

Safety information

Polybutylene Terephthalate (PBT)

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1. Product

1.1 Product data

Subject No.: 200000-999900

Designation: plastic profile

2. Composition / Data on constituents

2.1 Chemical properties (individual substance) PBT

Additional information: In addition to PBT, also contains pigments, fillers, additives, stabilisers and glass fibres.

2.2 Chemical properties (preparation)

Beschreibung: Product consists of PBT, glass-fibre reinforced.

Gefährliche Inhaltsstoffe: None

3. Potential hazards:

None

4. First-aid measures

Upon contact with skin: Cool the affected area with plenty of cold water. Do not tear off solidified product from the skin. Burns caused by molten material require medical care.

5. Fire-fighting measures

Suitable extinguishing agents:

Water spray, foam, dry powder and CO₂.

Unsuitable extinguishing agents for reasons of safety:

Full water jet

Possibly released at temperatures in excess of 290 °C:

Toxic gases, CO₂, Accompanied by traces of: hydrogen cyanide

Besides this small amounts of the following substances can appear:

Tetrahydrofuran, carbon monoxide

Special protective equipment for firefighters: Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Do not allow fire water to penetrate into surface or ground water. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

6. Measures in case of accidental leakage

Personal precautions, protective equipment and emergency procedures:

Provide adequate ventilation. Wear personal protection equipment. Do not breathe dust.

Environmental precautions: Do not allow to penetrate into soil, water-bodies or drains.

Methods and material for containment and cleaning up: Avoid generation of dust. Remove all sources of ignition. Take up mechanically. Collect in closed containers for disposal.

Additional information: Special danger of slipping by leaking/spilling product.

7. Handling and storage

Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe dust.

In the case of the formation of dust: Withdraw by suction.

Molten material: Avoid contact with the substance.

Precautions against fire and explosion: Take precautionary measures against static discharges. Keep away from sources of ignition. Use grounding equipment. Use explosion-proof equipment and non-sparking tools/utensils. Avoid open flames.

In case of dust formation (fine dust): May form explosible dust-air mixture if dispersed.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers: Store in a well-ventilated place. Keep container tightly closed. Protect against heat /sun rays.

Further details: danger of slipping by leaking/spilling product.

Specific end use(s): No information available.

Storage: Store in a dry place and protect from heat and direct sunlight to ensure that handling properties are maintained.

8. Exposure limits and personal protective equipment

The limit values will not be achieved if the product is processed properly and suitable ventilation is provided.

9. Physical and chemical properties

9.1 Appearance

Shape: Oblong

Colour: Black or other

Odour: Odourless - slightly characteristic (raw material)

9.2 Safety data

Melting point: 220 - 230 °C

Flash point: > 400 °C

Ignition point: > 350 °C

Density PBT GF30: 1.3 - 1.8 g/ccm

Fire-promoting properties: not oxidating

10. Stability and reactivity

Thermal decomposition at > 290 °C

Hazardous decomposition products: carbon monoxide, Tetrahydrofuran, Terephthalic acid, Carbon dioxide, Water

Depending on fire conditions: Smoke, hydrogen cyanide, carbon monoxide and carbon dioxide (CO₂).

Further data: No hazardous reactions observed.

11. Toxicological data

According to our experience and information, the product does not constitute a health hazard when handled and used correctly

12. Ecological data

No ecotoxic effects; water hazard class (WHC): 0 (generally not a water hazard because water-insoluble, non-toxic solid)

General note: When handled correctly, no environmental risks expected.

13. Notes on disposal

The material in the product can be recycled. The product can be disposed of as household refuse in accordance with local directives or can be fed into a suitable incinerator.

14. Transportation data

Does not constitute a hazard in terms of transportation regulations.

15. Regulations

Not classified by Dangerous Chemicals Ordinance or relevant EC Guidelines. When handling dust generated during mechanical processing, e.g. grinding, observe the relevant directives/limiting values for fines.

16. Other data

The cited data are based on our current knowledge and must not be taken as a warranty of properties. The recipient of our product assumes responsibility to observe existing laws and provisions.