Material Safety Data Sheet

PETG

Item No.: 100540, 100541, 100542, 100545

SECTION 1: Hazards identification

1.1 Classification of the product
The fibres are an article and do not contain hazardous substances above classification limits set by CLP Regulation 1272/2008/EC and Directive 67/548/EEC.

1.2 Label elements
Not required

1.3 Other hazards
When utilised as intended no specific hazards or adverse health effects have so far become apparent. Molten polymer will produce thermal burns. Polymer dust may represent a fire hazard at sufficient concentrations in presence of ignition sources.

SECTION 2: Composition / information on ingredients

2.1 Chemical identity of the article (The following information serves as guidance for the entire range of diameters and colour agents)

Composition:
Polyester fibre based on Neopentylglycolethleneglycol terephthalate copolymer (CAS-No. 026780-49-4), possibly prepared with a colour agent.
The polymer contains minor additives such as stabilizers and catalysts. These additives are immobilized by the polymer and are not released with normal use.

Hazardous ingredients:
None which have to be classified

SECTION 3: First aid measures

3.1 Description of first aid measures

After Inhalation:
Move exposed person to fresh air in case of accidental inhalation of dust, airborne fibres or fumes from overheating or combustion. Consult a physician after significant exposure.

After contact with skin:
Cool skin rapidly with cold water after contact with molten polymer. Do not peel polymer from the skin. Obtain medical attention.

After contact with eyes:
The eyes should be immediately flushed with plenty of water for at least 20 minutes. Get medical attention if symptoms occur.

After ingestion:
Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed by medical personnel. Get medical attention if symptoms occur.

3.2 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. Contact poison treatment specialist if large quantities have been ingested or inhaled.
SECTION 4: Firefighting measures

4.1 Extinguishing media
Suitable: water spray jet, foam, CO2, extinguishing powder
Not suitable: Full water jet; water, if fire is caused by an electrical short circuit.

4.2 Special hazards arising from the fibres
In case of fire, the hazardous combustion gases are carbon monoxide and carbon dioxide, acetaldehyde.

4.3 Advice for firefighters
Unusual fire and explosion hazards:
Powdered material may form explosive dust-air mixtures. High voltage static electricity build-up and discharge must be avoided when significant quantities of powdered material are present.

Special protective equipment for firefighters
Wear self-contained breathing apparatus, protective clothing and headgear to prevent contact with skin and eyes.

SECTION 5: Accidental release measures

5.1 Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment.
Avoid dust formation. Spillages may be slippery. Clear up spillages.
The molten polymer may remain hot for some time due to low thermal conductivity. Use care when disposing of molten mass.
Do not breathe vapours or fumes that may be generated during processing.

5.2 Environmental precautions
Investigate possibility of reuse or properly dispose of waste.
Avoid dispersal of spilt material and runoff. Avoid contact with soil, waterways, drains and sewers.
Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

5.3 Methods and material for containment and cleaning up
Collect the product mechanically or by vacuum-cleaner. Avoid dust formation.

SECTION 6: Handling and storage

6.1 Precautions for safe handling
Put on appropriate personal protective equipment.
Avoid dust formation. Ensure adequate ventilation and aspiration at the workplace. Keep away sources of ignition. Keep in mind the effects of electrostatic charging.

6.2 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, fire safety requirements must be observed.
Keep containers closed when not in use. Store in original container in a dry, cool and well-ventilated area, away from open flames, ignition sources, direct sunlight or incompatible materials.
SECTION 7: Exposure controls/personal protection

7.1 Control parameters

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

7.2 Personal protective equipment

Skin protection:
Appropriate footwear and working clothes must be worn. Protective Gloves must be used when handling hot polymer.

Eye protection:
Not required under normal conditions of use. Safety eyewear should be used if there is a likelihood of exposure. Recommended: Safety glasses with side shields when working with molten material.

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 to be 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.

SECTION 8: Physical and chemical properties

Appearance: monofilament
Aggregate state: solid
Smell: slight
Softening temperature: 170°C to 210°C (depending on type)
Flash point: not determined
Density: ≥ 1.29 g/cm³
Vapour pressure: not applicable
Solubility in water (20°C): insoluble
Solubility in solvents: soluble in some solvents
Temperature of decomposition: ≥ 270°C (depending on type)

Other Information
No other information
SECTION 9: Stability and reactivity

9.1 Reactivity
No specific test data related to reactivity available for this product or its ingredients

9.2 Chemical stability
Chemically stable

9.3 Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur. Polyester fibres can be decomposed by:
- strong bases
- strong acids
- strong oxidants

9.4 Conditions to avoid
Temperatures above 270°C

9.5 Incompatible materials
Acetic anhydride, acetone, aniline, benzene, chloroform, chromic acid, cyclohexanone, dimethyl formamide, dioxane, ethyl acetate, phenol, tetrahydrofuran. Strong bases, strong acids, strong oxidants will decompose polyester

9.6 Hazardous decomposition products
Carbon monoxide, carbon dioxide, acetaldehyde, soot

SECTION 10: Toxicological information

10.1 Information on toxicological effects
The intended use of the fibre product has not been known to create adverse health effects

Potential acute health effects

Inhalation: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.
Skin contact: No known significant effects or critical hazards.
Eye contact: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No specific data.
Ingestion: No specific data.
Skin contact: No specific data.
Eye contact: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
SECTION 11: Ecological information

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

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Result of PBT and vPvB assessment
No evaluation carried out.

12.6 Other adverse effects
No known significant effects or critical hazards.

SECTION 12: 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)

This material and its packaging must be disposed of in a safe way and should be recycled.

SECTION 13: 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!

SECTION 14: 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)
SECTION 15: 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 reflect the current knowledge of the party completing the form at the date of issue. These are not contractually binding guarantees of article properties.

*) The synthetic fibre 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 created in line with Annex II to this regulation under the aspect of Responsible Care.

SECTION 16: Emergency contact

Contact:

Contact person: Michael Elstner

Phone: +49 89 2488986 – 0

Mail: emergency@germanreprap.com