

# Safety Data Sheet



**Tecapeek®**

ISSUE DATE: 06/09/2015

## 1. PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: Tecapeek®  
SYNONYMS: Not Applicable  
PRODUCT COLORS: Natural and Black

MANUFACTURER: Ensinger Inc.  
DIVISION: Stock Shapes  
ADDRESS: 365 Meadowlands Blvd., Washington, PA 15301

EMERGENCY PHONE: (724) 746-6050  
OTHER CALLS: (856) 227-0500

CHEMICAL NAME: Polyetheretherketone  
CHEMICAL FAMILY: Polyarylketone  
CHEMICAL FORMULA: basic formula  $(OC_6H_4OC_6H_4COC_6H_4)_n$

PRODUCT USE: Stock Shape for Machining  
PREPARED BY: Allyson M. Crouse, Technical Resource Manager

SECTION 1 NOTE: Revised June 9, 2015

## 2. HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW: Mechanical injury only.

ROUTES OF ENTRY: Eyes

### POTENTIAL HEALTH EFFECTS

EYES: Solid or dust causes irritation or corneal injury due to mechanical action.

SKIN: Essentially nonirritating to skin. Mechanical injury only. Molten material may burn skin.

INGESTION: Single dose oral LD50 has not been determined. Single dose oral toxicity is believed to be very low. Now hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Dust may cause irritation to upper respiratory tract. At room temperature, exposure to vapors are unlikely due to physical properties, normal processing temperatures may generate vapors, which may cause irritation if ventilation is inadequate.

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ACUTE HEALTH HAZARDS: None Known

CHRONIC HEALTH HAZARDS: None Known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None Known

CARCINOGENICITY: None Known

In 1995, the International Agency for Research on Cancer (IARC) concluded that there is "sufficient evidence in experimental animals for the carcinogenicity of carbon black." IARC's overall evaluation was that "Carbon black is possibly carcinogenic to humans (2B)." In 2006, IARC re-affirmed this classification. There has been no causal link between carbon black exposure and cancer risk in humans. Applying the rules of the Globally Harmonized System of Classification and Labeling (GHS, e.g. UN `Purple Book`, EU CLP Regulation) the results of repeated dose toxicity and carcinogenicity studies in animals do not lead to classification of Carbon Black for Specific Target Organ Toxicity (Repeated exposure) and carcinogenicity. UN GHS says that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Furthermore, the CLP guidance on classification and labeling states, that "lung overload" in animals is listed under mechanism not relevant to humans.

Carbon Black, CAS: 1333-86-4

OSHA: (PEL, 8HR) 3.5 mg/m<sup>3</sup> (FRL\_TWA)

OSHA: (PEL, 8HR) 3.5 mg/m<sup>3</sup> (TL\_PEL)

ACGIH: TWA: 3.5 mg/m<sup>3</sup> (Inhalable Fraction); Notations: Not Classifiable as a Human Carcinogen

Particulates

OSHA: Particulates not otherwise regulated/OSHA (PEL) 15 mg/m<sup>3</sup> (TWA, Total Dust)

Particulates not otherwise regulated/OSHA (PEL) 5 mg/m<sup>3</sup> (TWA, Respirable Dust)

ACGIH: Particulates not otherwise regulated/ACGIH (TLV) 10 mg/m<sup>3</sup> (TWA, Total Dust)

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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INGREDIENT:

	<u>CAS NO.</u>
Polyetheretherketone	31694-16-3/29658-26-2
Carbon Black	1333-86-4

The non-hazardous components and exact percentage of the composition have been withheld as a trade secret.

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This product contains a proprietary blend of components encapsulated within a polymer matrix. These components are not regarded as hazardous under 2012 OSHA Hazard Communication Standard; 29CFR Part 1910.1200.

## 4. FIRST AID MEASURES

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**EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Mechanical effects only.

**SKIN:** Wash off in flowing water or shower.

**INGESTION:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling. Call a poison control center/physician, if patient feels unwell.

**INHALATION:** Remove to fresh air, if effects occur. Consult a physician.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

## 5. FIRE FIGHTING MEASURES

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**AUTOIGNITION TEMPERATURE:** 595°C (1103°F)

**EXTINGUISHING MEDIA:** Water spray, foam, or dry chemical

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** With carbonization and incomplete combustion toxic gases develop, predominantly carbon dioxide and carbon monoxide.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide

**SECTION 5 NOTES:** A self-contained breathing apparatus and suitable protective clothing should be worn in fore conditions. Dust is ignitable, but will not sustain combustion. A high temperature source of ignitions is required. Insensitive rot sparks.

## 6. ACCIDENTAL RELEASE MEASURES

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**ACCIDENTAL RELEASE MEASURES:** Ventilate the area and prevent access to unauthorized people. Wear suitable personal protective equipment. Do not allow entry to drains, water courses or soil. Prevent spreading by use of suitable barriers. Take up with suitable equipment, fill up in air-tight containers and give further treatment as soon as possible.

## 7. HANDLING AND STORAGE

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**HANDLING AND STORAGE:** Handle in accordance with good industrial hygiene and safety practices. Provide for appropriate exhaust ventilation and dust collection at machinery. Avoid dust formation. All metal parts of processing equipment must be earth ground.

Store in closed container in a dry and cool area. Keep away from heat sources and sources of ignition.

**OTHER PRECAUTIONS:** Obtain special instructions, before use. Do not breathe dust. Wash hands thoroughly after handling. Do not eat, drink or smoke; when machining this product. Use personal protective equipment as required.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**ENGINEERING CONTROLS:** Standard ventilation required

**VENTILATION:** Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

**RESPIRATORY PROTECTION:** For most conditions a dust mask is sufficient; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

**EYE PROTECTION:** Safety glasses with side shields should be sufficient for most operations; however, for dusty operations wear chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator

**SKIN PROTECTION:** No precautions other than clean body-covering clothing should be needed.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** None Known

**EXPOSURE GUIDELINES:**

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE: Opaque Stock shape  
ODOR: None  
PHYSICAL STATE: Solid  
MELTING POINT: 343°C (649.4°F)  
DECOMPOSITION TEMPERATURE: >450°C (>842°F)  
AUTOIGNITION TEMPERATURE: 595°C (1103°F)  
IGNITION TEMPERATURE: 575°C (1067°F)  
SPECIFIC GRAVITY (H<sub>2</sub>O = 1): ~1.3 g/cm<sup>3</sup>  
SOLUBILITY IN WATER: Insoluble

## 10. STABILITY AND REACTIVITY

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STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID (STABILITY): High temperatures

INCOMPATIBILITY (MATERIAL TO AVOID): Concentrated sulfuric acid

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: By strong overheating of the material carbon oxides.

HAZARDOUS POLYMERIZATION: Not Applicable

CONDITIONS TO AVOID: To avoid thermal decomposition, avoid elevated temperatures. Heating can result in the formation of gaseous decomposition products, some of which may be hazardous. Do not exceed melt temperature recommendations in product literature.

## 11. TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: No data – In solid state, this material is not considered as being harmful to human health.

## 12. ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: No data – This material does not harm the environment, but is not biodegradable.

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## 13. DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: Dispose of contents/containers in accordance with local, regional, national and international regulations.

## 14. TRANSPORT INFORMATION

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U.S. DEPARTMENT OF TRANSPORTATION  
Not regulated

## 15. REGULATORY INFORMATION

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### U.S. FEDERAL REGULATIONS

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** In compliance with TSCA Inventory requirements for commercial purposes.

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):** 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 40CFR372.

### California Prop. 65:

Components in this product known to the State of California to cause cancer and/or reproductive effects, are listed below:

Chemical Name	Weight %	California Proposition 65:
Carbon black, 1333-86-4	0 - 0.3	Listed: February 21, 2003 Carcinogenic. (airborne, unbound particles of Respirable size)

## 16. OTHER INFORMATION

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### ADDITIONAL INFORMATION

MEDICAL USE: CAUTION – Do not use in medical applications involving permanent implantation in the human body.

*This 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 responsibility to evaluate and use this product safely and to comply with all applicable laws and regulations. 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 may infringe existing patents. No warranty is made, either expressed or implied.*