



Safety Data Sheet

Rev. 3 08/05/2015

Section 1: Identification

Product: Densetec HDPE

Type of use: Building materials, fabricated parts

Restrictions on use: Do not use this material in any medical applications involving permanent implantation in the human body or permanent contact with internal body fluids

Company Business / Emergency contact

Polymer Industries

PO Box 32; Hwy 40

Henagar, AL 35978

Emergency Telephone Number: 256-657-5197

Section 2: Hazard (s) Identification

This material is not considered hazardous. According to GHS Formaldehyde may be produced at extremely elevated temperatures. Dust caused by cutting or machining of material may produce mechanical irritation to mucous membranes of the eyes, nose, throat and upper respiratory tract. Material dust may scratch the surface of the eye.

Section 3: Composition / Information on Ingredients

Principal Components: Polyethylene (CAS #: 9002-88-4), Polyethylene Hexene Copolymer (CAS #: 25213-02-9), Additives

Additives may include Color Pigments, UV Stabilizers, antioxidants and slip agents which can be formulated in polyethylene generally at concentration levels of less than 1% by weight.

Section 4: First Aid Measures

Eyes: Flush eyes with running water immediately if dust particles get into the eyes. Get medical attention if irritation persists.

Skin: Use soap and water to remove material from skin. If molten material gets on skin, quickly cool in water. See doctor for extensive burns. Do not try to peel

solidified material from skin. Vegetable oil, mineral oil, or petroleum jelly may be used to aid in removal from skin.

Ingestion: If swallowed, do not induce vomiting. Give person a glass of water and get immediate medical attention.

Inhalation: Non Hazardous at ambient and molten temperatures. Remove to fresh air if breathing is affected. Seek medical attention.

Section 5: Fire Fighting Measures

Fire Classification: OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

Dust particles can cause an explosive reaction due to static buildup or the presence of flammable vapors

Material will burn although it is not easily ignited. Water, foam, dry chemical, or carbon dioxide can be used to extinguish flames. For large fires, do not enter any enclosed or confined fire space without proper protective equipment.

If product combusts, carbon monoxide, carbon dioxide, and other organic compounds can be produced.

Section 6: Accidental Release Measures

Material in sheet form and is not subject to spills.

Personal precautions Sweep up to prevent a slipping hazard avoid breathing dust, avoid dust formation.

Environmental precautions: Do not contaminate surface water do not flush down drains

Method of cleanup: Clean up by using brooms or vacuum dust accumulation should not be blown around using compressed air as this could cause a static charge resulting in an explosion

Section 7: Handling and Storage

Sheet should be secured to prevent slippage during transport, material should be stored away from sparks or heat sources such as open flames, heaters, ovens to prevent material from combusting. All debris should be contained in properly designed systems to avoid spillage.

Section 8: Exposure Controls / Personal Protection

OSHA permissible exposure limits (OSHA PEL)

Debris and dust from processing sheet can be considered nuisance particulates.

OSHA PEL (Total dust) 15 mg/m³ TWA
ACGIH (Inhalable particulate) 10 mg/m³ TWA
OSHA PEL (Respirable Fraction) 5 mg/m³ TWA
ACGIH (Respirable particulate) 3mg/m³ TWA

Material may be handled without protective clothing. Gloves or other types of protective clothing should be used if handling material at elevated temperatures.

If machining of material results in dust use engineered dust collection systems and ventilate the area. Good ventilation should also be present when material is heated for welding or forming applications.

Personal protective equipment such as safety glasses with side shields or a face shield, steel toed boots, hearing protection should be worn when machining material. Heat resistant gloves and body protection should be used when the sheet is heated for bending or welding if engineered controls are not adequate.

Respiratory protection is not normally required.

Section 9: Physical and Chemical Properties

Appearance: Solid Plastic

Odor: Mild to no odor

Color: Opaque (Colorant can be added)

Thermal decomposition: Low molecular weight hydrocarbons, alcohol, aldehydes, acids and ketones can be formed during thermal processing

Melting Point: 135 deg C, 275 deg F

Density: .91 g/cm³ to .97 g/cm³

Flashpoint: 340 deg C, 644 deg F

Auto ignition: 380 deg C, 716 deg F

Section 10: Stability and Reactivity

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Reactivity: Not reactive with water or air.

Hazardous Reactions: Dust may create static discharge, risk of dust-air explosion increase with the presents of flammable vapors. Polyethylene may react and be degraded by Organic Chlorides, Hydrocarbons and certain halogens.

Conditions to avoid: Processing polyethylene at over 300 °C may emit various oligomers, waxes and oxygenated hydrocarbons as well as carbon dioxide, Carmon oxide and small amounts of other organic vapors (Inhalation of these gases may be hazardous

Section 11: Toxicological Information

This material in sheet form is not expected to be irritating to the eyes or skin.

Section 12: Ecological Information

Material is not readily biodegradable. Material is not expected to be harmful to aquatic organisms.

Section 13: Disposal Considerations

This material can be easily recycled. Material can be disposed of normally in landfills. Please comply with all local and state laws for proper disposal.

Section 14: Transport Information

This material is not regulated as a hazardous material or dangerous goods for transportation.

Section 15: Regulatory Information

SARA 311/312 Categories:

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|---------------------------------------|----|
| 1) Immediate (Acute) Health Effects: | No |
| 2) Delayed (Chronic) Health Effects: | No |
| 3) Fire Hazard: | No |
| 4) Sudden Release of Pressure Hazard: | No |
| 5) Reactivity Hazard: | No |

Section 16: Other Information

NFPA Rating:

Health Hazard	0
Fire Hazard	1
Reactivity Hazard	0



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