POLYETHERETHERKETONE (PEEK®)*

MSDS
MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

PRODUCT NAME: Natural Polyetheretherketone (PEEK®)

MANUFACTURER: Nytef Plastics Ltd.

PHONE NUMBERS:
INFORMATION: (215) 638-0800 (M – F, 8:30 – 5:00)
CHEMTREC  1-800-424-9300

II. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT NAME</th>
<th>CAS NUMBER</th>
<th>WEIGHT %</th>
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<tbody>
<tr>
<td>Polyetheretherketone (PEEK)</td>
<td>29658-26-2</td>
<td>100</td>
</tr>
</tbody>
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III. PHYSICAL AND CHEMICAL PROPERTIES

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

ODOR: Slight or no odor

PERCENT VOLATILES: Negligible

MELTING POINT: 334°C (633°F)

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 1.30

IV. STABILITY AND REACTIVITY

STABILITY: Stable at normal temperatures and storage conditions

CONDITIONS TO AVOID: None known

MATERIALS TO AVOID: PEEK® is dissolved by concentrated sulfuric acid

V. 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
V. EXPOSURE CONTROLS/PERSONAL PROTECTION - continued

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

<table>
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<tr>
<th>INGREDIENT</th>
<th>AGENCY</th>
<th>VALUE</th>
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<tbody>
<tr>
<td>Particulates</td>
<td>PEL (OSHA)</td>
<td>15mg/m³ total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³ respirable dust</td>
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</tbody>
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VI. HEALTH HAZARDS IDENTIFICATION

ACUTE OR IMMEDIATE EFFECTS

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

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.

CHRONIC/CARCINOGENICITY: NTP: not tested
                            OSHA: not regulated
                            IARC: not listed
VII. FIRST AID MEASURES

SKIN: If hot or molten polymer contacts skin, cool rapidly with cold water. Do not attempt to peel molten 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: In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician if symptoms persist.

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

VIII. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY: Harmless

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: None known

IX. FIRE FIGHTING MEASURES

AUTOIGNITION TEMPERATURE: 595°C (1103°F). Method ASTM D1929

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.

X. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE: Clean up by vacuuming or sweeping to prevent falls
XI. HANDLING AND STORAGE

HANDLING: Open containers only in well-ventilated area

STORAGE: Keep containers closed to prevent contamination

XII. DISPOSAL CONSIDERATIONS

DISPOSAL: Preferred options for disposal are: recycling, incineration with energy recover, and landfill. Treatment and disposal must be in accordance with Federal, State, Provincial and Local regulations.

XIII. DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

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