

REGISTRATION NO.: Ashland Chemical, Inc.  
P.O. Box 2215  
Columbus, OH 43017  
Data Sheet No.: 0101004-001-000 INVOICE DATE: 09/10/94  
PRODUCT NAME: PELLETHANE (R) 2103-85AE POLYURETHANE E

REVISION DATE: 92/02/03 DOCUMENT IDENTIFIER: 002383

NOTES

Mutually Defined 0596593ASHLAND CHEMICAL  
(R) INDICATES A TRADEMARK OF THE DOW CHEMICAL COMPANY  
THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT  
NO WARRANTY, EXPRESS OR IMPLIED, IS MADE. CONSULT THE DOW  
CHEMICAL COMPANY FOR FURTHER INFORMATION.

Supplier/Manufacturer:  
DOW CHEMICAL U.S.A.  
MIDLAND MI 48674

Emergency Contact-Shipper: EMERGENCY PHONE Telephone: 517-636-4400

Vendor's (Seller's) Item Number: 02733

Product: PELLETHANE (R) 2103-85AE POLYURETHANE ELASTOMER

MATERIAL SAFETY DATA SHEET

1. INGREDIENTS: (% w/w, unless otherwise noted)

Polyurethane from 4,4'-methylenediphenyl diisocyanate, 1,4-butanediol, and polytetramethylene glycol Additives

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not 'Hazardous' per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

2. PHYSICAL DATA:

BOILING POINT: Not applicable  
VAP. PRESS: Not applicable  
VAP. DENSITY: Not applicable  
SOL. IN WATER: Insoluble  
SP. GRAVITY: 1.1 - 1.2  
APPEARANCE: Clear colorless to pale yellow or pigmented pellets.  
ODOR: Odorless.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: Not applicable  
METHOD USED: Not applicable

FLAMMABLE LIMITS  
LFL: Not applicable  
UFL: Not applicable

Post-it* Fax Note	7871	Date	10/25/94	# of pages	1
To	DEBBIE	From	JUDY LATRO		
Company	SUPERCOL	Company	GENERAL POLYMERS		
Phone #		Phone #			
Fax #	(315) 445-7250	Fax #			

EXTINGUISHING MEDIA: Water fog, foam, CO2, dry chemical

FIRE AND EXPLOSION HAZARDS: Toxic vapors can be emitted under fire conditions. Quantities of dust in air may be combustible (see Section 9).

FIRE-FIGHTING EQUIPMENT: Use a positive-pressure, self-contained breathing apparatus to prevent exposure to hazardous decomposition products generated under fire conditions.

Distributed by: Ashland Chemical, Inc. P.O. Box 2219 Columbus, OH 43217
Data Sheet No.: 012104-001.004 Invoice Date: 08/10/94
Product Name: PELLETHANE (R) 2102-6606 POLYURETHANE EL

**4. REACTIVITY DATA:**

**STABILITY: (CONDITIONS TO AVOID)** Avoid excessive heat. Temperatures above 500F (260C) may degrade the resin and release decomposition products.

**INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID)** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, aliphatic compounds, and traces of hydrogen cyanide at highly elevated temperatures, such as fire conditions.

**HAZARDOUS POLYMERIZATION:** Not applicable.

**5. ENVIRONMENTAL AND DISPOSAL INFORMATION:**

**ACTION TO TAKE FOR SPILLS:** Sweep up and reuse or dispose. Spilled pellets may present a slipping hazard.

**DISPOSAL METHOD:** Incinerate or dispose of in an approved landfill in accordance with all applicable federal, state and local regulations.

**6. HEALTH HAZARD DATA:**

**EYE:** Solid or dust may cause irritation or corneal injury due to mechanical action. Vapors may irritate eyes.

**SKIN CONTACT:** Essentially nonirritating to skin. Mechanical injury only. Molten material may burn skin.

**SKIN ABSORPTION:** Skin absorption is unlikely due to physical properties.

**INGESTION:** Single dose oral LD50 has not been determined. Single dose oral toxicity is believed to be very low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

**INHALATION:** Dust may cause irritation to upper respiratory tract. At room temperature, exposure to vapors are unlikely due to physical properties; normal processing temperatures may generate vapors which may cause irritation if ventilation is inadequate.

**SYSTEMIC & OTHER EFFECTS:** No specific data; however, repeated exposures to the unheated material are not anticipated to cause any significant adverse effects. Processing fumes may cause eye and respiratory irritation upon repeated exposure.

**7. FIRST AID:**

**EYES:** Irrigate immediately with water for at least 5 minutes. Mechanical effects only.

**SKIN:** Wash off in flowing water or shower.

Manufactured by: Ashland Chemical, Inc.  
P.O. Box 2119  
Columbus, OH 43017  
Data Sheet No.: 0151004-001-000 Invoice Date: 05/10/94  
Product Name: PELLETHANE (R) 2102-6500 POLYURETHANE 2

**INGESTION:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

**INHALATION:** Remove to fresh air if effects occur. Consult a physician.

**8. HANDLING PRECAUTIONS:**

**EXPOSURE GUIDELINE(S):** None established.

**VENTILATION:** Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

**RESPIRATORY PROTECTION:** For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator.

**SKIN PROTECTION:** No precautions other than clean body-covering clothing should be needed.

**EYE PROTECTION:** Safety glasses should be sufficient for most operations; however, for dusty operations ear chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator.

**9. ADDITIONAL INFORMATION:**

**SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in sealed containers. Protect from atmospheric moisture.

Typically processing temperatures range from 320F-470F (160C-245C). Molten material can produce thermal burns. Avoid skin contact. Fumes released during normal processing may cause irritation. Provide adequate ventilation. Heating the resin above normal processing temperatures may cause hazardous decomposition products. Do not overheat.

Handling and fabrication of plastic resins can result in the generation of dust. Dust results from sawing, filing, and sanding of plastic parts in post-molding operations. Quantities of dust in air may be combustible and may cause respiratory irritation.

**MSDS STATUS:** Revised regsheets (WHMIS) information.

**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

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P.O. Box 2219  
Columbus, OH 43017  
Data Sheet No.: 011504-001.000 Invoice Date: 05/10/94  
Product Name: PELLETANE (R) 2103-434C POLYACTYANE EL

laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See MSD Sheet for health and safety information.

U.S. REGULATIONS

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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:

Not to have met any hazard category

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CANADIAN REGULATIONS

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The Workplace Hazardous Materials Information System (W.H.M.I.S.) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

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The Transportation of Dangerous Goods Act (T.D.G.A.) classification for this product is:

Not regulated.

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