



SDS

## Safety Data Sheet

**Product Name:** Polyethylene – Recycled Grade

**Chemical Family:** Polymer

**Chemical Name:** Recycled Polyethylene

**Synonyms:** Polyethylene recycled; PE

### Hazard Identification

#### Emergency Overview

This material is NOT HAZARDOUS by definition. Trade secret chemical identities will be revealed to treating physicians in an emergency, or to a health professional, employee or designated representative in non-emergency situations after execution of a secrecy agreement.

#### Signal Word

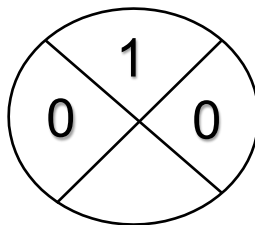
CAUTION

#### 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
Reactivity	0

#### Physical State

Solid

#### Color/s

Black, Natural, White, Gray, Mixed, Various

#### Odor

Faint, mild hydrocarbon odor.

#### Odor Threshold

No value available.

## **Potential Health Effects**

### **Routes of Exposure**

Eye Skin. Inhalation

### **Signs and Symptoms of Acute Exposure**

See component summary.

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**

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.

### **Eye**

Dust from this product may cause eye irritation.

### **Ingestion**

Ingestion not a likely route of exposure.

### **Chronic Health Effects**

See component summary.

No known chronic health effects.

### **Conditions Aggravated by Exposure**

No known conditions are aggravated by this material.

## **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 3 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. Obtain medical attention if breathing difficulty 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 the control of symptoms and the clinical condition of the patient. Treat burns or allergic reactions conventionally after decontamination.

## Fire Fighting Measures

### Flammable Properties

#### **Classification**

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

#### **Flash Point:**

341°C

#### **Auto-Ignition Temperature**

330-410 °C

#### **Lower Flammable Limit**

Not applicable.

#### **Upper Flammable Limit**

Not applicable.

### Extinguishing Media

**Suitable:** SMALL FIRE: Use DRY chemicals, CO<sub>2</sub>, water spray LARGE FIRES: Use dry chemicals, CO<sub>2</sub>, or water spray

**Unsuitable:** No additional information available.

### Protection of Firefighters

**Protective Equipment/Clothing:** Wear positive pressure self-contained breathing apparatus (SCBA).

Structural fire fighters protective clothing will only provide limited protection.

**Fire Fighting Guidance:** Polyolefin dust particles in the atmosphere are combustible and may be explosive.

Keep away from heat, sparks, open flame, or any ignition source.

**Hazardous Combustion Products:** Carbon monoxide, acids, ketones, aldehydes and alcohols may be formed.

## 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.

## Handling and Storage

### **Handling**

Keep away from heat, sparks, open flame, or any ignition source. Use with adequate ventilation. 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.

## Exposure Controls and Personal Protection

### **Engineering Controls**

Ventilate area to prevent accumulation of dust and fumes.

### **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 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 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. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse.

#### Occupational Exposure Limits

Component Name	Source/ Date	Value	Type	Notation
1-ethylene, Polymer with Ethane	US (ACGIH) / 2003 (Inhalable fraction)	10 mg/m <sup>3</sup>	8 hrs/twa	No
	US (ACGIH) / 2003	3 mg/m <sup>3</sup> (respirable fraction)	8 hrs/twa	No
	US (OSHA) / 2003	5 mg/m <sup>3</sup> (respirable fraction)	8 hrs/twa	No
	US (OSHA) / 2003	15 mg/m <sup>3</sup> Total dust	8 hrs/twa	No

Proprietary Components

US (ACGIH) / 2003  
US (OSHA) / 2003

N/L  
N/L

### Physical and Chemical Properties

**Appearance:** Various

**Odor:** Faint, mild hydrocarbon odor.

**Odor Threshold:** No value available.

**PH:** Not applicable.

**Boiling Point/Boiling Range:** Not applicable.

**Freezing Point/Melting Point:** 120-160 °C

**Flash Point:** Not applicable.

**Auto-ignition:** 330-410°C

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

**Lower Flammable Limit:** Not applicable.

**Upper Flammable Limit:** Not applicable.

**Explosive Properties:** No Data Available.

**Oxidizing Properties:** Not Applicable.

**Vapor Pressure:** Not applicable.

**Evaporation Rate:** Not applicable.

**Relative Density:** 0.91 - 0.965

**Relative Vapor Density:** Not applicable.

**Viscosity:** Not applicable.

**Solubility (Water):** Insoluble.

**Partition Coefficient (Kow):** No Data Available.

**Additional Physical and Chemical Properties:** No additional information available.

## Stability and Reactivity

### Chemical Stability

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. Reacts with fluorine gas.

### Decomposition Products

Not expected to decompose under normal conditions.

### Hazardous Polymerization

Not expected to occur.

### Reactions with Air and Water

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

## Toxicological Information

### Product Summary

(See Component Toxicity Information).

*1-Ethelyne, Polymer with Ethane*

### Repeated Dose Toxicity

No known chronic health effects.

### Carcinogenicity

Not listed by IARC, NTP, or OSHA.

*Proprietary Components*

### Repeated Dose Toxicity

No known chronic health effects.

### Carcinogenicity

Not listed by IARC, NTP, or OSHA.

## PRODUCT INFORMATION

## COMPONENT INFORMATION

## Ecological Information

## PRODUCT INFORMATION

### Eco toxicity

See component summary.

### Environmental Fate and Pathway

See component summary.

## COMPONENT INFORMATION

*Polyethylene*

### Eco toxicity

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

### Environmental Fate and Pathway

This material is not volatile and insoluble in water.

#### Persistence and Degradability

Biodegradation: This material is expected to be resistant to biodegradation.

Bioaccumulation: This material is not expected to bio accumulate.

#### Proprietary Components

### Eco toxicity

No Data Available.

### Environmental Fate and Pathway

No Data Available.

## Disposal Considerations

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

## 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

## Regulatory Information

### Regulatory Status

Country .....	Inventory	
Australia .....	AICS	X
Canada .....	DSL	X
Canada .....	NDSL	
China .....	IECS	X
European Union .....	EINECS	X
European Union .....	ELINCS	
European Union .....	NLP	
Japan .....	ENCS	X
Korea .....	ECL	X
Philippines .....	PICCS	X
United States .....	TSCA	X

X = All components are included or are otherwise exempt from inclusion on this inventory

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

**302/304**

No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.

### **311/312**

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

### **313**

This material does not contain any chemical components with known CAS numbers that exceed the DE Minimis reporting levels established by Title III, Section 313 and 40 CFR 372.

Component Reporting Threshold

### **State Reporting**

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under Proposition 65 at levels which would be subject to the proposition.

### **Other Information**

#### **Latest Revision(s)**

Revised Section(s): March 31 2018

#### **DISCLAIMER OF RESPONSIBILITY**

CAUTION DO NOT USE SSD 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. SSD DESIGNS LLC ARE NOT MANUFACTURED FOR USE IN IMPLANTATION IN THE HUMAN BODY OR IN CONTACT WITH INTERNAL BODY FLUIDS OR TISSUES. SSD DESIGNS LLC 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. SSD 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

The information presented in this document has been translated from English and believes to be reliable. This has been made a good-faith effort to verify the accuracy of the translation, but assume no responsibility for any errors that may have occurred.