrugated Construction  
Box & Lid.*

**1 - Product Identification**

**Manufacturer Name and Address:** Weyerhaeuser Paper Company  
Packaging Division  
Ed M. Egan  
CH 3K33  
Tacoma, WA 9847

**Emergency phone:** (206) 924-2839  
**Phone for additional information:** (206) 924-2919

**Product name:** Shipping Containers/Boxes/Cartons/Packages  
**Synonyms:** Shipping Containers/Boxes/Cartons/Packages

**Date prepared:** 7/1/86  
**Date revised:** 6/22/89  
**Prepared by:** Safety and Health Services  
**MSDS number:** WCO71-03

**3 - Physical / Chemical Characteristics**

**Boiling point (F or C):** NA  
**Vapor pressure (mm Hg):** NA  
**Vapor density (air = 1):** NA  
**Specific gravity (H<sub>2</sub>O = 1):** 0.1 - 0.3  
**Melting point (F or C):** NA  
**Evaporation rate (butyl acetate = 1):** NA  
**Solubility in water:** <1  
**% Volatile by volume @ 70°F:** NA

**4 - Fire and Explosion Hazard Data**

**Flash point (method used):** NA  
**Flammable limits:**  
LEL: See below under "Unusual Fire and Explosion Hazards."  
UEL: NA  
**Extinguishing media:** Water  
**Autoignition temperature:** 448°F-464°F  
**Special fire fighting procedures:** None  
**Unusual fire and explosion hazards:**  
Depending on moisture content, particle diameter, and rate of heating, cellulose dust may explode in the presence of an ignition source. An airborne concentration of 30,000 mg/m<sup>3</sup> is often used as the LEL for cellulose pulp.

**2 - Hazardous Ingredients / Identify Information**

Chemical or common name/ CAS#	Percent	Exposure Limits
Linerboard (paper fiber/cellulose) CAS# 9004-32-8	45-85	OSHA PEL-TWA 15.0 mg/m <sup>3</sup> (Total dust) OSHA PEL-TWA 5.0 mg/m <sup>3</sup> (Respirable dust) ACGIH TLV-TWA 10.0 mg/m <sup>3</sup> (Total dust)
Corrugating medium (paper fiber / cellulose) CAS# 9004-34-8	15-50	OSHA PEL-TWA 15.0 mg/m <sup>3</sup> (Total dust) OSHA PEL-TWA 5.0 mg/m <sup>3</sup> (Respirable dust) ACGIH TLV-TWA 10.0 mg/m <sup>3</sup> (Total dust)
Starch based adhesive CAS# None	1-3	OSHA PEL-TWA 15.0 mg/m <sup>3</sup> (Total dust) OSHA PEL-TWA 5.0 mg/m <sup>3</sup> (Respirable dust) ACGIH TLV-TWA 10.0 mg/m <sup>3</sup> (Total dust)
Joint adhesive (a) CAS# None	0-1	OSHA PEL-TWA None ACGIH TLV-TWA None
Water based ink CAS# None	<1	OSHA PEL-TWA None ACGIH TLV-TWA None

(a) Involves one or more of the following: Polyvinyl acetate, hot melt (polyolefin), tape or staples.

**Appearance and odor:** Products are boxes with little or no odor.

**5 - Reactivity Data**

**Stability:**  
( ) Unstable (x) Stable  
Conditions to avoid: NA

**Incompatibility (materials to avoid):**  
Avoid contact with oxidizing agents

**Hazardous decomposition or byproducts:**  
Combustion products include carbon monoxide and carbon dioxide

**Hazardous polymerization:**  
( ) May occur (x) Will not occur  
Conditions to avoid: NA

**6 - Precautions for Safe Handling and Use**

**Steps to be taken in case material is released or spilled:**  
Not applicable for product in purchased form. Paper dust may be swept or vacuumed for recovery or disposal. Avoid dusty conditions and provide adequate ventilation. Use NIOSH/MSHA approved respirator and goggles where ventilation is not possible.

**Waste disposal method:**  
If disposed or discarded in its purchased form, incineration is preferable. Dry land disposal is acceptable in most states. It is, however, the user's responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste. Follow applicable federal, state, or local regulations.

**Precautions to be taken in handling and storage:**  
No special handling precautions are required. Keep in cool, dry place, away from open flame.

**Other precautions:**  
NIOSH/MSHA approved respirator and goggles should be worn when the allowable exposure limits may be exceeded.

*Corrugated*

*Page 1 of 2*