

## Material Safety Data Sheet

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**DYNEX HDPE**

Revision Date: 2014.12.16 (Rev.0)

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Product Name: DYNEX HDPE  
Chemical Name: HIGH DENSITY POLYETHYLENE  
CAS NO: 9002-88-4 (POLYMER)  
Product Use: Engineering Plastic Stock Shape for Machining  
Company Identification: DYNEX Co.,Ltd.  
Namdongseo-ro, Namdong-Gu, Incheon-City, Korea  
(TEL:82-32-677-2971, FAX:82-32-677-2974)

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## Hazard Identification

**Emergency overview**

HMIS Rating : Health = 0, Flammability = 1, Reactivity = 0  
NFPA Rating : Health = 1, Flammability = 1, Reactivity = 0

**Eye**

Mechanical irritations is possible.

**Skin**

Hot and molten material has the potential to cause thermal burns.

**Inhalation**

Shapes not respirable.

**Ingestion**

No specific information available on the product.

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## Composition, information on Ingredients

Additives not hazardous by 29 CFR 1910.1200.

Identity	CAS#	Concentration(%)
High Density Polyethylene	9003-56-9	>99
Other additives	-	<1

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## First Aid Measures

**Eye**

Immediately flush eyes with plenty of water. Seek medical attention if discomfort persists.

**Skin**

If hot and molten HDPE contact skin, cool rapidly with cold water. If HDPE is stuck to skin, do not remove, and seek medical attention. And allow adhered HDPE to come off naturally.

**Inhalation**

ABS is not likely to be inhaled due to physical form. When gas from molten ABS is inhaled, move to fresh air.

**Ingestion**

If a significant quantity has been swallowed, give plenty of water to dilute. Seek medical attention.

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## Fire Fighting Measures

**Flash Point** : Not applicable.

**Autoignition Temperature** : 349°C (660°F)

**Unusual Fire, Explosion Hazards** : None Known.

**Hazardous Product of Combustion**

Carbon monoxide, carbon dioxide, aldehydes, organic acids and alcohols.

**Extinguishing Media** : Carbon dioxide, dry chemical, foam or water spray.

**Firefighting Instructions**

Firefighters should wear self-contained breathing apparatus and full fire-fighting turn-out gear (bunker gear). Product burns with a very hot, but very faint blue flame. Water, foam and dry chemical may cause damage to electrical equipment.

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## Accidental Release Measures

**Personal precaution**

Sweeping to prevent fall.

**Environmental protection**

No special measures.

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## Handling and Storage

**Handling**

Evacuate residue to prevent slipping hazard.

**Storage**

Store in well-ventilated area away from heat and sunlight.

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## Exposure Controls / Personal Protection

### Engineering Controls

A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended.

### Protective Equipment

**Eyes:** Wear safety glasses with side shields should be sufficient for most processing and machining runs.

**Skin:** When thermal or melt processing, wear long pants, long sleeves and well insulated gloves.

**Inhalation:** A NOIOSH approved respirator is recommended.

### Exposure Guidelines

Operations involving grinding and machining of parts should be reviewed to assure that particulate levels are kept below recommended standard.

Ingredient	Agency	Value
Nuisance/Inert Dust	PEL(OSHA)	15mg/cm <sup>3</sup>

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## Physical and Chemical Properties

<b>Appearance:</b>	Solid
<b>Smell:</b>	None
<b>PH:</b>	Not applicable
<b>Water Solubility:</b>	Insoluble
<b>Boiling Point:</b>	Not applicable
<b>Melting Point:</b>	120~140°C (248~284°F)
<b>Vapor Pressure:</b>	Not applicable
<b>Specific Gravity:</b>	0.945 ~ 0.975g/cm <sup>3</sup>

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## Stability and Reactivity

### Chemical Stability

Stable under normal conditions of use and storage.

### Condition to Avoid

Heating above 300°C(572°F).

### Materials to Avoid

Strong oxidizing materials.

### Hazardous Decomposition Products

Hydrocarbons, alcohols, aldehydes, acids and ketones.

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## Toxicological Information

No relevant information found.

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## Ecological Information

### Ecotoxicity

No specific information available on the product.

### Environmental Information

This material is considered to be non-biodegradable.

### Aquatic Toxicity

Toxicity is expected to be low based on insolubility of polymer in water.

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## Disposal Considerations

Recycling is encouraged. Dispose in accordance with local regulations.

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## Transportation Information

This product is not subject to transport regulations.

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## Regulatory Information

**OHSA:** This product is not considered hazardous under OHSA.

**TSCA:** All ingredients are listed.

**CERCLA:** Not Applicable.

**SARA 302/304:** No extremely hazardous substances.

**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 is not contain any toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.

**Labeling Information(EEC):** Not classified according to EEC directives 67/548EEC and 88/379/EEC.

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## Other Information

This product is not intended for use in medical applications involving permanent implantation in the human body. The information contained herein is based on the present state of our knowledge. We don't suggest or guarantee that any hazards listed herein are the only ones that exist. DYNEX Co., Ltd. makes no warranty of any kind concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and this material may aggravate the effects of other materials.

Users have the sole responsibility to determine the suitability of the materials of any use and the manner of use contemplated. Users must meet all applicable safety and health standards.

End of MSDS