

PETROTHENE® LP510000

SECTION 1: IDENTIFICATION

Product Name: PETROTHENE® LP510000

Product Number: 000000000000004142

Chemical Family: Polyethylene copolymer

CAS Number: 25213-02-9

Chemical Name: 1-Hexene,polymer with ethene

Synonyms: Polyethylene; PE; Ethylene/Hexene Copolymer

Type of Use: Resins

Company

Equistar Chemicals, LP
One Houston Center, Suite 700
1221 McKinney St.
P.O. Box 2583
Houston Texas 77252-2583

Business Contact

Customer Service
888 777-0232
Product Safety
800 700-0946
product.safety@lyondellbasell.com

24 Hour Emergency Contact

CHEMTREC USA 800-424-9300
EQUISTAR 800-245-4532

SECTION 2: HAZARD IDENTIFICATION

Emergency Overview

This material is NOT HAZARDOUS by OSHA Hazard Communication definition. Trade secret chemical identities will be revealed to treating physicians in an emergency, or to purchasers after execution of a secrecy agreement.

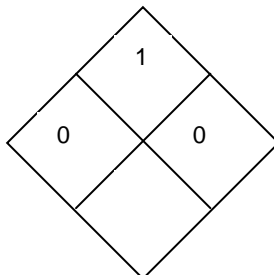
Signal Word

CAUTION.

Hazards

Molten polymer may cause thermal burns. At process temperatures irritating fumes may be produced. Dust may form explosive mixtures with air.

NFPA®



HMIS®

Health	0
Flammability	1
Physical Hazard	0

Physical State

solid

Color

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Color

Translucent to white.

Odor

Faint, mild hydrocarbon odor.

Odor Threshold

No value available.

Potential Health Effects

Routes of Exposure

Eye. Inhalation. Skin.

Signs and Symptoms of Acute Exposure

See component summary.

- *1-Hexene, polymer with ethene 25213-02-9*

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.

- *Proprietary Additive*

No known acute health effects.

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

See component summary.

- *1-Hexene, polymer with ethene 25213-02-9*

No known chronic health effects.

- *Proprietary Additive*

No known chronic health effects.

Conditions Aggravated by Exposure

No known conditions are aggravated by this material.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component Name</u>	<u>CAS #</u>	<u>EU Inventory</u>	<u>Concentration Wt. %</u>
1-Hexene, polymer with ethene	25213-02-9	Monomers are EINECS listed	98.0 <= 100.0

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Proprietary Additive Mixture Additives are <= 2.0
EINECS listed

Compositions given are typical values not specifications.

SECTION 4: FIRST AID MEASURES

General

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 2 of this MSDS.

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.

Inhalation

If symptoms are experienced, move victim to fresh air. Seek medical attention if discomfort persists.

Eye

Wash eyes with clean low-pressure water. Seek medical attention if discomfort persists.

Ingestion

Adverse health effects due to ingestion are not anticipated.

Note to Physician

There is no specific antidote; treatment of overexposure should be directed at control of symptoms and the clinical condition of the patient. Treat burns or allergic reactions conventionally after decontamination.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification

Not Classified. Polymer will burn but does not easily ignite.

Flash Point

Not applicable.

Auto-Ignition Temperature

343 °C (649.4 °F)

Lower Flammable Limit

No Data Available.

Upper Flammable Limit

No Data Available.

Extinguishing Media

Suitable:

SMALL FIRE: Use dry chemical, CO₂, water spray or regular foam LARGE FIRES: Use large quantities of water spray.

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Protection of Firefighters

Protective Equipment/Clothing:

Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

Fire Fighting Guidance:

Polyolefin dust particles in the atmosphere are combustible and may be explosive. Keep away from heat, sparks, flame and all other ignition sources. Keep container closed. Prevent dust accumulations and dust clouds.

Hazardous Combustion Products:

Carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and alcohols may be formed.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Release Response

Avoid generating dust. Potential dust explosion hazard. Use only non-sparking tools. Material creates dangerous slipping hazard on hard surfaces. Pick up and retain for recycle or disposal.

SECTION 7: HANDLING AND STORAGE

Handling

Keep away from heat, sparks, open flame, or any ignition source. Use with adequate ventilation. Spilled material can make walking hazardous, potentially causing falls and serious injury. After handling, always wash hands thoroughly with soap and water.

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

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Personal Protection

Inhalation

A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Use appropriate respiratory protection where atmosphere exceeds recommended limits.

Skin

Use chemical resistant gloves appropriate to conditions of use. Wear heat protective gloves and clothing if there is a potential for contact with heated material. Protective clothing such as long sleeves or a lab coat should be worn.

Eye

Dust service goggles should be worn to prevent mechanical injury or other irritation to eyes due to airborne particles which may result from handling this product. Safety glasses are required as minimum requirements.

Additional Remarks

Selection of appropriate personal protective equipment should be based on an evaluation of the performance

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Additional Remarks

characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Material spilled on hard surface can be a serious slipping/falling hazard. Use care in walking on spilled material.

Occupational Exposure Limits

Consult local authorities for acceptable exposure limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid Translucent to white.

Odor: Faint, mild hydrocarbon odor.

Odor Threshold: No value available.

pH: Not applicable.

Boiling Point/Boiling Range: Not applicable.

Freezing Point/Melting Point: 136 °C (276.8 °F)

Flash Point: Not applicable.

Auto-ignition: 343 °C (649.4 °F)

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

Lower Flammable Limit: No Data Available.

Upper Flammable Limit: No Data Available.

Explosive Properties: No Data Available.

Oxidizing Properties: No Data Available.

Vapor Pressure: Not applicable.

Evaporation Rate: Not applicable.

Relative Density: 0.92 - 0.98 (water=1)

Relative Vapor Density: Not applicable.

Viscosity: Not applicable.

Solubility (Water): Insoluble.

Partition Coefficient (Kow): Specific data not available.

Additional Physical and Chemical Properties: No additional information available.

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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.

Substances to Avoid

Material may be softened by some hydrocarbons.

Decomposition Products

Dependent on process conditions (>392°F, pressure, time, O₂) hazardous decomposition products may be generated.

Hazardous Polymerization

Not likely.

Reactions with Air and Water

Does not react with air, water or other common materials.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION

Product Summary

See components summary.

COMPONENT INFORMATION

- *1-Hexene, polymer with ethene* 25213-02-9

Acute Toxicity - Effects

Inhalation

Rats inhaling polyethylene dust developed mild inflammatory changes in the lungs. Prolonged inhalation of thermal degradation products from polyethylene caused neurological effects in rats.

Ingestion

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

Irritation

Skin

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.

Carcinogenicity

Not listed by IARC, NTP, OSHA or EPA.

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- *Proprietary Additive*

Repeated Dose Toxicity

No known chronic health effects.

Carcinogenicity

Not listed by IARC, NTP, OSHA or EPA.

SECTION 12: ECOLOGICAL INFORMATION

PRODUCT INFORMATION

Ecotoxicity

See components summary.

Environmental Fate and Pathway

See components summary.

COMPONENT INFORMATION

- *1-Hexene, polymer with ethene* 25213-02-9

Ecotoxicity

Ecotoxicity is expected to be minimal based on the low water solubility of polymers.

Environmental Fate and Pathway

Persistence and Degradability

Biodegradation: This material is not expected to be readily biodegradable.

Bioaccumulation: This material is not expected to bioaccumulate.

- *Proprietary Additive*

Ecotoxicity

No Data Available.

Environmental Fate and Pathway

No Data Available.

SECTION 13: DISPOSAL CONSIDERATIONS

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Use only licensed transporters and permitted facilities for waste disposal. Comply with federal, state, or local regulations for disposal. Recycle if possible.

SECTION 14: TRANSPORT INFORMATION**Special Requirements**

If you reformulate or further process this material, you should consider re-evaluation of the regulatory status of the components listed in the composition section of this sheet, based on final composition of your product.

Proper Shipping Name POLYETHYLENE, OTHER THAN LIQUID, NOT REGULATED

SECTION 15: REGULATORY INFORMATION**Regulatory Status**

This product and its components are listed, or exempt from listing, on the following:

Country	Inventory
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS
Korea	ECL
Philippines	PICCS
United States	TSCA
New Zealand	NZIoC

Contact product.safety@lyondellbasell.com for additional global inventory information.

If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

SARA 302/304

This product contains no known chemicals regulated under SARA 302/304.

SARA 311/312

Based upon available information, this material is not classified as a health and/or physical hazard according to Section 311 & 312.

SARA 313

This product contains no known chemicals regulated under SARA 313.

State Reporting

This product contains no known chemicals regulated by California's Proposition 65.

This product contains no known chemicals regulated by New Jersey's Worker and Community Right to Know Act.

This product contains no known chemicals regulated by Massachusetts' Right to Know Law.

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This product contains no known chemicals regulated by Pennsylvania's Right to Know Act.

SECTION 16: OTHER INFORMATION

Latest Revision(s)

Reviewed Date of Revision: December 8 2008

DISCLAIMER OF RESPONSIBILITY

CAUTION DO NOT USE LYONDELLBASELL PETROCHEMICALS, LP 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. LYONDELLBASELL PETROCHEMICALS, LP MATERIALS ARE NOT DESIGNED OR MANUFACTURED FOR USE IN IMPLANTATION IN THE HUMAN BODY OR IN CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES. LYONDELLBASELL PETROCHEMICALS, LP 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. LYONDELLBASELL PETROCHEMICALS, LP 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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Numerical Data Presentation

The presentation of numerical data, such as that used for physical and chemical properties and toxicological values, is expressed using a comma (,) to separate digits into groups of three and a period (.) as the decimal marker. For example, 1,234.56 mg/kg = 1 234,56 mg/kg.

Language Translations

This document may be available in languages other than English.

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