



# POLYMER INDUSTRIES

## MATERIAL SAFETY DATA SHEET

### Section 1: Product and Company Identification

Product: DENSETEC SHIELD

Company: Polymer Industries  
PO Box 32; Hwy 40  
Henagar, AL 35978

### Section 2: Composition / Information on Ingredients

Principal Components: Polyethylene (CAS #: 9002 88 4): < 95%  
Boric Oxide (CAS #: 1303 86 2): > 5%  
Additives

### Section 3: Hazards Identification

Boric Oxide has low acute oral and dermal toxicity. Reaction with water results in the liberation of heat and the formation of boric acid. However, all of the Boric oxide is encased in polyethylene and, when exposed to water, the Densetec Shield does not react with water.

Large amounts of Boric Oxide can be harmful to plants and other species. Therefore, releases to the environment should be minimized.

Dermal exposure is not a concern because Boric Oxide is poorly absorbed through intact skin.

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.

Occasional mild irritation effects to the nose and throat may occur from inhalation of Boric Oxide dust at levels greater than 10 mg/m<sup>3</sup>.

#### 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.

NFPA Ratings: Health: 1 Flammability: 1 Reactivity: 0

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 is in sheet form and is not subject to spills. This section is not applicable.

#### Section 7: Handling and Storage

Material should be stored away from sparks or heat sources such as open flames, heaters, ovens to prevent material from combusting.

## Section 8: Exposure Controls / Personal Protection

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, ventilate area. Good ventilation should also be present when material is heated for welding or forming applications. Safety glasses should always be worn when machining material.

Respiratory protection is not normally required unless airborne concentrations are expected to exceed exposure limits.

ACGIH/TLV:	10 mg/m <sup>3</sup>
Cal OSHA/PEL	10 mg/m <sup>3</sup>
OSHA/PEL (total dust):	15 mg/m <sup>3</sup>
OSHA/PEL (respirable dust):	5 mg/m <sup>3</sup>

## Section 9: Physical and Chemical Properties

Appearance: Solid Plastic

Odor: None

Solubility: Not Soluble in water

Melting Point: 135 deg C, 275 deg F

Density: .95 g/cm<sup>3</sup> to 1.0 g/cm<sup>3</sup>

## Section 10: Stability and Reactivity

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

Flashpoint: 340 deg C, 644 deg F

Autoignition: 380 deg C, 716 deg F

## Section 11: Toxicological Information

This material 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:

- |                                       |    |
|---------------------------------------|----|
| 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

Information contained herein is accurate to the best of our knowledge. Polymer Industries makes no warranty of any kind, express or implied, concerning the safe use of this material .