

Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:
2006-08-18

Performance Fibers PEEK

Page 1 of 6

1. Product and Supplier Information

1.1. Fiber Product

- 1.1.1 Appearance: Filament
- 1.1.2 Fibertype: Polyetheretherketone (PEEK)
- 1.1.3 Chemical Name: $[C_6H_4COC_6H_4OC_6H_4O]_n$
- 1.1.4 CAS-No.: 29 658-26-2
- 1.1.5 Trade Mark or Synonyms: PEEK Yarn

1.2 Company Information

- 1.2.1 Supplier: Performance Fibers GmbH, Berliner Straße 1, 36251 Bad Hersfeld
- 1.2.2 Information phone no.: +49-8234-82-1337

2. Composition/Information about ingredients

2.1 Composition

		<u>%</u>
2.1.1	Polymer	99
2.1.2	Additives	None
2.1.3	Other Ingredients	Finish
		< 1

2.2 Special Ingredients

2.2.1 Finish

The fibre product itself is not toxic. It can contain up to 1 % of finish. Consult the manufacturer if the product is to be used for special applications such as in the food industry, or for hygiene, or in the medical or surgical sectors. To date, proper use of this fibre product has not been associated with any detrimental effects on health.

Finish is applied to most fibers and yarns as a processing aid. The finish, spooling oils and sizes can generally be removed in an aqueous medium if so required.

Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:
2006-08-18

Performance Fibers PEEK

Page 2 of 6

2.2.2 Solvent

None.

3. Potential Hazards

The product is neither cancerogenic, mutagenic nor teratogenic.

4. First Aid

4.1 Inhalation

Inhalation hazards of this product are negligible pending possible imposition of threshold limit values. Therefore no special precautionary measures are necessary.

Inhalation of fiberfly, dust and finish decomposition products should be avoided by hood suction or fresh air ventilation. In case of coughing or other symptoms the person should seek fresh air and - if necessary - see a physician.

4.2 Eye contact

In case of eye contact, rinse with plenty of water. In case of persistent irritation see physician.

4.3 Skin contact

Wash with soap and water. In case of irritation see physician.

4.4 Ingestion

No special measures necessary.

5. Measures in case of fire

5.1 Burning Behavior

Combustion temperature:	Not applicable
Autoignition temperature:	Product will burn in a fire.
Thermal decomposition:	595 °C DIN 51794
	> 300 °C

Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:
2006-08-18

Performance Fibers PEEK

Page 3 of 6

Hazardous Decomposition Products:

Carbonmonoxide, carbondioxide and low-molecular-weight organic compounds depending on temperature and air supply.

Unusual Fire and Explosion Hazards:

Fiber dust and fly could represent a fire hazard at sufficient concentrations. Remove ignition sources. Beware of electrostatic charges.

5.2 Extinguishing Media:

All usual extinguishing media can be used. Do not use water, if fire is caused by an electrical short circuit.

Use selfcontaining breathing apparatus for fire fighting in closed rooms.

6. Spills

In case of accidental spills refer to section 5. "Measures in case of Fire" and section 7 "Handling and Storage". During cleanup use proper personal protection.

7. Handling and Storage

All packages, cartons or bales must be stored in line with applicable procedures and requirements.

8. Limits to Exposure and Personal Safety Measures

8.1 Avoid accumulation fiber fly, dust and finish decomposition products by sufficient air supply and proper house keeping.

8.2 Personal Safety Measures

8.2.1 Eye Protection

Appropriate Safety Measures e.g. while cutting bale or carton straps.

Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:
2006-08-18

Performance Fibers PEEK

Page 4 of 6

8.2.2 Skin Protection

Fibers that are processed at high speeds could cause abrasions or cuts. Appropriate protective measures are recommended.

8.2.3 Inhalation

See 4 and 5.

8.3 **Limits to Exposure**

None.

9. Physical and Chemical Properties

9.1 **Appearance**

9.1.1 Form: Filament yarn

9.1.2 Color: Brownish

9.1.3 Odor: None

9.2 **Safety Relevant Data**

9.2.1 Specific density : 1,3 - 1,4 g/cm³

9.2.2 Melting Range: 330 - 340 °C

9.2.3 Solubility in Water: not soluble

9.2.4 Solvents: None.

9.2.5 Autoignition temperature:) see 5.1

9.2.6 Decomposition:)

10. Stability and Reactivity

10.1 **Chemical Stability:** stable

10.2 **Conditions to avoid**

Temperatures above 300°C will decompose the material if oxygen is present (see also 5.1 and 10.4).

Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:
2006-08-18

Performance Fibers PEEK

Page 5 of 6

10.3 **Materials to avoid**

PEEK will be decomposed by strong oxidation agents. Concentrated sulfuric acid will decompose PEEK at elevated temperatures.

10.4 **Decomposition**

Hazardous decomposition products see 5.1.

10.5 **Polymerization**

Not applicable.

11. **Toxicology**

See 2.2.1.

12. **Ecology**

12.1 **Ecotoxicological Information**

The fiber product is not associated with any ecological problems.

The finish may vaporize or decompose at temperatures above 130 °C.

If subsequent processing involves the use of water, the waste water should be given the appropriate treatment in a purifying plant, in line with local regulations.

12.2 **Ecochemical Information**

Under usual soil conditions PEEK is stable and does not decompose.

13. **Disposal Information**

If recycling is not possible, PEEK can be disposed of in a suitable refuse installation or incinerated subject to local regulations.

EWC (European Waste Catalogue) code: 070213

14. **Transportation**

GGVSee/IMDG-Code: UN-Nr. ICAO/IATA-DGR:
GGVE/GGVS: RID/ADR: ADNR:

Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:
2006-08-18

Performance Fibers PEEK

Page 6 of 6

Other information:

Not a dangerous substance as defined in the above regulations.

15. Regulations

See 14.

16. Other Information

This Product Data Sheet contains selected information about a specific Performance Fibers product, or group of products, and particular uses of the same. It relates only to the identified product and any identified uses, and is based on information available as of the date hereof. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. **THIS PRODUCT DATA SHEET DOES NOT CONTAIN A COMPLETE STATEMENT OF, AND DOES NOT CONSTITUTE A REPRESENTATION, WARRANTY OR GUARANTY WITH REGARD TO, A PRODUCT'S CHARACTERISTICS, USES, SUITABILITY, SAFETY, EFFICACY, HAZARDS OR HEALTH EFFECTS.** Purchasers and users of the product are responsible for determining that the product is suitable for the intended use and that their workers and the general public are advised of any risks resulting from such use. Nothing contained in this Product Data Sheet shall be construed to modify any of the commercial terms pursuant to which the product was sold by Performance Fibers including, but not limited to, terms and conditions addressing each party's respective rights and obligations with regard to warranties, remedies and indemnification.

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