according to VO (EG) Nr. 1907/2006



Article description: Polyamide Fibres

Version 02 last change: 04 January 2010 date of print: 26 August 2013

1. Identification of the article and the company

1.1 **Product Identifier**

Polyamide Fibres (PA 6)

1.2 Relevant identified use of the product

Fibres for technical applications

1.3 Details of the supplier of the Safety Information

Manufacturer: Hahl Filaments GmbH

Rottenackerstraße 2-18 D-89597 Munderkingen ☎ +49 (0) 73 93 53 – 0 ☐ www.hahl-pedex.com

Issuing Department: Product Safety

Dipl.-Ing. (FH) Benjamin Frank

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2. Hazards Identification

2.1 Classification of the product

The fibres are an article and do not contain hazardous substances above classification limit set by Directive 1999/45/EC or CLP Regulation 1272/2008/EC

2.2 Label elements

Not required

2.3 Other hazards

When utilised as intended no specific hazards or adverse health effects have so far become apparent.

3. Composition/ information on ingredients

3.1 **Chemical identity of the article** (The following information serves as guidance for the entire range of diameters and

colour agents)

Composition: Polyamide 6 fibre based on Polycaprolactam (CAS-No 25083-54-2), eventually

prepared with a colour agent and/or additives (may contain up to 2%

caprolactam)

Hazardous ingredients: None which have to be classified

Remarks and general indications: The fibre article may contain up to 0,1 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

4.1 Description of first aid measures

After Inhalation - <u>of dust or airborne fibres:</u>

Persons subjected to excessive levels of dust,

should seek fresh air or seek medical attention if coughing or other symptoms persist.

of products after decomposition in the event of fire:

Seek fresh air and place the person in the recovery position. Seek medical advice

immediately

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After contact with skin: No special measures necessary.

After contact with eyes: The eyes should be immediately flushed with plenty of water. If the irritation persists,

medical attention should be sought.

After ingestion: No special measures necessary.

4.2 Most important symptoms and effects, both acute and delayed

After Inhalation of toxic fumes in the event of a smouldering fire: smoke intoxication. Seek medical advice immediately

5. Firefighting measures

5.1 Extinguishing media

Suitable: water spray jet, foam, CO₂, extinguishing powder

Not suitable: Full water jet

5.2 Special hazards arising from the fibres

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.

5.3 Advice for firefighters

Use self-contained breathing apparatus during operations in closed rooms and immediate vicinity of fires.

It is to be expected that the firefighting 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 firefighting water, it is recommended to catch the firefighting 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

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation

6.2 Environmental precautions

Investigate possibility of reuse or properly dispose of waste

6.3 Methods and material for containment and cleaning up

Collect the product mechanically, vacuum-clean any dust

7. Handling and storage

7.1 Precautions for safe handling

Avoid dust formation. Ensure adequate ventilation and aspiration at the workplace. Keep away sources of ignition. Keep in mind the effects of electrostatic charging.

7.2 Conditions for safe storage, including any incompatibilities

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. Protect the product from dirt, moisture, direct sunlight and open flames!

Storage class (VCI): 11 (flammable solids).

8. Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits: dust - respirable fraction: Germany (TRGS 900) MAC: 3 mg/m³ - inhalable fraction: Germany (TRGS 900) WEL: 10 mg/m³

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8.2 Personal protective equipment

Skin protection: Processing of fibres at high speeds may cause abrasive injuries and cuts. According

protective measures must be maintained.

Eye protection: Adequate protection measures are to be observed.

Respiratory protection: If inhalation of dust can be avoided no further precautions are 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 use soap and water. Regular cleaning of

machines, working areas and clothes must be conducted.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	monofilament, bristles or abrasive bristles
Aggregate state:	solid
Smell:	Odourless
Softening temperature	215°C to 260°C (depending on type)
Flash point	not determined
Density:	ca. 1,0-1.2 g/cm ³
Vapour pressure:	not applicable
Solubility in water (20°C):	insoluble
Solubility in solvents:	soluble in some solvents
Temperature of decomposition:	≥ 300°C

9.2 Other Information

None

10. Stability and reactivity

10.1 **Reactivity**

None

10.2 Chemical stability

Chemically stable

10.3 Possibility of hazardous reactions

Polyamide fibres can be decomposed by: -

strong bases

strong acidsstrong oxidants

10.4 Conditions to avoid

Temperatures above 300°C

10.5 Incompatible materials

strong bases, strong acids, strong oxidants

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, soot and low molecular weight organic decomposition products

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11. Toxicological information

11.1 Information on toxicological effects

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

12. Ecological information

12.1 **Toxicity**

The product is not known to be toxic to the environment.

12.2 Persistence and degradability

The product is not biodegradable

12.3 Bioaccumulative potential

The product is insoluble in water and not bioaccumulable

12.4 Mobility in soil

None

12.5 Result of PBT and vPvB assessment

No evaluation carried out. The product is not bioaccumulative

12.6 Other adverse effects

The product is not hazardous to water in the sense of § 19g WHG paragraph 5 (Water Resources Act).

13. Disposal considerations

13.1 Waste treatment methods

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)):

04 02 21 (Waste from unprocessed textile fibres)

European Waste List 2001/118/EG:

04 02 22 (Wastes from treated textile fibres)

14. Transport information

14.1 GGVSee/IMDG Code:

Non-hazardous substance

14.2 **GGVSE**, **RID/ADR**:

Non-hazardous substance

14.3 **ADNR**:

Non-hazardous substance

14.4 ICAO/IATA-DGR:

Non-hazardous substance

14.5 Additional information

Protect the product from dirt, moisture, direct sunlight and open flames!

Keep separate from oxidising agents, acids and bases!

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15. Regulatory information

15.1 **EU legislation**

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

15.2 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. Other information

16.1 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 reflects 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 polyamide 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.