

# Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:  
2006-08-17

## Performance Fibers High Tenacity FR (flame retardand)

Page 1 of 7

### 1. Product and Supplier Information

#### 1.1. Fiber Product

1.1.1 Appearance: multi filament yarns

1.1.2 Fibertype: Polyester (PES)

1.1.3 Chemical Name: Polyethyleneterephthalate with up to 3 % non toxic halogen-free modification component

1.1.4 CAS-No.: 25 038-59-9

1.1.5 Trade Mark or Synonyms: Performance Fibers Hochfest FR

#### 1.2 Company Information

1.2.1 Supplier: Performance Fibers GmbH, Berliner Straße 1, 36251 Bad Hersfeld

1.2.2 Information phone no.: **+49 (0)8234-82-1337**

### 2. Composition/Information about ingredients

#### 2.1 Composition

		<u>%</u>
2.1.1	Polymer	> 97.5
2.1.2	Additives dyes, where applicable	< 3
2.1.3	Other Ingredients Finish	< 1.5

#### 2.2 Special Ingredients

##### 2.2.1 Finish

The fibre product itself is not toxic. It can contain up to 1.5 % of finish. Consult the manufacturer if the product is to be used for special applications such as in the food

# Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:  
2006-08-17

## Performance Fibers High Tenacity FR (flame retardand)

Page 2 of 7

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.

### 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 fiber fly, 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

# Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:  
2006-08-17

## Performance Fibers High Tenacity FR (flame retardand)

Page 3 of 7

No special measures necessary.

### 5. Measures in case of fire

#### 5.1 Burning Behavior

Combustion temperature:	Not applicable Product will burn in a fire.
Autoignition temperature:	515 °C DIN 51794
Thermal decomposition:	> 300 °C

#### Hazardous Decomposition Products:

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

#### Fire and Explosion Hazards:

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.

5.3 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.

# Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:  
2006-08-17

## Performance Fibers High Tenacity FR (flame retardand)

Page 4 of 7

### 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.

##### 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**

## Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:  
2006-08-17

### Performance Fibers High Tenacity FR (flame retardand)

Page 5 of 7

**9.1.1** Form: multi filament yarns

**9.1.2** Color: white or spundyed

**9.1.3** Odor: none

## 9.2 Safety Relevant Data

**9.2.1** Specific density : 1,3 - 1,4 g/cm<sup>3</sup>

**9.2.2** Melting range: 250 - 260 °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).

### 10.3 Materials to avoid

Performance Fibers High Tenacity Polyester FR will be decomposed by strong oxidation agents as well as strong acids and caustic.

### 10.4 Decomposition

# Safety Data Sheet for Synthetic Fibers

(according to 91/155/EC)

Revised:  
2006-08-17

## Performance Fibers High Tenacity FR (flame retardand)

Page 6 of 7

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 Performance Fibers High Tenacity FR Polyester is stable and does not decompose.

### 13. Disposal Information

If recycling is not possible, Performance Fibers High Tenacity FR Polyester can be disposed of in a suitable refuse installation or incinerated subject to local regulations.

EWC (European Waste Catalogue) code: 070213

### 14. Transportation

# Safety Data Sheet for Synthetic Fibers

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Revised:  
2006-08-17

## Performance Fibers High Tenacity FR (flame retardand)

Page 7 of 7

GGVSee/IMDG-Code:

UN-Nr.

ICAO/IATA-DGR:

GGVE/GGVS:

RID/ADR:

ADNR:

Other information:

Not a dangerous substance as defined in the above regulations.

### 15. Regulations

See 14.

### 16. Other Information

This safety data sheet for synthetic fibers uses the format and listing sequence the EC - Material Safety Data Sheet for chemical compounds and preparations. It is intended to provide information about the physical properties, safety aspects, toxicological data and ecological characteristics which are relevant for the use of synthetic fibers in textile and industrial applications, and to recommend safe procedures for handling, storage and transport. Furthermore, it should also serve to provide industrial users of synthetic fibers with the appropriate information to protect both man and the environment. It was not designed with the private end user in mind. It is recommended that supplementary information be requested if an unusual application of synthetic fibers is intended.

The information given here is the best available to the author of this document on the date of issue. It does not constitute a contractual description of the product properties.