

TPU-93A

UPDATE: 1.09.2020

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier Trade name: Filament TPU-93A 1,75mm; Filament TPU-93A 2,85m

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses Thermal processing: FDM/FFF

1.2.2. Uses advised against No data.

1.3. Company

Producent/Dostawca: Omni3d sp z o.o.
Adres: ul. Św Michała 43 Poznań 61-119
Telefon: 886 618 690
Adres e-mail: sales@omni3d.com

1.4. Emergency telephone number EU-wide emergency number: 112

2. HAZARD IDENTIFICATION

2.1. Classification of the substance/mixture

The preparation is not dangerous in the sense of Directive the European Commission (WE) 1272/2008.

2.2. Label elements

No data

2.3. Other hazards

Preparation/mixture without hazards for human health or environment.
Prolonged and repeated inhalation of decomposition product may cause a pulmonary oedema.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Thermoplastic Polyurethane Elastomer (TPU) >98%
Additives <2%

3.2. Mixtures

Not applicable.



4. FIRST AID MEASURES

4.1. Description of first aid measures

General Information

First Aider: Pay attention to self-protection. Provide adequate ventilation.

Inhalation

Provide adequate ventilation. In case inhalation of decomposition product, affected person should be moved into the fresh air and kept still. Consult physician.

Skin contact

The melted product can cause severe burns. Do not use force or solvents to remove product incrustations from affected skin areas. After contact with molten product, cool skin area rapidly with cold water.

Eye contact

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ingestion

Consult physician.

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

No data.

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

No data.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Water. Foam. Carbon Dioxide (CO₂), Extinguishing powder.

5.2. Special hazards arising from the substance or mixture

Carbon monoxide. Carbon dioxide. Oxides of nitrogen. Traces of hydrogen cyanide.

5.3. Advice for firefighters

In case of fire: wear self-contained breathing apparatus. Protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

High slip hazard because of leaking or spilled product.

6.2. Environmental precautions

No special environmental protection measures are necessary.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.
Do not empty into drains.



6.4. Reference to other sections

None

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide adequate ventilation. Equipment with built-in suction provisions.

7.2. Conditions for safe storage, including any incompatibilities

Keep in cool place. Provide adequate ventilation. Storage temperature: < 40°C unlimited durability. No special precautionary measures are necessary.

7.3. Specific end use(s)

Not applicable.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

So far, no national limit standards have been established.

8.2. Exposure controls

Protective and hygiene measures

Provide adequate ventilation. Equipment with built-in suction provisions. When using do not eat, drink and smoke. Do not breathe dust.

Respiratory protection

Respiratory protection necessary at: in the case of the formation of dust (half-mask with filter (DIN EN 149)).

Hand protection

Wear suitable gloves.

Eye protection

Wear eye/face protection.

Skin protection

Only wear fitting, comfortable and clean protective clothing. In case of increasing hazard add heat resistant synthetic fibers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Solid (Fiber).
Odour	Odourless.
pH	Not applicable.
Boiling point	Not applicable.
Melting point/range	180-230°C
Vapor Pressure	Not applicable.
Density at 23°C	1,16 – 1,22 gr/cm ³
Water solubility	Not soluble in water

9.2. Other information

No data.

10. Stability and reactivity

10.1. Reactivity

There is no risk of known reactivity.

10.2. Chemical stability

This material is stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

There are no dangerous reactions.

10.4. Conditions to avoid

Strong oxidizers, excessive heat, avoid contact with open flames or sparks.
Molten resin temperatures above 300°C.

10.5. Incompatible materials

No data.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Hydrogen cyanide.



11. TOXICOLOGICAL INFORMATION

11.1. Acute toxicity

Not applicable.

11.2. Skin corrosion/irritation

Not applicable.

11.3. Eye corrosion/irritation

Not applicable.

11.4. Respiratory sensitization

Not applicable.

11.5. Skin sensitization

Not applicable.

11.6. Mutagenicity

Not applicable.

11.7. Carcinogenicity

Not applicable.

11.8. Reproductive toxicity

Not applicable.

11.9. Specific target organ toxicity (single exposure)

Not applicable.

11.10. Specific target organ toxicity (repeated exposure)

Not applicable.

11.11. Aspiration hazard

Not applicable.

11.12. Further information

Not an irritant. When used and handled according to the specifications, this product does not have any harmful effects to human health according to our experience and the information available. Contact the manufacturer in case the material is to be used in special applications such as contact with food or hygiene, medical or surgical end-use.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Insoluble in water. No ecotoxicological effects. Due to the consistency along with the low water solubility of the product, bioavailability is unlikely.

12.2. Persistence and degradability

Expected to be not inherently biodegradable. Persist under anaerobic conditions.

12.3. Bioaccumulative potential

Not expected to bioaccumulate.

12.4. Mobility in soil

Floats on water. Remain on surface of soil

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Can be burnt together with household waste in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge. Refer to manufacturer/supplier for information on recovery/recycling. Material recycling possible.

14. TRANSPORT INFORMATION

14.1. UN number

ADR/RID Not available.

ADN Not available.

IMDG Not available.

ICAO-TI Not available.

IATA-DGR Not available.

14.2. UN proper shipping name

ADR/RID Not a hazardous material with respect to transportation regulations.

ADN Not a hazardous material with respect to transportation regulations.

IMDG Not a hazardous material with respect to transportation regulations.

ICAO-TI Not a hazardous material with respect to transportation regulations.

IATA-DGR Not a hazardous material with respect to transportation regulations.



14.3. Transport hazard class(es)

ADR/RID Not available.
 ADN Not available.
 IMDG Not available.
 ICAO-TI Not available.
 IATA-DGR Not available.

14.4. Transport packing group

Not available.

14.5. Environmental hazard

Not available.

14.6. Special precautions for user

Not available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulation/legislation specific for the substance or mixture

Information on EU regulations

The preparation does not need to be labeled according to Guideline 1999/45 / EC or Annex VI to Guideline 67/548 / EEC.

KBwS-No.: 766

15.2. Chemical safety assessment

Not available.

16. OTHER INFORMATION

16.1. Indication of changes

The Safety Data Sheet has been reviewed and the data therein were revised and laid out according the requirements of the Commission Regulation (EU) No. 453/2010

16.2. Abbreviations and acronyms

1272/2008 CLP: Classification, Labelling and Packaging regulation.

REACH: Registration, Evaluation and authorisation of chemical substances.

DNEL: Derive no effects level

PNEC: Predicted no effect concentration

16.3. Key literature references and sources for data

The product safety data sheet has been prepared based on the documentation provided by the manufacturer of the granulate from which the filament product was made.

16.4. Relevant R phrases and H statements

See Section 2.1 for information on Classification of the mixture.

16.5. Training advice

Not applicable.

16.6. Further information

To the best of our knowledge, the information contained in this statement is accurate as of the date of publication. The information relates only to the product identified in this document when not used in conjunction with other products or materials. Omni3D Sp. z o.o. makes no warranties, expressed or implied, and assumes no liability in connection with the use of this information.

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