TRADEASIA INTERNATIONAL PTE LTD
133 Cecil Street # 12-03 Keck Seng Tower, Singapore 069535,
Republic Of Singapore
Tel. +65 6227 6365 - **Fax**. +65 6225 6286
www.tradeasia.com

Material Safety Data Sheet
PET Resins

Section 1: Chemical Product and Company Identification

Product Name : Polyethylene Terephthalate (PET)
Chemical Formula : $(C_{10}H_8O_4)_n$
Company Identification : Tradeasia International Pte Ltd
Email : contact@chemtradeasia.com

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	% by Weight
Polyethylene Terephthalate (PET)	25038-59-9	> 99
Modifiers / Fillers / Additives	25053-09-2	< 1

Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Super fund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Section 3: Hazards Identification

Emergency Overview: Solid pellets with slight or no odor. Spilled pellets create slipping hazard. Can burn in a fire creating dense toxic smoke. Molten plastic can cause severe thermal burns. Thermal processing may release irritating gases or fumes.
Potential Health Effects: Molten polymer will adhere to the skin and can cause severe burns. Eye contact with Polyethylene Terephthalate particles may cause mechanical irritation with discomfort, tearing, or blurring of vision. Decomposition products caused by overheating Polyethylene Terephthalate may cause skin, eye or respiratory tract irritation.
Carcinogenicity Information: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Section 4: First Aid Measures

General Information: Seek medical help in case of any doubt or occurrence of disease symptoms.
Inhalation: No specific intervention is indicated, as the compound is not likely to be hazardous by inhalation. However, if exposed to fumes from overheating or combustion, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.
Skin Contact: The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable. If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn. Use of high temperature resistant gloves is recommended while handling PET polymer or during processing.
Eye Contact: If irritation develops, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Use of safely glasses / face shield is recommended.
Ingestion: Ingestion is not an expected route of exposure during normal use of the product. If ingested during processing, consult a physician.

Section 5: Fire and Explosion Data

Flash Point: Not Applicable
Auto-ignition: No Data Available

Physical operations, such as grinding, can create dust and a potential dust explosion hazard. Under these conditions, follow National Fire Protection Association Code and Standards for handling combustible dusts.
Extinguishing Media: Water spray, Foam, Carbon Dioxide, and Dry Chemical.
Specific Hazards Arising from the Chemical: Powdered material may form explosive dust-air mixture.
Hazardous Thermal Decomposition Products: No known products of thermal decomposition.
Fire Fighting Instructions: Wear self-contained breathing apparatus. Wear full protective equipment. Avoid excessive inhalation of smoke or potential thermal decomposition products.

Section 6: Accidental Release Measures

Safeguards (Personnel): NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up. Due to lower thermal conductivity, the interior of molten masses may remain hot for some time. Use appropriate PERSONAL PROTECTIVE EQUIPMENT when disposing of molten masses.
Spillages: Sweep up and recover, or mix material with moist absorbent and shovel into suitable chemical waste container.

Section 7: Handling and Storage

Handling: Do not breathe vapors or fumes that may be evolved during high temperature processing. Contact with hot/molten material can cause burns. Avoid contact with molten material. Use appropriate PERSONAL PROTECTIVE EQUIPMENTS. Avoid dust generation.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Use local ventilation to control fumes from hot processing. Processes such as pneumatic conveying systems, grinding and other physical operations can create dust. There is the potential for a dust explosion hazard. Use appropriate mechanical ventilation system.
Respiratory protection: Respirators are not needed for normal use. Where airborne concentrations are expected to exceed exposure limits, a NIOSH approved respirator should be selected based on the form and concentration of the contaminant in air and in accordance with OSHA Respiratory Protection Standard CFR 1910.134.
Eye protection: Wear safety goggles and face shield when the possibility exists for eye or face contact from airborne material.
Skin protection: If there is potential for contact with hot/molten material, wear heat-resistant clothing and footwear. Special protective clothing is not needed for normal use. High temperature resistant gloves are recommended.
Exposure Guidelines:
Applicable Exposure Limits
PEL (OSHA): None Established
TLV (ACGIH): None Established
Comply with national occupational threshold values for dust or powder.

Section 9: Physical and Chemical Properties

Physical state and appearance	: Pellets or Molten Polymer
Odor	: Odorless
Taste	: Not available.
Molecular Weight	: -
Color	: Clear to Grayish White

pH (1% soln./water)	: Not available.
Boiling Point	: 154°C - 170°C
Melting Point	: 246°C (475°F) to 255°C (491°F)
Flash Point	: Not applicable.
Critical Temperature	: Not available.
Specific Gravity	: 1.3 – 1.4 (Water = 1)
Vapor Pressure	: Not applicable.
Vapor Density	: Not applicable.
Volatility	: Negligible
Odor Threshold	: Not available.
Solubility	: Non-soluble in water.

Section 10: Stability and Reactivity Data

Chemical Stability: Stable at normal conditions.
Conditions to Avoid: Exposure to open flame or temperatures > 570°F for pro-longed time.
Materials to avoid: Incompatible or can react with strong oxidizers.
Hazardous decomposition products: Combustion products include carbon dioxide and carbon monoxide. Thermal decomposition products can include acetaldehyde and ethylene.
Polymerization: Will not occur.

Section 11: Toxicological Information

Acute toxicity: Low acute toxicity. Fumes, vapors or dust inhalation may cause irritation to the respiratory system.
Irritating and corrosive effect: Can develop eye irritation due to dust exposure
Sensitizing properties: Skin contact may cause allergy.
Information obtained from practical use: Harmful at inhalation, skin contact and if swallowed. Harmful: may cause lung damage at ingestion.

Section 12: Ecological Information

Ecotoxicological Information: No data available.
Aquatic Toxicity: No information if available. Toxicity is expected to be low based on insolubility in water.

Section 13: Disposal Considerations

Waste Disposal: Treatment, storage, transportation, and disposal must be in accordance with applicable Central, State/Provincial, and Local regulations.

Section 14: Transport Information

DOT Hazard Class: Not Regulated.
IMDG Class: Not restricted
ICAO/ IATA Class: Not restricted

Section 15: Other Regulatory Information

TSCA Status: In compliance with TSCA Inventory requirements for commercial purposes.
WHMIS Classification: Not a controlled product.
This product does not contain reportable quantities of substances subject to supplier notification.

Section 16: Other Information

Medical Use: CAUTION: Do not use in medical applications involving permanent implantation in the human body.

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 way shall Tradeasia International Pte. Ltd. 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 Tradeasia International Pte. Ltd. has been advised of the possibility of such damages.