

Polyethylene Terephthalate

Safety Data Sheet



1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: PET RESIN (POLYETHYLENE TEREPHTHALATE)

Recommended use: Injection Blow Molding of PET bottles for food applications, containers, jars and Extrusion of APET sheets/ Films and PET straps

Restrictions on use: All uses other than the identified

Company Identification: MGI INTERNATIONAL, LLC
1121 Walt Whitman Rd, Suite #301,
Melville, NY11747
Phone (631) 629-4520 Fax (631) 629-4519

2. HAZARDS IDENTIFICATION, CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification of the substance or mixture

Combustible Dust May form combustible dust concentrations in air.

Additional information:

May form combustible dust concentrations in air if processing activities significantly reduce the particle size (e.g. mechanical or pneumatic conveying, grinding, pulverizing).

Label elements

GHS label elements: The substance is classified and labeled according to the Globally Harmonized System (GHS).

Signal word: Warning

Hazard statements: May form combustible dust concentrations in air.

Additional information:

May form combustible dust concentrations in air if processing activities significantly reduce the particle size (e.g. mechanical or pneumatic conveying, grinding, pulverizing).

Other hazards

Results of PBT and vPvB assessment:

PBT: Not determined.

vPvB: Not determine

3. COMPOSITION INFORMATION

Chemical characterization: Substances

CAS No. Description: 25038-59-9 Polyethylene Terephthalate (PET)

Identification number(s)

EC number: Polymer

Polyethylene Terephthalate

Safety Data Sheet



4. FIRST-AID MEASURES

Eye Contact: Low hazardous for usual industrial handling. Use of safety glasses with side shields is recommended. Flush eyes with water while holding eyelids open to remove product fines. If irritation continues, consult a physician.

Skin Contact: Molten material can cause severe burns. DO NOT try to peel molten polymer from the skin. Cool rapidly with water. Burns should be treated as thermal burns. The plastic material will come off, as healing occurs; therefore, immediate removal from the skin is not necessary.

Inhalation: Inhalation of dust and decomposition products should be avoided by hood suction and fresh air ventilation. In case of coughing or other symptoms, the person should seek fresh air and if necessary, see a physician.

Ingestion: It is unlikely to occur. If it occurs, treat symptomatically. Do not induce vomiting. Call in a physician and show him the Data Sheet.

Precautions: Processing fumes inhalation may be irritating to the respiratory tract. If symptoms are experienced remove victim from the source of contamination or move victim to fresh air and obtain medical advice.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide
Carbon dioxide

Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Spillages may be slippery. Clear up spillages. The molten polymer may remain hot for some time due to low thermal conductivity. Use care when disposing of molten mass. Do not breathe vapors or fumes that may be

Polyethylene Terephthalate

Safety Data Sheet



6. ACCIDENTAL RELEASE MEASURES (cont.)

evolved during processing. Material can be handled hot/ molten. Contact with hot/ molten polymer can cause burns. Avoid contact with molten material.

Environmental precautions:

In case of accidental spills, do not allow entering drains and waterways. When picked up, treat material as prescribed under heading "Disposal considerations". Use proper personal protection.

Methods for cleaning up:

Clean up by vacuuming or wet sweeping to minimize dust exposure. Sweep up and recover, or mix material with moist absorbent and shovel into suitable chemical waste container.

7. HANDLING AND STORAGE

Precaution for safe handling:

Adequate ventilation and cleanliness must be employed in the processing area.

Area should be controlled using good occupational hygiene practices. Accumulation of the dust may represent a fire and explosion hazard at sufficient concentrations. Remove ignition sources. Beware of electrostatic charges.

Condition for safe storage:

Storage temperatures: Ambient.

Keep containers closed when not in use. Store in a cool & dry place. Do not store near flame, ignition sources, direct sunlight or incompatible materials. Maintain good housekeeping to control dust accumulations.

Specific use(s):

No specific end-use related recommendation needs to be followed

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional Occupational Exposure Limit Values for possible hazards during processing:

PEL: 15* 5** mg/m³
* total dust **respirable fraction
REL: 10* 5** mg/m³
* total dust **respirable fraction
TLV: 10 mg/m³
Dust Value

Exposure controls:

Avoid accumulation of dust and decomposition products during extrusion operations by hood suction, sufficient fresh air supply and proper house keeping.

Polyethylene Terephthalate

Safety Data Sheet



8. EXPOSURE CONTROLS/PERSONAL PROTECTION (cont.)

Occupational exposure controls:

- a) Respiratory protection: For operations where inhalation exposure can occur, a NIOSH approved respirator recommended by an industrial hygienist may be necessary.
- b) Hand protection: Protective gloves are required when handling hot polymer.
- c) Eye protection: When using material in cold processing (e.g. cutting, stamping, grinding), wear suitable eye protection. Wear safety glasses or a face shield while doing extrusion operations.
- d) Skin protection: Use long sleeve cotton shirt and long pants or hot suite while handling molten polymer. Gloves should be worn to protect against thermal burns. A safety shower and washing facilities should be available.

Environmental exposure controls:

Exhausted dust and decomposition products shall be properly collected and disposed off.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Pellets
Color	Opaque White
Odor	Odorless
Flash Point [Method]	Data not available
Melting Point	>240 °C
Boiling Point	Undetermined
Flammability	Data not available
Explosive properties	Data not available
Oxidising properties	None
Relative density	>1.35 g/cm ³
Solubility	Insoluble in common solvents
PH	Not applicable
Viscosity	Not applicable
Vapor density	Vapor pressure
Evaporation rate	Not applicable

10. STABILITY AND REACTIVITY

Condition to avoid: Stable in normal condition. Temperature above 300°C lead to thermal decomposition.

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: Acetaldehyde, Ethylene

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Polyethylene Terephthalate

Safety Data Sheet



11. TOXICOLOGICAL INFORMATION (cont.)

Primary irritant effect:

Skin:	No irritant effect.
Eye:	No irritating effect.
Sensitization:	No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Carcinogenic categories:

IARC (International Agency for Research on Cancer)	3
NTP (National Toxicology Program)	Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration)	Substance is not listed.

12. ECOLOGICAL INFORMATION

Eco-toxicity: Low toxic to aquatic organisms.

Mobility: The product is insoluble in water. Due to their negligible solubility in water and high molecular weight, they are expected to have a low BOD and will not cause oxygen depletion in aquatic systems.

Persistence and degradability: The product is non-biodegradable in soil.

Bio accumulative potential: They are expected to be non-biodegradable and unlikely to bioconcentrate.

Other adverse effects: Unlikely to affect biological treatment processes.

13. DISPOSAL CONSIDERATIONS

Disposal of Polyester products does not pose any specific danger. It is recommended that Polyester Flakes be recycled. (Recycling has commercial value too). If recycling is not possible, Polyester waste flakes can be disposed of in a suitable refuse installation or incinerated subject to local regulations.

14. TRANSPORT INFORMATION

UN number:	Not applicable
Class/ Packing group:	Not restricted
Marine pollutant:	None
International Transport Regulations:	Not classified as dangerous for transport.
Road/ Rail (ADR/ RID):	Not restricted
Sea (IMDG):	Not restricted
Air (ICAO / IATA):	Not restricted

Polyethylene Terephthalate

Safety Data Sheet



15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Sara:

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is listed.

Proposition 65:

Chemicals known to cause cancer:

Substance is not listed.

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

New Jersey Right-to-Know List:

Substance is not listed.

New Jersey Special Hazardous Substance List:

Substance is not listed.

Pennsylvania Right-to-Know List:

Substance is not listed.

Pennsylvania Special Hazardous Substance List:

Substance is not listed.

Carcinogenicity categories:

EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

16. OTHER INFORMATION

This Safety Data Sheet and the health, safety and environmental information it contains are intended to provide a summary of our knowledge and guidance regarding use of the designated Product. Its contents are offered in good faith as accurate and complete as of the date specified below, but without guarantee. The data herein applies only to the Product sold by entities of the Global Plastics and not to products sold by others. It relates only to the Product and does not relate to its use in combination with any other product or material or in any process.

Local laws and regulations and conditions of use and suitability of the product for particular uses are beyond the control of Global Plastics; all risks of use, storage, handling, transportation and disposal of the Product are therefore assumed by the user and Global Plastics expressly disclaims all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the Product. Global Plastics shall not be responsible for any damage or injury resulting from abnormal use of the Product, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the Product.