

# SAFETY DATA SHEET

## PLA



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Date: 01.06.22

Version V 1.0

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### 1 PRODUCT AND SUPPLIER INFORMATION

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Tradename:

Material 4 Print PLA

Manufacturer information:

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

Recommended Use:

Additive manufacturing

### 2 RISK IDENTIFICATION

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Classification:

According to Regulation (EC) NO 1272/2008: Not classified as a dangerous product

Label Warnings:

None

Other hazards:

Risk of burns from contact with hot polymer. Dangerous fumes when burning.

### 3 COMPOSITION INFORMATION

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Chemical characterization:

This product is based on polylactic acid with additives

### 4 FIRST AID MEASURES

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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

Autoignition temperature:

388°C

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:

150-180°C

Decomposition temperature:

250°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.

Conditions to avoid:

Keep away from sources of ignition - No smoking.

Incompatible materials:

Oxidizing agent, Strong caustic

Hazardous decomposition products:

In case of fire may be liberated: aldehydes, carbon monoxide, carbon dioxide (CO<sub>2</sub>).

## 11 TOXICOLOGICAL INFORMATION

Local irritation:

Dust may irritate eyes, respiratory tract and skin. After swallowing are  
Abdominal pain or nausea possible.

Other notes:

No known significant effects or critical hazards

## 12 ENVIRONMENTAL INFORMATION

Ecotoxic effects:

Not determined

Biodegradation:

Not determined

Bioaccumulative potential:

No known significant effects or critical hazards

Toxicity:

EC50/72h/algae > 1100mg/L

## 13 DISPOSAL INSTRUCTIONS

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:

PLA is not classified as dangerous for transport according to ADR/RID/IMDG/ICAO/IATA.

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## 15 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.