

Revision Date : 2016.06.29 (Rev.1)

Product Name : DYNEX HDPE

1. Chemical Product and Company Identification

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

2. Hazards Identification

- o **GHS Classifications** : Not applicable
- o **GHS label elements**
 - Classification : None
 - Signal Word : None
 - Pictograms and Symbols : None
 - Hazard Statements : None
 - Precautionary Statements : None
- o **Emergency overview**
 - NFPA Ratings : Health = 1, Flammability = 1, Reactivity = 0
- o **Eye** : Mechanical irritations is possible.
- o **Skin** : Hot and molten material has the potential to cause thermal burns.
- o **Inhalation** : Shapes not respirable.
- o **Ingestion** : No specific information available on the product.

3. Composition, information on Ingredients

Identity	CAS#	Concentration(%)
High Density Polyethylene	9002-88-4	>99
Other additives	-	<1

Other ingredients which do not contribute to classification of the product

4. 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**
 - HDPE is not likely to be inhaled due to physical form.
 - When gas from molten HDPE is inhaled, remove to fresh air.
- **Ingestion**
 - If a significant quantity has been swallowed, give plenty of water to dilute. Seek medical attention.
- **Note to Physicians**
 - Medical personnel may leave this material in place to minimize physical damage to the skin or cover the material with a burn gel to prevent adhesion of the dressing to the material.

5. Fire Fighting Measures

- **Extinguishing Media**
 - Suitable extinguishing media : Carbon dioxide, dry chemical, foam or water spray.
 - Unsuitable extinguishing media : indoor or outdoor hydrant facilities, sprinkler, water jet
- **Special hazards arising from the substance or mixture**
 - Carbon monoxide, carbon dioxide, aldehydes, organic acids and alcohols.
- **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

6. Accidental Release Measures

- **Personal precaution**
 - Sweeping to prevent fell.
- **Environmental protection**
 - No special measures.

7. Handling and Storage

o Handling

- Evacuate residue to prevent slipping hazard.

o Storage

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

8. Exposure Controls, Personal Protection

o Engineering Controls

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

o 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.

o Exposure Guidelines

Ingredient	Agency		Value
Particulates	OSHA	PEL	15 mg/m ³ (Total), 5 mg/m ³ (Respirable)
	ACGIH	TLV	10 mg/m ³ (Total)

9. Physical and Chemical Properties

- o **Appearance** : Solid
- o **Smell** : None
- o **PH** : Not applicable
- o **Water Solubility** : Insoluble
- o **Boiling Point** : Not applicable
- o **Melting Point** : 85~135°C (185~275°F)
- o **Vapor Pressure** : Not applicable
- o **Specific Gravity** : 0.945 ~ 0.975g/cm³

10. Stability and Reactivity

- o **Chemical Stability** : Stable under normal conditions of use and storage.
- o **Hazardous Reactions** : Stable under normal conditions.
- o **Condition to Avoid** : Avoid to heat, open flames, sparks and other source of ignition.
- o **Materials to Avoid** : Strong oxidizing materials.
- o **Hazardous Decomposition Products** : Carbon oxides, Hydrocarbons, aldehydes, acids and ketones.

11. Toxicological Information

- **Aggravated Medical** : None.
- **Acute Effects** : Non-toxic.
- **Skin Corrosion/Irritation** : Not irritating to the skin.
- **Serious Eye Damage/Irritation** : Particulates can be mechanically irritating to the eyes.
- **Respiratory or Skin Sensitization** : Not expected to be a sensitizer.
- **Germ Cell Mutagenicity** : Not expected to be a germ cell mutagen.
- **Carcinogenicity** : Not classifiable as carcinogen to humans.
- **Reproductive Toxicity** : There aren't known reproductive toxicity effects.
- **Aspiration Hazard** : No data available. Not expected to be an aspiration hazard.

12. Ecological Information

- **Ecotoxicity** : No specific information available on the product.
- **Persistence and degradability** : It's expected high persistence and slow degradability.
- **Bioaccumulative Potential** : It's expected moderate to high bioaccumulative potential.
- **Mobility in Soil** : No data available
- **Other Adverse Effects** : No data available

13. Disposal Considerations

Recycling is encouraged. Dispose in accordance with local regulations.

14. Transport Information

- **UN number** : Not available
- **UN Proper Shipping Name** : Not available
- **Transport hazard class(es)** : Not available

15. Regulatory Information

- **ISHL(The industrial Safety and Health Law in Korea)**

This product is not subject to the chemical needs monitoring workplace exposure limit under ISHL Article 42. This product is not subject to the chemical specified the exposure limit under ISHL Article 42., Public notice 2008-2.

- o **TCCA(The Toxic Chemical Control Act in Korea)**

This product is not classified as Toxic chemical and Observational chemical under TCCA Article 2.3. and 2.4.

- o **OHSA** : This product is not considered hazardous under OHSA.
- o **TSCA** : All ingredients are listed.
- o **CERCLA** : Not Applicable.
- o **SARA 302/304** : No extremely hazardous substances.
- o **SARA 311/312** : Based upon available information, this material is not classified as a health and/or physical hazard according to Section 311&312.
- o **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.
- o **Labeling Information(EEC)** : Not classified according to EEC directives 67/548EEC and 88/379/EEC.

16. 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.

- The End of SDS -