

## Product Safety Data Sheet for Polyester Fibre Articles

Date of Issue: 06 February 2008 Updated: 04.01.10

### 1. Identification of the product and company

Name of the article: **Polyester fibre \*) {refer to last page}**

Recommended application: **Fibres for technical and textile applications**

### 2. Possible hazards

Rating: **The fibre is an article and is not classified as a hazardous material according to EC criteria.**

Additional danger to humans and the environment: **When utilised as intended no specific hazards or adverse health effects have so far become apparent.**

### 3. Composition / information on the ingredients

The following information serve as guidance for the entire range of diameters:

Chemical composition: **Polyethylenterephthalat  
CAS No.: 25038-59-9  
Polybutylenterephthalat  
CAS No.: 30965-26-5  
Polyethylenaphthalat  
CAS No.: 25853-85-4**

Composition of the article: **max. 1 weight percentage preparation  
max. 2 weight percentage stabilized  
colour pigments can be added**

Remarks on special components: **The fibre article may contain up to 1 weight percent of fibre preparation as a finish. This finish may generally be removed using an aqueous medium if necessary. The fibre article contains no residual solvent.**

### 4. First aid measures

Inhalation:	Inhalation of airborne fibres, dust and decomposition remnants of the preparation is to be avoided by ventilation and aspiration. Persons subjected to excessive levels of dust or fibre flight, should get some fresh air and seek medical attention should coughing or other symptoms not disappearing by expectoration emerge.
Eyes:	The eyes should be immediately flushed with plenty of water. If the irritation persists, medical attention should be sought.
Skin:	Wash up with soap and water. If the irritation persists, medical attention should be sought.
Ingestion:	No special measures necessary.
Immediate medical attention is required, if toxic fumes were possibly inhaled during a smouldering fire.	

## 5. Fire-fighting measures

Appropriate extinguishing agents:	All standard extinguishing media.
Unsuitable extinguishing agents for safety reasons:	Water if the fire was caused by electrical short circuit.
Special protective equipment for fire-fighting:	When fire-fighting in smoke-filled rooms, self-contained breathing protection (respirators, which are independent of the ambient air) must be used.
Special hazards caused by the product or the resulting products of combustion:	In case of fire, the hazardous combustion gases are carbon monoxide and carbon dioxide, nitrogen oxides, and also low-molecular organic compounds depending on temperature and air flow.

### Additional information:

It is to be expected that the fire-fighting water may contain some proportion of organic substance as TOC (total organic carbon) or rather COD (chemical oxygen demand) due to the decomposition products generated by the fire. As the concentration of water pollutants naturally depends on the fire behaviour and the quantity of fire-fighting water, it is

recommended to catch the fire-fighting water as far as possible in the case of larger fires. Prior to the discharge into the sewage system, consent of the competent authority must be obtained. No unusual difficulties are anticipated regarding the functioning of biological sewage treatment plants.

## 6. Accidental release measures

Measures for cleaning / collecting:

Carefully sweep up released product. Collect mechanically. Investigate possibility of reuse or properly dispose of as waste.

## 7. Handling and Storage

Information for safe handling:

The packaging should be removed in compliance with safety regulations. Instruction of personnel is required. Avoid dust formation!

Precautions against fire and explosion:

Prevent or eliminate airborne fibres. Ensure adequate ventilation and aspiration at the workplace. Keep away sources of ignition. Keep in mind the effects of electrostatic charging.

Advice for safe storage:

All supply units are to be secured in storage, especially when stacking, so that they are not damaged by shifting or falling down, and to prevent injury. Regarding thermal load, the fire safety requirements must be observed.

Recommended storage conditions:

Protect the product from dirt, moisture, direct sunlight and open flames!  
Storage class (VCI): 11 (flammable solids).

## 8. Exposure control and personal protection

General information:

The accumulation of and contact with airborne fibres, dust and decomposition products of the preparation should be avoided by ventilation and aspiration.

Personal protection:

Eye protection:

Adequate protection measures are to be observed.

Skin protection:

Processing of fibres at high speeds may cause abrasive injuries and cuts. According protective measures must be maintained.

Respiratory protection:

Avoid inhalation of dust. Otherwise, no special precautions required, except in case of fire or if local ventilation/aspiration is insufficient (see points 4 and 5.).

Hygiene at work:

The general requirements for industrial hygiene are observed. Wash hands thoroughly before eating or smoking and after work using soap and water. When eating, do not eat, drink or smoke. Regular cleaning of machines, working areas and clothes must be conducted.

Limiting environmental exposure:

Extracted airborne fibre and dust must be retained using filters.

Exposition limits:

- Dust – respirable proportion:

Germany (TRGS 900) AGW: 3 mg / m<sup>3</sup>

- Dust – respirable proportion:

Germany (TRGS 900) WEL: 10 mg / m<sup>3</sup>

## 9. Physical and chemical properties

### General information:

- |                   |  |
|-------------------|--|
| - Physical state: | Solid (monofilaments, bristles or abrasive bristles) |
| - Colour          | White, matted or spun-dyed                           |
| - Smell:          | Odourless  |

### Health, safety and environmental information:

- |                                 |                                       |
|---------------------------------|---------------------------------------|
| - Melting range:                | Abt. 230–270 ° C (depending on type)  |
| - Density:                      | 1.3–1.4 g / cm <sup>3</sup> at 20 ° C |
| - Vapour pressure:              | Fibres do not evaporate at 20 ° C     |
| - Solubility in water:          | Insoluble                             |
| - Flash point:                  | Not applicable                        |
| - Solvent content:              | None                                  |
| - Induced ignition temperature: | approx. 390 ° C                       |
| - Decomposition temperature:    | ≥ 270 ° C (depending on type)         |

## 10. Stability and reactivity

### Chemical Stability:

Stable

### Conditions to avoid:

- |                          |   |
|--------------------------|---|
| - Temperatures > 270 °C: | At approx. 270 ° C the thermal decomposition of the fibres begins. Hazardous decomposition products are generated. The main pyrolysis and combustion product is carbon monoxide. In addition, carbon dioxide, water and low molecular weight organic decomposition products were found. |
|--------------------------|---|

### Degradation:

No degradation under normal storage conditions

## 11. Toxicological information

### Acute effects:

The intended use of the fibre product has not been known to produce adverse health consequences.

## 12. Ecological Information

### Mobility of polymer:

Insoluble in water

Mobility preparation:	When processed using water, the generated wastewater is to be purified in accordance with the relevant government regulations.
Degradation:	The fibre article is ecologically safe. During the heat treatment at temperatures above 130 ° C components of the preparation may evaporate or decompose.
Water:	The article is not hazardous to water in the sense of § 19g WHG paragraph 5 (Water Resources Act).
Information about eco-chemical behaviour:	Polypropylene is retained in naturally occurring substances in the soil and rot-resistant.

### 13. Information regarding disposal

Appropriate methods of disposal:	Where recycling is not possible, the article may be landfilled in compliance with local regulations or burned in suitable incineration plants.
Origin-related waste code No. Waste Catalogue Ordinance (Abfallverzeichnis-Verordnung (AVV) European Waste List 2001/118/EG:	04 02 21 (Waste from unprocessed textile fibres) 04 02 22 (Wastes from treated textile fibres)

### 14. Transport information

GGVSee/IMDG Code:	Non-hazardous substance
GGVSE, RID/ADR:	Non-hazardous substance
ADNR:	Non-hazardous substance
ICAO/IATA-DGR:	Non-hazardous substance
Additional information:	Protect the product from dirt, moisture, direct sunlight and open flames! Keep separate from oxidising agents, acids

and bases!

## 15. Regulation

### EU legislation:

The fibre article is not subject to classification according to EC directives.

### National regulations for Germany:

#### Water pollution class (WGK):

Not a water hazard according to § 19g Section 5 WHG (Water Resources Act) as well as in accordance with VwVwS (Administrative Regulations for Water Polluting Substances): Identification Code 766 (plastics, granules, for example, molded parts, fibres, films, plastic resins, as far as these are solid, not dispersed, insoluble in water and indifferent)

## 16. Miscellaneous

The information in this data sheet relate solely to the fibre articles described herein, and are not to be used in combination with any other substance or preparation or product or in any other procedure.

The purpose of this data sheet is the protection of humans and the environment on the basis of information provided to the commercial users of chemical fibres. It is not intended for private consumers.

In the event that the article is intended for usage in specific applications, such as for example, the food industry, the hygiene, medical or surgical sector, please contact the manufacturer first.

The information in this data sheet reflect the current knowledge of the party completing the form at the data of issue. These are not contractually binding guarantees of article properties.

\*) The synthetic fibre polyester is an article and not subject to the European Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Safety Data Sheets or chemical safety reports under Article 31 or rather Article 14 of this act are therefore not necessary. This data sheet was voluntarily drawn up in line with Annex II to this regulation under the aspect of Responsible Care.