

# SAFETY DATA SHEET

## TPU 98A



Date: 01.06.23

Version V 1.0

### 1 PRODUCT AND SUPPLIER INFORMATION

Tradename:

Material 4 Print TPU 98A

Manufacturer information:

Material 4 Print GmbH & Co. KG  
Scheidkamp 13  
32584 Löhne  
Germany

Recommended Use:

Additive manufacturing

### 2 RISK IDENTIFICATION

Classification:

Not classified as a dangerous product under recommended conditions according to Regulation (EC) No. 1272/2008 [CPL]

Warnings:

When heated, the product may release styrene fumes, which are harmful and irritate the respiratory tract. Ensure good ventilation.

### 3 COMPOSITION INFORMATION

Chemical characterization:

This product is free from any substances that can be harmful to human health or the environment. It does not pose any danger worldwide, as it adheres to occupational exposure limits. Furthermore, it does not contain any persistent, bioaccumulative, or toxic substances.

### 4 FIRST AID MEASURES

After inhalation:

Call a doctor if you feel unwell. Provide fresh air. Lay the casualty down, cover and keep warm.

After skin contact:

Molten product can cause severe burns. Solidified product not pull off the skin. After contact with the molten product, cool the affected skin area rapidly with water.

After swallowing:

No effects known. Rinse mouth with water and drink more water. Consult a doctor in case of complaints.

After eye contact:

Flush with water. Consult a doctor if symptoms persist.

## 5 FIRE FIGHTING MEASURES

Extinguishing agent:

Water, dry powder, foam, Carbon dioxide (CO<sub>2</sub>)

Special protective Equipment:

In case of fire, use respirator mask that is independent from outside air.

## 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and to be used in emergencies procedure:

Ensure adequate ventilation. Wear personal protective equipment

Environmental protection measures:

Do not discharge into drains or rivers.

Methods and material for containment and cleaning up:

Pick up mechanically. Treat the material taken up according to the Disposal section.  
Special danger of slipping due to leaking/spilling product.

## 7 HANDLING AND STORAGE

Handling:

Avoid contact with molten Polymer, generation of dust and electrostatic charging

Storage:

Protect from moisture and UV radiation. Store cool and when not in use keep closed.  
Avoid sources of ignition.

## 8 EXPOSURE AND PROTECTION INFORMATION

Protection and hygiene measures:

Take off contaminated clothing. Wash hands before breaks and at the end of work. Do not eat and drink at work.



Eye/face protection:

Wear Eye/face protection

Handguard:

Tested protective gloves must be worn (DIN EN 374)

Body armor:

Wear suitable protective clothing when working.

Respiratory protection:

In case of insufficient ventilation wear respiratory protection.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Filament

Color:

coloured

Melting area:

195-220°C

## 10 STABILITY AND REACTIVITY

Reactivity:

If handled and stored as intended, no dangerous reactions will occur.

Chemical stability:

The product is stable when stored at normal ambient temperatures.

Possibility of hazardous reactions:

There are no known dangerous reactions in conditions of normal use.

Conditions to avoid:

Keep away from sources of ignition - No smoking.

Incompatible materials:

Oxidizing agent, Strong caustic

Hazardous decomposition products:

Thermal degradation products can consist of a complex blend of substances, which may include, but are not limited to, CO, CO<sub>2</sub>, hydrogen cyanide, nitrogen oxides, hydrocarbons, isocyanates, and water vapor smoke.

## 11 TOXICOLOGICAL INFORMATION

Local irritation:

Dust may irritate eyes, respiratory tract and skin.

Abdominal pain or nausea is possible after swallowing.

Other notes:

If used properly, no adverse effects on human health are to be expected. In the solid state, the material has no toxicological effect. Styrene fumes released from the melt are toxic.

## 12 ENVIRONMENTAL INFORMATION

Ecotoxic effects:

Not determined

Biodegradation:

Not determined

Bioaccumulative potential:

No known significant effects or critical hazards

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### **13 DISPOSAL INSTRUCTIONS**

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Disposal:

In accordance with local and national regulations. Do not contaminate waterways or ditches with chemical or used container. For recycling, contact local waste disposal centers.

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### **14 TRANSPORT NOTICES**

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Regulations:

The substance is not classified as dangerous for the transport according to ADR/ADNR/RID/IMDG/ICAO/IATA/GGVSee

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### **15 REGULATORY INFORMATION**

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Regulations:

According to EC directives, this product does not have to be labeled

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### **16 FURTHER INFORMATION**

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The information in this safety data sheet corresponds to our knowledge to the best of our knowledge. The information is intended to give you clues for the safe handling of the in this Product specified in the safety data sheet during storage, processing, transport and disposal. The Specifications cannot be transferred to other products. It is the responsibility of the recipient to comply with the applicable legal regulations governing the use of this product.