

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MECHETEC® PEEK Natural Polyetheretherketone (PEEK)

PRODUCT USE: Engineering/Industrial grade thermoplastic stock shapes for subsequent machining and fabrication.

MANUFACTURER: Polymer Industries
10526 AL Hwy 40
Henagar, AL 35978
Website: www.polymerindustries.com

PHONE NUMBERS: (256) 657-5197

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME /CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Polyetheretherketone (PEEK)	29658-26-2	100

SECTION 313 SUPPLIER NOTIFICATION:

This product is not known to contain toxic chemicals listed under Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40CFR part 372.

HAZARDOUS INGREDIENTS:

None of these ingredients are classified as hazardous under OSHA regulations.

3. HEALTH HAZARDS IDENTIFICATION

ACUTE OR IMMEDIATE EFFECTS/ROUTES OF EXPOSURE:

SKIN: No irritation is likely to develop following contact of stock shapes with human skin. Mechanical irritation can develop after contact with powder or dust. Thermal burns can result from contact with molten polymer.

EYES: Contact with powder or dust may cause mechanical irritation.

INHALATION: Shapes are not considered an inhalation hazard. No toxic effects are known to be associated with inhalation of dust from this material.

INGESTION: Not a probable route of exposure for stock shapes. The acute oral LD₅₀ in rats is probably above 15g/kg. Relative to other materials, a single dose of this product is relatively harmless by ingestion.

LONG TERM/DELAYED EFFECTS: None Known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None Known.

3. HEALTH HAZARDS IDENTIFICATION (continued)

CHRONIC/CARCINOGENICITY:

NTP: Not tested.
OSHA: Not regulated.
IARC: Not listed.

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 vapors.

4. FIRST AID MEASURES

SKIN: If molten polymer contacts skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical attention for thermal burns. Obtain medical attention for mechanical irritation that develops as a result of contact with dust or particulates.

EYES: For contact with dust or particulates, immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician if redness, itching, or a burning sensation develops.

INHALATION: If exposure to fumes from overheating, move to fresh air. Consult a physician if symptoms persist.

5. FIRE FIGHTING MEASURES

AUTOIGNITION TEMPERATURE: 595 C (1103 °F).

CONDITIONS OF FLAMMABILITY: Requires a continuous flame source to ignite.

HAZARDOUS PRODUCTS OF COMBUSTION:

Hazardous combustion products may include intense heat, smoke, carbon monoxide and carbon dioxide.

EXTINGUISHING MEDIA: Water fog, foam, carbon dioxide, dry chemical, halogenated agents.

SPECIAL FIRE FIGHTING INSTRUCTIONS / PRECAUTIONS:

Fire fighters and others exposed to products of combustion should wear full protective clothing including self – contained, breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE: Clean up by vacuuming or sweeping to prevent falls.

7. HANDLING AND STORAGE

HANDLING: Open containers only in well-ventilated area.

STORAGE: Dry storage. Keep containers closed to prevent contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION: Local exhaust at processing equipment to keep particulates below 15 mg/m³, the OSHA limits for nuisance dusts. Grinding and machining of parts should be reviewed to assure that particulate levels are kept below recommended standards.

PROTECTIVE EQUIPMENT:

SKIN: Protective gloves are required when handling hot polymer. Long sleeve cotton shirt and long pants when handling molten polymer.

EYE: Safety glasses are recommended to prevent particulate from entering eyes while grinding or machining.

RESPIRATOR: None under normal processing, if ventilation is adequate.

EXPOSURE GUIDELINES: Grinding and machining of parts should be reviewed to assure that particulate levels are kept below recommended standards.

<u>INGREDIENT</u>	<u>AGENCY</u>	<u>VALUE</u>
PARTICULATES	PEL (OSHA)	15 mg/m ³ total dust 5 mg/m ³ respirable dust

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Stock shape may be rods or plates of different sizes. Grey-tan color.

ODOR: Slight or no odor.

MELTING POINT: 334 C (633 °F)

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 1.30

PERCENT VOLATILES: Negligible.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable at normal temperatures and storage conditions.

CONDITIONS TO AVOID: None known for shapes.

MATERIALS TO AVOID: UNITEX PEEK is dissolved by concentrated sulfuric acid.

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY: MECHETEC® PEEK extruded shapes are harmless.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

There are no known human health effects aggravated by exposure to this product.

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY: Toxicity is expected to be low based on insolubility of polymer in water.

13. DISPOSAL CONSIDERATION

WASTE DISPOSAL: Preferred options for disposal are: recycling, incineration with energy recovery, and landfill. Treatment and disposal must be in accordance with federal, state and local regulations. Discarded product is not a hazardous waste under RCRA 40CFR261.

14. TRANSPORT INFORMATION

DOT HAZARD CLASS: Not regulated.

SHIPPING NAME: Not regulated.

15. REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION (SARA TITLE III-TOXIC CHEMICALS LIST):

This product contains no known toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR372.

TOXIC SUBSTANCES CONTROL ACT (TSCA) INVENTORY STATUS – 40CFR710:

All ingredients are listed on the TSCA Chemical Substance Inventory.

STATE REGULATIONS:

STATE RIGHT TO KNOW LAWS:

No substances on the state hazardous list, for the states indicated below, are used in the manufacture of products on this MSDS, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this MSDS contain no such substances except for those specifically listed below:

PENNSYLVANIA: Substances on the Pennsylvania hazardous substances list present at a concentration of 1% or more: None Known.
Substances on the Pennsylvania special hazardous substances list present at a concentration of 0.01% or more: None Known.

CALIFORNIA PROPOSITION 65:

Substances known to the state of California to cause cancer: None Known.
Substances known to the state of California to cause birth defects or other reproductive harm: None Known.

NEW JERSEY: Substances on the New Jersey workplace hazardous substance list present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens, or teratogens): None Known.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

Polyetheretherketone is on the Non-Domestic Substances List.

16. OTHER INFORMATION

PREPARED BY:

Technical Team
Polymer Industries
10526 AL Hwy 40
Henagar, AL 35978 USA

REVISION DATE:

December 01, 2017

SUPERCEDES REVISION DATED:

Rev. 5 May 18, 2015

REVISION SUMMARY:

Updated MECHETEC product brand name from previous UNITREX name and information.

The information set forth herein has been gathered from standard reference materials and/or supplier test data and is, to the best knowledge and belief of Polymer Industries, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones that exist. Polymer Industries makes no warranties expressed or implied, with respect to the use of such information or the use of the specific material identified herein in combination with any other material or process, and assumes no responsibility therefore.

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