

## Material Safety Data Sheet

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**DYNEX ABS**

Revision Date: 2014.07.31(Rev.0)

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Product Name: DYNEX ABS  
Chemical Name: ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMER  
CAS NO: 9003-56-9 (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**

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

**Eye**

Polymer particles can cause mechanical irritation.

**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(%) |
|---------------------------------|-----------|------------------|
| Acrylonitrile-Butadiene-Styrene | 9003-56-9 | >98              |
| Other additives                 | -         | <2               |

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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 ABS contact skin, cool rapidly with cold water. If ABS is stuck to skin, do not remove, and seek medical attention. And allow adhered ABS 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.

**Note to Physicians**

This product is essentially inert and nontoxic. However if it is overheated or burns, gases such as carbon monoxide and formaldehyde may be released. Formaldehyde is a respiratory irritant gas. If patients may have inhaled high concentrations of irritating fumes they should be monitored for delayed onset pulmonary edema.

## Fire Fighting Measures

**Flash Point** : None Known.

**Autoignition Temperature** : None Known.

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

**Hazardous Product of Combustion**

Intense heat, dense black smoke, carbon monoxide, carbon dioxide, traces of hydrogen cyanide and hydrocarbon fragments.

**Extinguishing Media** : Foam or water spray.

**Firefighting Instructions**

Firefighters should wear self-contained breathing apparatus and full fire-fighting turn-out gear(bunker gear). Water spray is the preferred extinguishing medium. This product will melt but will not be carried on the surface of water. Water and foam 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.

**Respiratory:** Under normal conditions no special respiratory protection is required, however one recommends with work under increased temperatures without sufficient exhaust, use an approved air-purifying respirator.

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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>    | Not applicable               |
| <b>Vapor Pressure:</b>   | Not applicable               |
| <b>Specific Gravity:</b> | 1.02 ~ 1.10g/cm <sup>3</sup> |

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## Stability and Reactivity

### Chemical Stability

Stable under normal conditions of use and storage.

### Condition to Avoid

Avoid heat, flame, spark and other ignition sources.

### Materials to Avoid

Acids and oxidizing materials.

### Hazardous Decomposition Products

Acrylonitrile, styrene and carbon oxides.

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## Toxicological Information

**Product acute oral:** 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

### **Section 313 Supplier Notification**

This product does 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.

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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