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**MATERIAL SAFETY DATA SHEET**

**Ultem® Glass Reinforced**

**EMERGENCY TELEPHONE:** 724-746-6050 or 856-227-0500  
**Issue Date:** June 1, 1989  
**Revised Date:** July 6, 2004  
**TRADE NAME:** Ultem Glass Reinforced  
**CHEMICAL NAME:** Polyetherimide (CAS# 61128-46-9) Glass Fiber Reinforced

**1. Composition / Information on Ingredients**

This product consists primarily of high molecular weight polymers. Substances listed below are reportable hazardous ingredients as defined by the OSHA Hazard Communication Standard. Exposure limits, when available, are also listed.

Additional compositional data are provided in Section 15, Regulatory information, subject to supplier notification requirements.

CAS Number: Chemical name 65997-17-3 glass  
 OSHA:  
 Units:  
 ACGIH: 10.0  
 Units: mg/m<sup>3</sup> (resp. fr.)

**2. 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. Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Secondary operations, such as grinding, sanding, or sawing, can produce dust which may present an explosion or respiratory hazard.

**3. Potential Health Effects**

*Eye:* Product may cause irritation or injury due to mechanical action.  
*Skin:* Pellets not likely to cause skin irritation.  
*Ingestion:* Not acutely toxic.  
*Inhalation:* Pellet inhalation unlikely due to physical form.  
*Chronic / Carcinogenicity:* NTP: Not Tested; OSHA: Not Tested; IARC: Not Tested  
*Melt Processing Health Effects:* Molten plastic can cause severe burns. Processing fumes may cause irritation to the eyes, skin, and respiratory tract, and in cases of severe over-exposure, nausea and headache. Grease-like processing fume condensates on ventilation duct work, molds, and other surfaces can cause irritation and injury to skin.  
*Medical Restrictions:* There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing fumes.  
*Note:* Additives containing certain heavy metal compounds may be present. These ingredients are essentially bound in the plastic matrix and are unlikely to contribute to workplace exposure under recommended processing conditions.

#### 4. First Aid Procedures

*Eyes:* Remove contact lenses at once. Immediately flush eyes well with copious quantities of water or normal saline for at least 20-30 minutes. Seek medical attention.

*Skin:* Wash skin thoroughly with soap and water. Seek medical attention if rash or burn occurs.

*Ingestion:* Not probable. If a large amount is swallowed, seek medical attention.

*Inhalation:* Not likely to be inhaled due to physical form.

*Melt Processing:* For molten plastics skin contact, cool rapidly with water and immediately seek medical attention. Do not attempt removal of plastic without medical assistance. Do not use solvent for removal.

For processing fume inhalation irritation, leave contaminate area and breathe fresh air. If coughing, difficult breathing, or any other symptoms develop, seek medical attention at once, even if symptoms develop at a later time.

For skin contact with fume condensate, immediately was thoroughly with soap and water. If irritation develops seek medical attention.

#### 5. Fire Fighting Measures

*Fire Fighting:* Approved pressure demand breathing apparatus and protective clothing should be used for all fires. Water spray is the preferred extinguishing medium. This product will melt but will not be carried on the surface of water.

*Extinguishing Media:* Water, spray, and foam. Water is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition.

*Hazardous Combustion Products:* Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen cyanide, and hydrocarbon fragments.

*Flash Point:* Not applicable.

*Lower Flammable Limit:* Not established.

*Upper Flammable Limit:* Not established

*Auto-ignition:* 538°C (1000°F), estimated

*Conditions of Flammability:* Requires a continuous flame source to ignite and sustain combustion.

*Explosion Data:* Impact Sensitivity: Not sensitive to mechanical impact.

*Static Discharge:* Not sensitive to static discharge (See Handling and Storage)

#### 6. Handling and Storage

*Handling:* Follow recommendations on label and in processing guide. Prevent contact with skin and eyes. Use good industrial hygiene practices.

Provide adequate ventilation. Secondary operations such as grinding, sanding, or sawing may produce a dust explosion hazard. Use aggressively housekeeping activities to prevent dust accumulation; employ bonding, grounding, venting, and explosion relief provisions in accordance with accepted engineering practices.

*Storage:* Store in a dry place away from moisture, excessive heat and sources of ignition. Avoid storage near foods to prevent fad contamination.

#### 7. Accidental Release Measures

*General:* Sweep or gather up material and place in proper container for disposal or recovery. (See Disposal Information).

#### 8. 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. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, duct work, and other surfaces using appropriate personal protection. For powders and residual dusts refer to Handling and Storage section.

Ventilation requirements must be locally determined to limit exposure to processing fumes in the workplace. Design techniques and guidelines may be found in publications such as:

Industrial ventilation: available from the American Conference of Governmental Industrial Hygienists, Committee on Industrial Ventilation, PO Box 15153, Lansing, MI 48901

**Personal Protection:**

**Eye / Face:** Wear safety glasses with side shields or chemical goggles. In addition, use full face shield when cleaning processing fume condensates from hoods, ducts, and other surfaces.

**Skin:** When handling pellets avoid prolonged or repeated contact with skin. When melt processing product, wear long pants, long sleeves, well insulated gloves, and face shield when applicable. Use appropriate protective clothing, including chemical resistant gloves, to prevent any contact with processing fume condensates.

**Respiratory:** When processing fumes are not adequately controlled, use respirator approved for protection from organic vapors and acid gasses. When dust or powder from secondary operations, such as grinding, sanding, or sawing, are not adequately controlled use respiratory approved for protection from dust.

### 9. Physical and Chemical Properties

<b>Physical State:</b>	Solid
<b>Odor and Appearance:</b>	Plastic pellet with slight odor
<b>Boiling Point:</b>	Not Applicable
<b>Melting Point:</b>	See Comment Below
<b>Vapor Pressure (mm Hg)</b>	Negligible
<b>Vapor Density (air = 1)</b>	Not Applicable
<b>Specific Gravity (water = 1)</b>	>1
<b>Water Solubility:</b>	Insoluble
<b>% Volatiles:</b>	Negligible
<b>pH:</b>	Not Applicable
<b>Odor Threshold:</b>	Not Established
<b>Evaporation Rate:</b>	Negligible
<b>Coefficient Water / Oil Distr:</b>	Not Established

**Comment:** This product does not exhibit a sharp melting point, but softens gradually over a wide temperature range.

### 10. Stability and Reactivity

**Stability:** Stable under recommended conditions of storage and handling.

**Reactivity:** Not reactive under recommended conditions of handling, storage, processing, and use.

**Conditions to Avoid:** Do not exceed melt temperature recommendations in product literature. In order to avoid auto-ignition / hazardous decomposition of hot thick masses of plastic, purgings should be collected in small, flat shapes or thin strands to allow for rapid cooling and quench in water (See Exposure Controls/ Personal Protections section for respiratory protection advice).

**Hazardous Decomposition:** Processing fume evolved at recommended processing conditions may include trace levels of orthodichlorobenzene and phenol.

### 11. Toxicological Information

**Product**

**Eye:** Product not considered primary eye irritant. When similar products, in finely divided form, were placed in the eyes of rabbits, slight transient redness or discharge occurred - consistent with the expected slightly abrasive nature of the resin particles.

**Skin:** Product not considered primary skin irritant. Draize Skin Primary Irritation Score (rabbit) for similar products, in finely divided form, for a 24-hour exposure is 0. Not expected to be a skin sensitizer based on results of Modified Buehler Guinea Pig Sensitization Test from similar products. Dermal LD50 (rabbit) >2g/kg, estimated.

**Acute Oral:** Oral LD50 (rat) >5g/kg, estimated.

**Acute Inhalation:** Processing fumes from similar products are not considered toxic. In acute inhalation tests, laboratory rats were exposed to processing fumes at concentrations exaggerating those that would likely occur in workplace situations. No deaths or signs of toxicity were noted during the 5 hour fume exposure tests. There were no distinct or consistent treatment related tissue or organ changes noted in gross necropsies.

**Components:** Polyetherimide resin is not a mutagen by Ames (Salmonella) Assay with and without activation.

## 12. Ecological Information

*General:* Not expected to present any significant ecological problems.

## 13. Disposal Information

*RCRA Hazardous Waste:* Product is not a RCRA hazardous waste.

*Waste Disposal:* recycling is encouraged. Landfill or incinerate in accordance with federal, state, and local requirements. Collected processing fume condensates and incinerator ash should be tested to determine waste classification.

## 14. Transportation Information

*DOT Hazard Class:* Not regulated

*Proper Shipping Name:* Not regulated

*Identification Number:* Not listed

*TDGA:* Not listed

## 15. Regulatory Information

Listed below are chemical substances subject to supplier notification requirements. The percentages, when present, represent average values.

*CAS Number Chemical Name:* 65997-17-3 Glass

*EPCRA:* 313, %

*WHMIS:* %

*NPRI:* %

*CA-65:* %

*FL RI:* X

*TSCA Status:* This product complies with the Chemical Substance Inventory requirements of the US EPA Toxic Substances Control Act (TSCA). WHMIS Classification: Not a controlled product.

*This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe this information to be correct but cannot guarantee its accuracy or completeness. Health and safety precaution in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulation. No statement made in the data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either express or implied.*