



Safety Data Sheet
Following laws (CE) n° 1907/2006, Article 31

BCN3D FILAMENTS TPU Safety Data Sheet

1. Identification of the substance/preparation and of the company:

1.1. Trade name:

BCN3D FILAMENTS TPU

1.2. Use of the product:

Filament for FFF/FDM technology based 3D printing

1.3. Company:

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2. Hazards identification:

2.1. Classification:

- Classification according to Regulation (EC) No 1272/2008: The product is not classified according to the CLP regulation.
- Classification according to the directive 67/548/CEE or Directive 1999/45/CE: Not classified.
- Classification System: Not required to identify the product according to the calculation procedure in the latest valid version of the "General Classification guideline for preparations of the EU"

2.2. Label elements:

Labelling according to EC guidelines:

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.

Usual preventive measures should be considered for the manipulation of chemical products. products.

2.3. Other hazards:

- Results of the valuation PBT y mPmB
PBT: Non-applicable
mPmB: Non-applicable

3. Composition/information on ingredients:

- Polyurethane Thermoplastic – 99% CAS: 75701-44-9

3.1. Chemical characteristics: Mixures

Description: Polymer

Dangerous components: Not applicable

Other components: Not applicable

4. First-aid measures:

4.1. First-aid measures description:

- General instruction: Change clothes impregnated with the product.
- In case of inhalation: Supply fresh air. In case of disturbances, consult a doctor.
- After inhalation of decomposition products, breathe fresh air, rest, seek medical help.
- In case of skin contact: Wash with soap and water. Visit your doctor if irritation continues skin.
- After contact with molten product, cool rapidly with cold water. No skin separating the solidified product. Call a doctor immediately.
- In case of eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Remove contact lenses, if present and easy. Continue rinsing.
- If swallowed: Rinse mouth and drink plenty of water. Do not induce vomiting. Consult doctor in case of persistent symptoms.

4.2. Most important symptoms and effects, both acute and delayed:

There is not relevant information available.

4.3. Indication of any immediate medical attention and special treatment needed:

There is not relevant information available.

5. Firefighting measures:

5.1. Extinguishing media:

Any method is applicable.

5.2. Unsuitable extinguishing media for safety reasons:

Throw water with strong pressure.

Carbon dioxide CO₂.

5.3. Special hazards arising from the substance or mixture:

Formation of toxic gases if heated or fire.

Irritant gases / vapors.

During a fire, they can be released:

- Smoke
- Carbon monoxide (CO) and carbon dioxide (CO₂)
- Hydrocarbons
- Hydrogen cyanide (HCN)

Under certain conditions, during the fire may traces of other toxic materials. In case of accidental dispersion: Personal precautions.

5.4. Advise for firefighters:

Protective equipment: Wear protective breathing apparatus independent of the ambient air.

6. Measures in case of accidental release

6.1. Personal precautions, protective equipment and emergency procedures:

- Protective equipment and emergency procedures
- Avoid dust formation.
- Do not breathe dust.
- Keep away from sources of ignition.
- Avoid eye contact.
- Danger of slipping on spilled product or pouring.

6.2. Environmental precautions:

Do not discharge into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up:

Allow to solidify, pick up mechanically.

Dispose of the material collected according to regulations.

7. Handling and storage:

7.1. Precautions for safe handling:

- Ensure good ventilation / exhaustion at the workplace.
- Avoid dust formation.
- Do not inhale fumes / dust produced.
- Remove regularly dust that inevitably form.
- Avoid contact with the eyes and skin.
- Complying value / it is of the CMA.
- Avoid contact with the product I heat.

Prevention of fire and explosion:

- Protect against electrostatic charges.
- Keep away from sources of ignition - No smoking.
- Protect from heat.
- The enrichment of fine dust in presence of air can lead to danger of dust explosion.

7.2. Conditions for safe storage, including any incompatibilities:

- Requirements to be met by storerooms and receptacles:



Keep in a dry place



Protect from
direct sunlight



Store between
10-40 degrees

- Standards in one common storage facility: Not required
- Further information about storage conditions: Store it in a tightly sealed container in a cool, dry place.

8. Exposure controls/personal protection:

Additional information about engineering measures:
No additional information, consult section 7.

8.1. Control parameters:

Components with admissible limit values that require monitoring at the workplace: Do not exceed the values for dust concentration.

Additional information: Based on references valid at the time of processing

8.2. Personal protective equipment:

General safety and hygiene:

- Keep away from foodstuffs, beverages, and food.
- Do not eat, drink, smoke, or sniff snuff during work.
- Do not breathe dust / smoke / mist.
- Avoid contact with eyes and skin.
- Wash hands before breaks and after work. Breathing equipment:
- Surely concentrations below the value of the CMA does not require special measures.

Protection of hands:

- For use of chemical protective gloves is required.
- For handling product, I heat / cast heat resistant gloves.

Eye protection:

- Protection glasses

Body protection:

- For handling, hot / molten heat resistant protective clothing product.

9. Physical and chemical properties:

- A. Appearance: Various colors
- B. Odor: Odorless
- C. Odour Threshold: NA
- D. pH: NA
- E. Boiling Point (° C): NA
- F. Melting point (° C): 220-240
- G. Softening point (° C): 105
- H. Evaporation Rate: NA
- I. Properties Flammable / Explosive: NA
- J. Vapor pressure / vapor density: NA
- K. Relative density: 1.05
- L. Solubility: NA
- M. Octanol / water partition: NA
- N. Auto-ignition temperature: NA
- O. Decomposition temperature: NA
- P. Viscosity: NA
- Q. Other properties: NA

10. Stability and reactivity:

10.1. Reactivity:

Not applicable.

10.2. Chemical stability:

Thermal decomposition / conditions to be avoided:

- No decomposition with storage and proper handling.
- Avoid impact, friction, heat, sparks, and electrostatic charges.

10.3. Possibility of hazardous reactions:

Not applicable.

10.4. Conditions to avoid:

There is not relevant information available

10.5. Incompatible materials:

Strong oxidants.

10.6. Hazardous decomposition products:

- Irritant gases / vapours.
- Toxic gases / vapours.
- Smoke.
- Carbon monoxide (CO) and carbon dioxide (CO₂) emissions

11. Toxicological information:

11.1. Information on toxicological effects:

Not applicable

Primary irritant effect:

- On the skin: Dust may cause mechanical irritation.
- In the eye: Dust may cause mechanical irritation.
- Sensitization: No sensitizing effects known.
- Subacute to chronic toxicity: no data.
- Additional toxicological information: According to our experience and the Information we have about the product does not cause any adverse health effects when handled properly and used for the purposes specified.
- CMR effects (carcinogenicity, mutagenicity, and toxicity for reproduction). Based on current information, it is known that no CMR effects.

12. Ecological information:

12.1. Ecotoxicity:

It is not expected to be very toxic, but if ingested by birds or aquatic life, can cause adverse mechanical effects.

12.2. Movility:

Bioconcentration is not envisaged due to the high molecular weight (MW> 1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

12.3. Persistence and degradability:

This solid water-insoluble polymeric are expected to be inert in the environment. Surface degradation is expected with exposure to sunlight. Appreciable biodegradation is not expected.

12.4. Additional ecological information:

General instructions: CPA 1 (auto classification); not dangerous for water.

12.5. Results of PBT and vPvB assessment:

PBT: Not applicable.
mPmB: Not applicable.

13. Disposal considerations:

13.1. Waste treatment methods:

Recommendation: Disposal must be made according to official regulations.

European Waste Catalogue (EWC):

Allocation of waste codes according to the European waste list depends on the source generating the waste.

Contaminated packaging:

Recommendation: Disposal must be made according to official regulations.

14. Transport information:

Unregulated.

15. Regulatory information:

Not regulated.

16. Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.