EASTMAN

>00001823/F/USA

>Revision Date: 10/16/1996

>Page 1

>

Malcolm Baldrige National Quality Award 1993 Winner Eastman Chemical Company

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Developmental Amorphous Polyolefin D-180S

Product Identification Number(s): PLS D-180S

Manufacturer/Supplier: Eastman Chemical Company, Kingsport, Tennessee 37662

>MSDS Prepared by: Eastman Product Safety and Regulatory Programs, Eastman

> Chemical Company, Kingsport, TN 37662

For Emergency Health, Safety & Environmental Information, call 800-EASTMAN

For Emergency Transportation Information, call CHEMTREC a 800-424-9300 or call 800-EASTMAN

For Other Information, call your Eastman representative or the Eastman operator at 423-229-2000 (USA)

Chemical Name: not applicable

Synonym(s): not applicable

Molecular Formula: not applicable

Molecular Weight: not applicable

Product Use: plastic, adhesive

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No.)

>85 propylene-ethylene copolymer (009010-79-1)

<15 polyethylene (009002-88-4)

<1 modifiers/additives (mixture; not applicable)</pre>

3. HAZARDS IDENTIFICATION

CAUTION!

POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES MOLTEN MATERIAL WILL PRODUCE THERMAL BURNS

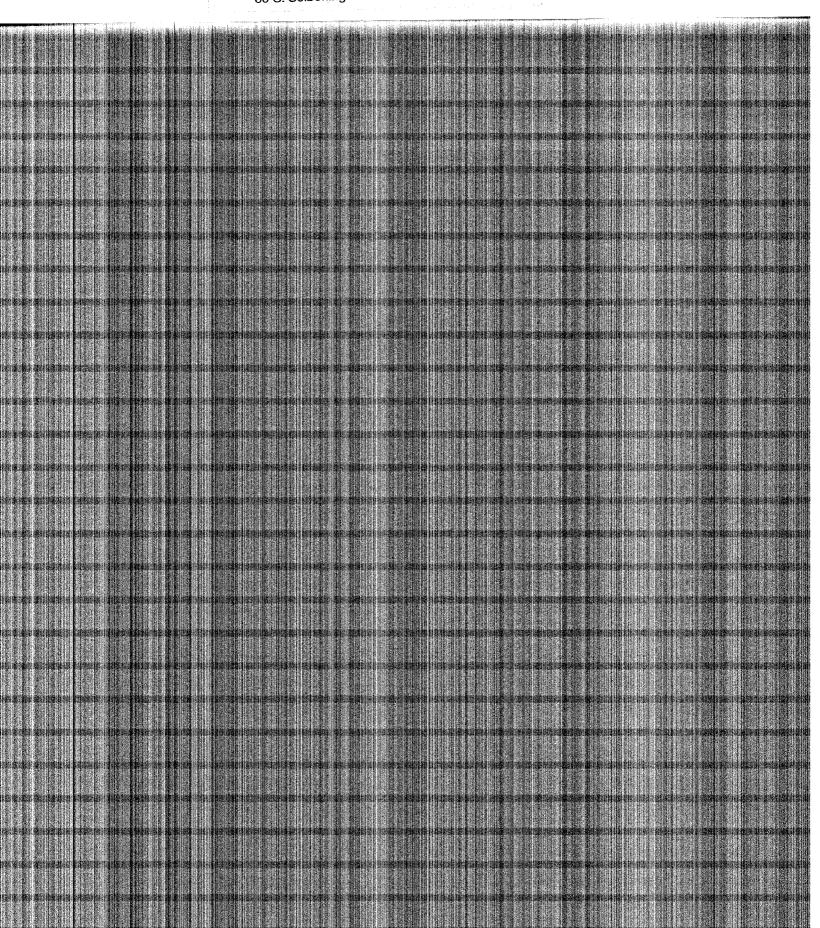
HMIS Hazard Ratings: Health - 1, Flammability - 1, Chemical Reactivity - 0

NFPA Hazard Ratings: Health - 1, Flammability - 1, Chemical Reactivity - 0

60 S. Seiberling Street • Akron, Ohio 44305

MARKETED BY HARWICK STANDARD DISTRIBUTION CORPORATION

60 S. Seiberling Street • Akron, Ohio 44305



000001823/F/USA

Revision Date: 10/16/1996

Page 2

NOTE: HMIS and NFPA ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

4. FIRST-AID MEASURES

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.

>Eyes: If molten material contacts the eye, immediately flush with plenty of >water for at least 15 minutes. If easy to do, remove contact lenses. Get medical >attention immediately.

Skin: If burned by contact with molten material, cool as quickly as possible. Do not peel material from skin. Get medical attention.

Ingestion: Material is not expected to be absorbed from the gastrointestinal tract so that induction of vomiting should not be necessary.

Note to Physicians: Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, dry chemical

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: carbon dioxide, carbon monoxide

Unusual Fire and Explosion Hazards: Powdered material may form explosive dust-air mixtures.

6. ACCIDENTAL RELEASE MEASURES

Sweep or scoop up and remove.

7. HANDLING AND STORAGE

Personal Precautionary Measures: No special precautionary measures should be needed under anticipated conditions of use.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Minimize dust generation and accumulation. Refer to NFPA Pamphlet No. 654,

000001823/F/USA

Revision Date: 10/16/1996

Page 3

"Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

Storage: Keep container closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

ACGIH Threshold Limit Value (TLV): not established

OSHA (USA) Permissible Exposure Limit (PEL, 1989 Table Z-1-A values or section-specific standards): not established

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances such as poorly ventilated spaces, mechanical generation of dusts, heating, drying, etc.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. Respirator type: dust. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134.

Eye Protection: It is a good industrial hygiene practice to minimize eye contact.

Skin Protection: It is a good industrial hygiene practice to minimize skin contact. When material is heated, wear gloves to protect against thermal burns.

Recommended Decontamination Facilities: eye bath, washing facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical Form: solid
- Color: white
- Odor: slight
- Odor Threshold: not applicable
- Specific Gravity (water = 1): <1.0
- Vapor Pressure: negligible
- Vapor Density (Air = 1): not applicable
- Evaporation Rate: not applicable
- Boiling Point: not available
- Softening Point: 110-150°C (230-302°F)
- >- Viscosity at Ambient Temperature: not applicable
- Solubility in Water: negligible
- pH: not applicable
- Octanol/Water Partition Coefficient: not available
- Flash Point: not applicable, combustible solid

000001823/F/USA

Revision Date: 10/16/1996

Page 4

- Lower Explosive Limit: not applicable Upper Explosive Limit: not applicable
- Autoignition Temperature: not available
- Sensitivity to Mechanical Impact: not available Sensitivity to Static Discharge: not available

10. STABILITY AND REACTIVITY

Stability: stable

Incompatibility: Material can react with strong oxidizing agents.

Hazardous Polymerization: will not occur

11. TOXICOLOGICAL INFORMATION

Effects of Exposure:

Inhalation: Low hazard for usual industrial handling or commercial handling by trained personnel.

> Eyes: Molten material will produce thermal burns.

Skin: Molten material will produce thermal burns.

Ingestion: Expected to be a low ingestion hazard.

Acute Toxicity Data:

Oral LD-50: not available

Inhalation LC-50: not cailable Dermal LD-50: not available

12. ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate.

14. TRANSPORT INFORMATION

>- DOT (USA) Status: (solid) not regulated

>- DOT (USA) Status: (liquid (molten)) Quantities of 450 liters (119 gallons) or

000001823/F/USA

Revision Date: 10/16/1996

Page 5

. 1

- > less are not regulated; the following requirements apply to larger quantities
 >- Class 9, packing group III

- TDG (Canada) Status: not regulated

- Air International Civil Aviation Organization (ICAO)
- ICAO Status: not regulated
- Sea International Maritime Dangerous Goods (IMDG)
- IMDG Status: not regulated

15. REGULATORY INFORMATION

- This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
- OSHA hazardous chemical(s): none
- California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause cancer: none
- California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause adverse reproductive effects:
- Massachusetts Substance List: none
- New Jersey Workplace Hazardous Substance List: none
- Pennsylvania Hazardous Substance List: none
- This document has been prepared in accordance with the MSDS requirements of the WHMIS Controlled Products Regulation.
- WHMIS (Canada) Ingredient Disclosure List: none
- WHMIS (Canada) Status: noncontrolled
- Carcinogenicity Classification (components present at 0.1% or more):
 - International Agency for Research on Cancer (IARC): not listed
 - American Conference of Governmental Industrial Hygienists (ACGIH): not listed
 - National Toxicology Program (NTP): not listed
 - Occupational Safety and Health Administration (OSHA): not listed
- Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372: none
- SARA (U.S.A.) Sections 311 and 312 hazard classification(s): not applicable
- >- US Toxic Substances Control Act (TSCA): All components of this product are
- > listed on the TSCA inventory. Any impurities present in this product are
- > exempt from listing.
- >- Canadian Environmental Protection Act (CEPA) and Domestic Substances List
- > (DSL): All components of this product are listed on the DSL. Any impurities
- > present in this product are exempt from listing.

000001823/F/USA

Revision Date: 10/16/1996

Page 6

- >- European Inventory of Existing Commercial Chemical Substances (EINECS): All
- > components of this product are listed on EINECS. Any polymer intentionally
- > present in this product has regulatory clearance under Directives of the
- > European Union.
 - Australian Inventory of Chemical Substances (AICS) and National Industrial Chemicals Notification and Assessment Scheme (NICNAS): All components of this product are listed on AICS or otherwise comply with NICNAS.
 - Japanese Handbook of Existing and New Chemical Substances: All components of this product are listed in the Handbook or have been approved in Japan by new substance notification.

16. OTHER INFORMATION

Label Statements:

CAUTIONI

POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES MOLTEN MATERIAL WILL PRODUCE THERMAL BURNS

Minimize dust generation and accumulation.

- > FIRST AID: If burned by contact with molten material, cool as quickly as
- > possible. Do not peel from skin. If molten material contacts the eye,
- > immediately flush with plenty of water for at least 15 minutes. If easy to do,
- > remove contact lenses. Get medical attention immediately.

Note to Physicians: Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.

CAUTION: FOR MANUFACTURING, PROCESSING OR REPACKING BY TRAINED PERSONNEL

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.

The symbol ">" in the left margin denotes a revision in this section.