

EQUISTAR

Equistar Chemicals, LP
One Houston Center, Suite 1600
1221 McKinney Street
P.O. Box 2583
Houston, Texas 77252-2583
Phone: 713.652.7200

07/23/2002

Dear Customer:

Thank you for your interest in Equistar Chemicals, LP products. Attached is a current Material Safety Data Sheet (MSDS) for the following product(s) purchased or requested by your company.

<u>EQUISTAR Product Name</u>	<u>Product Number</u>	<u>Material Name</u>	<u>MSDS #</u>
Polyethylene Homopolymer	00000000000009370	PETROTHENE LB832001	000000004231

This MSDS has been prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200). The MSDS provides important health and safety information. We suggest that you review this document prior to handling the product. For the MSDS to be an effective means of hazard communication, it must be made available to all those who handle and are responsible for operations involving this product.

Information contained herein should not be used for specification purposes. We recommend that you consult your occupational health and safety specialist to insure that methods used in the handling, storage and reporting of these products will be adequate and in compliance with applicable laws and regulations.

If additional health and safety information is required, please call the Equistar Product Safety office at (800) 700-0946 or FAX (713) 951-1574.

Sincerely,
Equistar Chemicals, LP
Product Safety

Attachment



HMIS (USA)

Health Hazard	0
Fire Hazard	1
Reactivity	0

EQUISTAR
Material Safety Data Sheet
PETROTHENE LB832001

MSDS No.: 000000004231
Validation Date: 11/19/2001
Version No: 1.2

SECTION 1: IDENTIFICATION

Product Name: Polyethylene Homopolymer
Chemical Name: Polyethylene Homopolymer
CAS Number: 9002-88-4
Synonyms: Polyethylene, Polyethylene Homopolymer, PE
Chemical Family: Polyethylene Homopolymer
Manufacturer: Equistar Chemicals, LP
 One Houston Center, Suite 1600
 1221 McKinney St.
 P.O. Box 2583
 Houston, Texas 77252-2583
Telephone Numbers:
Emergency: CHEMTREC 800 424-9300
 EQUISTAR 800-245-4532
Non-Emergency: CUSTOMER SERVICE
 888 777-0232
 PRODUCT SAFETY
 800 700-0946

SECTION 2: COMPOSITION

<u>Component Name:</u>	<u>CAS #.</u>						<u>Concentration by</u>		
		<u>OSHA</u>	<u>OSHA</u>	<u>ACGIH</u>	<u>ACGIH</u>	<u>Carcinogenic</u>	<u>Wt./Mol%</u>		
		<u>PEL</u>	<u>STEL</u>	<u>TLV</u>	<u>STEL</u>	<u>Listing*</u>	<u>Avg.</u>	<u>Min.</u>	<u>Max.</u>
Polyethylene, Homopolymer	9002-88-4	N/L	N/L	N/L	N/L	N/L		98.0	100.0
Proprietary Additives		N/L	N/L	N/L	N/L	N/L			2.0

*1 = OSHA 2 = IARC 3 = NTP 4 = Others N/L = Not Listed See Section 11 for more information

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview The purpose of this MSDS is to transmit important product safety information.
Signal Word: CAUTION!
Hazards: Dust may form explosive mixtures with air. Molten polymer may cause thermal burns. At process temperatures irritating fumes may be produced.
Physical State: Solid
Color: Translucent to white.
Odor: Faint, mild hydrocarbon odor.
Potential Health Effects
Routes of Exposure: Eye Ingestion Inhalation Skin.
Signs and Symptoms of Acute Exposure: Hot material may cause thermal burns. At process temperatures, irritating fumes may cause soreness in the nose and throat; coughing may result. Mechanical irritation is possible.



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- *Polyethylene, Homopolymer* Hot material may cause thermal burns. At process temperatures, irritating fumes may cause soreness in the nose and throat; coughing may result. Mechanical irritation is possible.
- Skin:** Molten polymer may cause thermal burns.
- Inhalation:** Inhalation of process fumes and vapors may cause soreness in the nose and throat and coughing. "Nuisance dust" such as polymer dust typically exhibit no significant health effect when they are reasonably controlled. Exposure to high concentrations of dust may cause slight irritation by mechanical action.
- Eye:** Mechanical irritation is possible.
- Ingestion:** Ingestion not a likely route of exposure.
- Chronic Health Effects:** No known chronic health effects.
- *Polyethylene, Homopolymer* No known chronic health effects.
- Conditions Aggravated by Exposure:** No known conditions are aggravated by this material.

SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 3 of this MSDS.

- Inhalation:** If symptoms are experienced, move victim to fresh air. Obtain medical attention if breathing difficulty persists.
- Eye:** Flush eyes thoroughly with water for several minutes and seek medical attention if discomfort persists.
- Skin:** If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissue and polymer. Do not attempt to peel polymer from skin. Obtain immediate emergency medical attention if burn is deep or extensive.
- Ingestion:** Adverse health effects due to ingestion are not anticipated.

SECTION 5: FIRE FIGHTING MEASURES NFPA: Health 0; Fire 1; Reactivity 0; Others:

- Flammability Classification:** Not Classified. Polymer will burn but does not easily ignite.
- Flash Point / Method:** Not applicable.
- Auto-Ignition Temperature:** 343 °C (650 °F)
- Flammable Limits:** LOWER: Not applicable.
UPPER: Not applicable.
- Hazardous Combustion Products:** Carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and alcohols may be formed.
- Special Conditions to Avoid:** Dust may form explosive mixtures with air.

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Extinguishing Media: SMALL FIRE: Use DRY chemicals, CO2, water spray LARGE FIRES: Use dry chemicals, CO2, or water spray

Fire Fighting Instructions: **Protective Equipment/Clothing:** Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

INSTRUCTIONS: Use flooding quantities of water until well after fire is extinguished.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response: Pick up and retain for recycle or disposal.

Reportable Quantities: See Section 15: Regulatory Information.

SECTION 7: HANDLING AND STORAGE

Handling: Keep material off walking surfaces, it may create a slipping hazard. Polymer dust may form explosive mixtures with air. Avoid accumulation of dust in enclosed space. Use in well-ventilated area. Ground and bond equipment to prevent electrostatic charge when transferring product. Control spilled material to prevent runoff to the sewers and the environment. Do not create dust which can burn/explode. Use good housekeeping practices during storage, transfer, handling, and use to avoid excessive dust accumulation/rendering airborne.

Storage: Keep container dry. Store away from excessive heat and away from strong oxidizing agents. Keep container closed to prevent contamination.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Ventillate area to prevent accumulation of dust and fumes.

Personal Protection:

Inhalation: Use appropriate respiratory protection where atmosphere exceeds recommended limits.

Skin: Protective clothing such as long sleeves or a lab coat should be worn.

Eye: Safety glasses are required as minimum requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Not applicable.	pH:	Not applicable.
Vapor Pressure:	Not applicable.	Viscosity:	Not applicable.
Specific Gravity:	Solid/Liquid: 0.91 - 0.98 (water=1) Vapor: Not applicable.	Water Solubility:	Insoluble.
Octanol/Water Partition Coefficient in Kow:	Specific data not available.	Melting/ Freezing Point:	104 - 138 °C (219 - 280 °F)
		Evaporation Rate:	Not applicable.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: The product is stable.

Conditions to Avoid: Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

Incompatibility with: Material may be softened by some hydrocarbons. Reacts with fluorine gas.



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Hazardous Products of Decomposition: Not expected to decompose under normal conditions.
Hazardous Polymerization: Not likely.
Reactions with Air and Water: Does not react with air, water or other common materials.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary:

ACUTE ORAL EFFECTS: No adverse health effects were noted on the digestive system of test animals when fed up to 20% polyethylene.

SKIN EFFECTS: No adverse effects are expected.

Repeated Dose Toxicity Subchronic, 50-90 day, feeding studies conducted on rats, dogs and swine showed no effects from dietary levels of 1-20% powdered and shredded polyethylene.

Reproductive / Development Effects Not expected to occur.

Component Summary:

- *Polyethylene, Homopolymer*

ACUTE ORAL EFFECTS: No adverse health effects were noted on the digestive system of test animals when fed up to 20% polyethylene.

SKIN EFFECTS: No adverse effects are expected.

Repeated Dose Toxicity Subchronic, 50-90 day, feeding studies conducted on rats, dogs and swine showed no effects from dietary levels of 1-20% powdered and shredded polyethylene.

Reproductive / Development Effects Not expected to occur.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicity is expected to be minimal based on the low water solubility of polymers. Pellets can be harmful to birds and fish if ingested.

Environmental Fate: No information found in our selected references.

Bioaccumulation: Not expected to occur.

SECTION 13: DISPOSAL CONSIDERATIONS

Use only licensed transporters and permitted facilities for waste disposal. Recycle if possible.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name:

Polyethylene, ot liquid

DOT Hazard Class: Not Regulated.

UN/NA ID: Not Regulated

Marine Pollutant: No

Packing Group: Not applicable.

NAER Guidebook: Not Regulated



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Labels: Not Regulated. **DOT Status:** Not Regulated.

SECTION 15: REGULATORY INFORMATION

TSCA: All components of this product are listed or are exempt from listing on the TSCA 8(b) inventory. If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

TSCA 12(b) Component

SARA - Section 313
Emissions Reporting:

Component Summary:

Reporting Threshold

SARA - Section 311/312:

CERCLA Hazardous
Substances and their
Reportable Quantities:

Component Summary:

Reportable Quantity

California Prop. 65:

Proposition 65 requires manufacturers or distributors of consumer products into the State of California to provide a warning statement if the product contains ingredients for which the State has found to cause cancer, birth defects or other reproductive harm. If this product contains an ingredient listed by the State of California to cause cancer or reproductive toxicity it will be listed below.

SECTION 16: OTHER INFORMATION

DISCLAIMER OF
RESPONSIBILITY:

CAUTION DO NOT USE EQUISTAR MATERIALS IN APPLICATIONS INVOLVING IMPLANTATION WITHIN THE BODY; DIRECT OR INDIRECT CONTACT WITH THE BLOOD PATHWAY; CONTACT WITH BONE, TISSUE, TISSUE FLUID, OR BLOOD; OR PROLONGED CONTACT WITH MUCOUS MEMBRANES. EQUISTAR MATERIALS ARE NOT DESIGNED OR MANUFACTURED FOR USE IN IMPLANTATION IN THE HUMAN BODY OR IN CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES. EQUISTAR WILL NOT PROVIDE TO CUSTOMERS MAKING DEVICES FOR SUCH APPLICATIONS ANY NOTICE, CERTIFICATION OR INFORMATION NECESSARY FOR SUCH MEDICAL DEVICE USE REQUIRED BY FDA REGULATION OR ANY OTHER STATUTE. EQUISTAR MAKES NO REPRESENTATION, PROMISE, EXPRESS WARRANTY OR IMPLIED WARRANTY CONCERNING THE SUITABILITY OF THESE MATERIALS FOR USE IN IMPLANTATION IN THE HUMAN BODY OR IN CONTACT WITH INTERNAL BODY TISSUES OR FLUIDS.

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Latest Revision(s): Conversion to SAP template.

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