



MATERIAL SAFETY DATA SHEET

Polymics

PEKK – Polyetherketoneketone.

I. Chemical Identification

Trade Name: PEKK.

Part Numbers: Pyramid KA, KB and KC unfilled grades.

Chemical Family: Polymer Resin.

Manufacturer: Polymics

Emergency Telephone: In North America, Dial Chemtrec (800) 424-9300.

II. Hazardous Ingredients

Substance	CAS #	wt, %	Exposure Limit
PEKK	74970-25-5	>99	None established

This product is listed in the TSCA inventory.

III. Physical Data

Melting Point: 310 – 360 °C (590 – 665 °F)

% Volatile: 0.7%

Solubility in H₂O: Insoluble

Appearance and Odor: Solid pellets or powder, white

Specific Gravity (H₂O = 1): 1.30

Softening Point: 190 °C (375 °F)

IV. Fire and Explosion Data

Flash Point: None. Not a fire or explosion hazard. Hazardous vapors, gases produced in a fire are carbon monoxide and carbon dioxide.

Extinguishing Media: Use water, carbon dioxide or dry chemical for fires.

Special Fire Fighting Procedures: Keep personnel removed and upwind of fire. Wear self contained NIOSH approved breathing apparatus. Also, wear full protective equipment.

Unusual Fire and Explosion Hazards: This material, like most organic materials when is powder form, is capable of creating a dust explosion. Refer to NFPA Pamphlet #654 for more details.

NFPA Rating:

Health	1
Flammability	0
Reactivity	0

V. Health Hazard Data

Threshold Limit Value (TLV): None established.

Effects of over exposure: No adverse effects are expected from occupational exposure.

Emergency and First Aid Procedures:

INHILATION: If large amounts of dust are inhaled, remove to fresh air. If breathing is difficult, give oxygen and call a physician.

EYES AND SKIN: Persons should wear protective safety glasses when using this product. If contact is made, flush with water for 15 minutes. If irritation persists, call a physician. Skin Contact: The compound is not likely to be hazardous by skin contact but cleaning the skin after use is advisable.

INGESTION: Not a probable route of exposure.

CARCINOGENICITY: The components of PEKK are not listed as carcinogens by NTP, IARC, ACGIH or OSHA.

VI. Reactivity Data

Stability: Material is stable.

Conditions to avoid: Heat > 400 °C (752 °F) will cause decomposition.

Incompatibility: None reasonable foreseeable.



Hazardous Decomposition Products: Burning may produce carbon monoxide, carbon dioxide.

Polymerization: Will not occur.

VII. Spill or Leak Procedures

Spill Leak or Release: Note: Review "Fire and Explosion Data" section before proceeding with clean-up. Use appropriate personal protective equipment. Shovel or sweep up any spilled polymer. Reuse or place in container for disposal.

Waste Disposal: Comply with Federal, State, and Local regulations. Consult appropriate regulatory agency prior to disposal or discharge of waste materials. Preferred options for disposal are: recycling, incineration with energy recovery and landfill.

VIII. Special Protection Information

Respiratory Protection: None required in ventilated work areas. Use NIOSH approved self-contained or supplied air respirators for emergencies and in situations where extreme dusty conditions exist.

Ventilation: Adequate.

Local Exhaust: For poorly ventilated work areas.

Mechanical: Adequate for storage.

Protective Gloves: Recommended for long repeated contact.

Eye Protection: Protective safety glasses.

Other protective equipment: Protective clothing for prolonged or repeated contact.

IX. Special Precautions

Precautions for handling and storage: Avoid breathing dust. Avoid dust generation. Wash thoroughly after handling. Store in a well ventilated place and keep container tightly closed.

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Section 313 Supplier Information

This product does not contain any toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372.

Other Information

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

This information must be included in all MSDS's that are copied and distributed for this material.
