HMIS (USA)

Health Hazard	0
Fire Hazard	1
Reactivity	0

MSDS No.: 000000002315
Validation Date: 11/11/1999
Version: 1.57

EQUISTAR
Material Safety Data Sheet
Polyolefin, unspecified

SECTION 1: IDENTIFICATION

Product Name: Polyolefin, unspecified

Chemical Name: Polyolefin, unspecified

CAS Number:

Synonyms: PP, PE, EVA

Chemical Family: Polyolefin, unspecified

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
Product Safety: Phone 800 700 0946
FAX 713 951 1574

SECTION 2: COMPOSITION

Component Name:	CAS No.	OSHA PEL	OSHA STEL	ACGIH TLV	ACGIH STEL	Carcinogenic Listing*	Concentration by Wt./Mol% Avg.	Min.	Max.
Polyolefin, unspecified		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 This material is NOT HAZARDOUS by OSHA Hazard Communication definition.

Signal Word: CAUTION!

Physical and Health Hazards: Dust may form explosive mixtures with air. Molten polymer may cause thermal burns. Irritating fumes may be produced at process temperatures. Contains small amounts of a compound which is considered to be a possible cancer-causing agent.

Physical State: Solid

Color: Translucent to white solid pellets or granules.

Odor: Faint, mild hydrocarbon odor.

Odor Threshold: No data available.

Potential Health Effects

Routes of Exposure: Eye Contact, Ingestion, Inhalation, Skin Contact

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.

- *Polyolefin, unspecified* — 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 Contact: Molten polymer may cause thermal burns.

Inhalation: At process temperatures irritating fumes may be produced. 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. Inhaling polyethylene dust is considered a nuisance.

Eye Contact: Mechanical irritation is possible.

Ingestion: Ingestion is unlikely in normal industrial use.

Chronic Health Effects Summary: No known chronic health effects.

- *Polyolefin, unspecified* — 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 symptoms persist.

Eye Contact: Wash eyes with clean low-pressure water. If irritation persists, seek medical advice.

Skin Contact: 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. Get medical attention immediately.

Ingestion: Adverse health effects due to ingestion are not anticipated. If gastric irritation or discomfort persists, seek medical advice.

SECTION 5: FIRE FIGHTING MEASURES

NFPA: Health 0; Fire 1; Reactivity 0; Other

Flammability Classification: Not Classified. Polymer will burn but does not ignite readily.

Flash Point / Method: Not applicable.

Auto-Ignition Temperature: 343 °C, 349 °C (650 °F, 660 °F)

Flammable Limits: LOWER:

UPPER:

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.

Extinguishing Media: , LARGE FIRES: Use DRY chemicals, CO2, or water spray.

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

Instructions: Use flooding quantities of water until well after fire is out.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response: Pick up and retain for recycle or disposal. Do not flush spilled material to the sewer or the environment.

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.

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: If user operations generate dust or fumes, ventillate area to prevent accumulation.

Personal Protection

Inhalation: Use appropriate respiratory protection where atmosphere exceeds recommended limits. Total Dust (PNOC): ACGIH 10 mg/M3, OSHA 15 mg/M3. Respirable Dust (PNOC) ACGIH 3 mg/M3, OSHA 5 mg/M3.

Skin: Protective clothing such as long sleeves or a lab coat should be worn. When handling heated materials, also be sure to use heat-resistant gloves, boots and face protection.

Eye: Use safety glasses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point/Range: Not applicable.

pH: Not applicable.

Vapor Pressure: 0 mm Hg

Viscosity: Not applicable.

Specific Gravity: **Solid/Liquid:** 0.92 - 0.98 (water=1)
Vapor: Not applicable.

Water Solubility: Insoluble.

Octanol/Water Partition Coefficient in Kow: Specific value not available.

Melting/ Freezing Point: 136 °C (266 °F)

Evaporation Rate:

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: The product is stable.

Conditions to Avoid: Avoid contact with strong oxidizers and all sources of ignition.

Incompatibility with: Solid material is softened by some hydrocarbons. Reacts with Fluorine Gas.

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

Summary: Not considered to be toxic to humans or animals.

Component

- *Polyolefin, unspecified*

LC50 (INHL): Mouse 12 GM/M3/30M

SKIN EFFECTS: No skin effects are expected from polymer contact.

ACUTE ORAL EFFECTS: Animal studies showed no adverse health effects on the digestive system when fed up to 20% polyethylene.

ACUTE INHALATION EFFECTS: Rats inhaling polyethylene DUST developed mild inflammatory changes in the lungs. Prolonged inhalation of thermal degradation products from polyethylene caused neurological effects in rats.

SUBCHRONIC EFFECTS: Subchronic, 50 to 90 day, feeding studies conducted on rats, dogs and swine showed no effects from dietary levels of 1 to 20% powdered and shredded polyethylene. IARC has listed polyethylene as a Group 3 substance (not classifiable as to carcinogenicity to humans).

REPRODUCTIVE / DEVELOPMENTAL EFFECTS: No reproductive or developmental effects are expected.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Ecotoxicity is expected to be low 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

This material is NOT classified as a Hazardous Material by RCRA. Recycle, if possible. Use only licensed transporters and permitted disposal facilities and conform to all laws. Recycle to process, if possible.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name: Polyolefin, ot Liquid

DOT Hazard Class: Non-regulated.

UN/NA ID:	Not Regulated.	**Marine Pollutant:**	No.
Packing Group:		**NAER Guidebook:**	Not Regulated.
Labels:		**DOT Status:**	Non-regulated.

SECTION 15: REGULATORY INFORMATION

TSCA: All components of this product are listed 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	Listed under TSCA Section

SARA - Section 313 Emissions Reporting: This product contains no SARA 313 "toxic chemicals" above threshold levels.

Component	Reporting Threshold

SARA - Section 311/312: No components present in this product are subject to the reporting requirements of this statute.

CERCLA Hazardous Substances and their ReportableQuantities:

Component	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