



# MATERIAL SAFETY DATA SHEET

## Polyester Resin

### Section 1 - Chemical Product and Company Identification

MSDS Name:	Polyester Resin
Chemical class :	Polyethylene terephthalate polymer
CAS#	None Assigned
Generic Name	Organic Resin
Formula	Polymer
Synonyms:	

Company Identification:	Hazel Mercantile Limited
Company Identification: (INDIA)	701/712 A, Embassy Centre, Nariman Point, Mumbai - 400 021.
For information in the INDIA, call:	+91 - 22 - 2282 4444 (50 Lines)

### Section 2 - Composition / Information on Ingredients

CAS #	Component	Percent
25038-59-9	Polyethylene terephthalate polymer (PET)	100

### Section 3 - Hazards Identification

#### Emergency Overview

**APPEARANCE AND ODOR:** Product form varies: chips, dice noodles or lace. Colors vary: milky white to black; several levels of translucence or luster.

Under normal conditions of use, this product is not expected to create and unusual emergency hazards.

Polyesters can burn if exposed to flame. Molten polymer generates small amounts of volatile degradation products (off-gases), one of which is acetaldehyde. Acetaldehyde vapors form explosive mixtures with air that can spontaneously ignite (auto-ignite) at temperatures above 347°F (175°C). Combustion products may include compounds of carbon, hydrogen, and oxygen; exact composition depends on conditions of combustion.

In the event of fire, use normal fire fighting procedures to prevent inhalation of smoke and gases.

#### Potential Health Effects

**Summary:** Nuisance dust hazards are associated with the dry resin. Heating resin above 195°C may cause gas and vapor that are potent irritants.

Inhalation	Irritation of the upper respiratory tract, coughing, and congestion may occur
Skin	Molten resin will cause thermal burns
Absorption	Not applicable
Ingestion	Not applicable
Eye	Temporary irritation (itching) or redness may occur
Target Organs	Upper respiratory passages, skin, and eyes
Primary Routes of Entry (Exposure)	Respiratory system, skin, and eye



## Section 4 - First Aid Measures

Inhalation	Remove to fresh air. Drink water to clear throat, and blow nose to remove dust
Skin	If contact with molten resin occurs the affected area should be flushed with plenty of water. Prompt medical attention is advised for burns
Ingestion	Not applicable
Eyes	Flush eyes with large amounts of water for 5-15 minutes. If irritation develops, or persists, seek medical attention

## Section 5 - Fire Fighting Measures

Flash Point	Not applicable Upper Flammable Limit (UFL): Not applicable Lower Flammable Limit (LFL): Not applicable
Auto Ignition	Not determined
Rate of Burning	Not determined
Hazardous Combustion Products	Acetaldehyde, carbon, hydrogen and oxygen
Extinguishing Media	Class A or Class B fire extinguishers or water fog
Fire Fighting Equipment/Instructions	Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products

### General Fire Hazards

Polyesters can burn if exposed to flame. Molten polymer generates small amounts of volatile degradation products (off-gases), one of which is acetaldehyde. Acetaldehyde vapors form explosive mixtures with air that can spontaneously ignite (auto-ignite) at temperatures above 175°C. Combustion products will be comprised of compounds of carbon, hydrogen, and oxygen. The exact composition will depend on the conditions of combustion.

## Section 6 - Accidental Release Measures

### Containment Procedures

Sweep up small spills and put into an appropriate container. Stepping or walking on resin chips or pellets can cause falls; avoid accumulation on floors and walkways. Pick up large pieces.

### Clean-Up Procedures

Wastes are not hazardous. Comply with state and local regulations for disposal of these products.

## Section 7 - Handling and Storage

### Handling Procedures

Customary personal hygiene measures, such as washing hands after working with these products are recommended.

### Storage Procedures

No special precautions are required.



### Section 8 - Exposure Controls / Personal Protection

#### Exposure Guidelines

No information available for the product.

#### A: Component Exposure Limits

<b>OSHA:</b>	100 ppm TWA; 180 mg/m3 TWA
	150 ppm STEL; 270 mg/m3 STEL

#### B: Exposure Limits for Chemicals which may be generated during processing

This material has no components listed.

#### PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face	Wear safety glasses with side shields
Skin	Leather or cotton gloves should be worn to prevent skin contact and irritation
Respiratory	Respiratory protection is not required when using this product. However, exposure to chemical substances may occur as a result of heating this resin. Use an approved full-face respirator to protect against toxic gases.
Ventilation	Local exhaust ventilation should be provided at areas of cutting to remove airborne dust and fibers. General dilution ventilation should be provided as necessary to keep airborne dust and fibers below the applicable exposure limits and guidelines. The need for ventilation systems should be evaluated by a professional industrial hygienist, while the design of specific ventilation systems should be conducted by a professional engineer
General	Loose-fitting, long-sleeved clothing should be worn to protect the skin from irritation. Exposed skin areas should be washed with soap and warm water after handling

### Section 9 - Physical & Chemical Properties

<b>Appearance:</b>	Products in form of chips, dice noodles or lace. Colors range from milky white to black; variable translucence or luster.
<b>Physical State:</b> Solid	<b>pH:</b> Not applicable
<b>Vapor Pressure:</b> Not applicable	<b>Vapor Density:</b> Not applicable
<b>Boiling Point:</b> Not determined	<b>Melting Point:</b> 260°C/500°F
<b>Solubility (H2O):</b> Nil	<b>Specific Gravity:</b> 1.33-1.45
<b>Freezing Point:</b> Not applicable	<b>Evaporation Rate:</b> Not applicable
<b>Viscosity:</b> Not applicable	<b>Percent Volatile:</b> 0
<b>VOC:</b> Not applicable	
<b>Odor:</b>	Odorless

### Section 10 - Chemical Stability & Reactivity Information

Chemical Stability	This is a stable material. This product is not reactive
Hazardous Decomposition	Combustion products will be comprised of compounds of acetaldehyde, carbon, hydrogen, and oxygen.
Hazardous Polymerization	Will not occur



## Section 11 - Toxicological Information

### Acute Toxicity

Acetaldehyde can cause irritation to eyes, nose and upper respiratory tract; eye, skin burns; dermatitis; conjunctivitis; cough; central nervous system depressant/depression; delayed pulmonary edema.

### A: Component Analysis - LD50/LC50

#### Acetaldehyde\* (75-07-0)

Inhalation LC50 Rat:	13300 ppm/4H
Inhalation LC50 Mouse:	23 gm/m3/4H
Oral LD50 Rat:	661 mg/kg
Oral LD50 Mouse:	900 mg/kg
Dermal LD50 Rabbit:	3540 mg/kg

### Carcinogenicity

The Occupational Safety and Health Administration (OSHA), National Toxicology Program (NTP), International Agency for Research on Cancer (IARC), and American Conference of Governmental Industrial Hygienists (ACGIH) have not classified this product in its entirety as a carcinogen.

### A: Component Carcinogenicity

<b>NTP:</b>	Suspect Carcinogen (Possible Select Carcinogen)
<b>IARC:</b>	Monograph 71, 1999; Supplement 7, 1987; Monograph 36, 1985 (Group 2B (possibly carcinogenic to humans))

### Chronic Toxicity

No long-term health hazards are associated with polyester or polyethylene terephthalate polymer. In animals acetaldehyde has caused: kidney, reproductive, teratogenic effects. The International Agency for research on cancer classified acetaldehyde a Group 2B possible carcinogen. The National Toxicology Program classifies it a suspect carcinogen. The American Conference of Governmental Industrial Hygienists classified acetaldehyde an A3 animal carcinogen.

## Section 12 - Ecological Information

**Ecotoxicity:** No data available for this product.

**A: Component Analysis - Ecotoxicity - Aquatic Toxicity**

## Section 13 - Disposal Considerations

This product is not regulated as a hazardous waste. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

## Section 14 - Transportation Information

This product is not classified a hazardous material for transport.

## Section 15 - Regulatory Information

**TSCA Status:** This product and its components are listed on the TSCA



## Section 16 - Other Information

<b>MSDS Creation Date:</b>	October 15, 2007
<b>Revision #0 Date</b>	

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*