

# Material Safety Data Sheet

PLA

## SECTION 1: Hazards Identification

### 1.1 Classification of the product

The fibres are an article and do not contain hazardous substances above classification limits stated in Directive 1999/45/EC or CLP Regulation 1272/2008/EC

### 1.2 Label elements

Not required

### 1.3 Other hazards

When utilised as intended no specific hazards or adverse health effects have so far become apparent. May be harmful if swallowed. Danger of burns while handling the hot product.

## SECTION 2: Composition/information on ingredients

### 2.1 Chemical identity of the article (The following information serve as guidance for the entire range of diameters and colour agents)

**Composition:** Polylactide fibre based on Polylactide (CAS-No 9051-89-2), eventually prepared with a colour agent

**Hazardous ingredients:** None which have to be classified

## SECTION 3: First aid measures

### 3.1 Description of first aid measures

#### After Inhalation

##### - of dust or airborne fibres:

Persons subjected to excessive levels of dust, should seek fresh air or seek medical attention if coughing or other symptoms persist.

##### - of products after decomposition in the event of fire:

Seek fresh air and place the person in the recovery position. Seek medical advice immediately

#### After contact with skin:

No special measures necessary.

#### After contact with eyes:

The eyes should be immediately flushed with plenty of water. If the irritation persists, medical attention should be sought.

#### After ingestion:

Induce vomiting if large quantities are swallowed. Seek medical attention

### 3.2 Most important symptoms and effects, both acute and delayed

After Inhalation of toxic fumes in the event of a smouldering fire: smoke intoxication. Seek medical advice immediately

## SECTION 4: Firefighting measures

### 4.1 Extinguishing media

#### Suitable extinguishing media

water spray jet, foam, CO<sub>2</sub>, extinguishing powder

#### Not suitable

Full water jet

### 4.2 Special hazards arising from the substance or mixture

In case of fire, the hazardous combustion gases are carbon monoxide and carbon dioxide, nitrogen oxides, and also low-molecular organic compounds depending on temperature and air flow.

### 4.3 Advice for firefighters

Use self-contained breathing apparatus during operations in closed rooms and immediate vicinity of fires. It is to be expected that the firefighting water may contain some proportion of organic substance as TOC (total organic carbon) or rather COD (chemical oxygen demand) due to the decomposition products generated by the fire. As the concentration of water pollutants naturally depends on the fire behaviour and the quantity of firefighting water, it is recommended to catch the firefighting water as far as possible in the case of larger fires. Prior to the discharge into the sewage system, consent of the competent authority must be obtained. No unusual difficulties are anticipated regarding the functioning of biological sewage treatment plants.

## SECTION 5: Accidental release measures

### 5.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation

### 5.2 Environmental precautions

Investigate possibility of reuse or properly dispose of waste

### 5.3 Methods and material for containment and cleaning up

Collect the product mechanically, vacuum-clean any dust

## SECTION 6: Handling and storage

### 6.1 Precautions for safe handling

Avoid dust formation. Ensure adequate ventilation and aspiration at the workplace. Keep away sources of ignition. Keep in mind the effects of electrostatic charging.

### 6.2 Conditions for safe storage, including any incompatibilities

All supply units are to be secured in storage, especially when stacking, so that they are not damaged by shifting or falling down, and to prevent injury. Regarding thermal load, the fire safety requirements must be observed.

Protect the product from dirt, moisture, direct sunlight and open flames! Storage class (VCI): 11 (flammable solids).

## SECTION 7: Exposure controls/personal protection

### 7.1 Control parameters

#### Occupational exposure limits:

dust	-respirable fraction:	Germany (TRGS 900) MAC: 3 mg/m <sup>3</sup>
	-inhalable fraction:	Germany (TRGS 900) WEL: 10 mg/m <sup>3</sup>

### 7.2 Personal protective equipment

#### Skin protection:

Processing of fibres at high speeds may cause abrasive injuries and cuts. According protective measures must be maintained.

#### Eye protection:

Adequate protection measures are to be observed.

#### Respiratory protection:

If inhalation of dust can be avoided no further precautions are required, except in case of fire or if local ventilation/aspiration is insufficient (see points 4 and 5.).

**Hygiene at work:**

The general requirements for industrial hygiene are observed. Wash hands thoroughly before eating or smoking and after work use soap and water. Regular cleaning of machines, working areas and clothes must be conducted.

**SECTION 8: Physical and chemical properties**

**8.1 Information on basic physical and chemical properties**

<b>Appearance</b>	monofilament
<b>Aggregate state:</b>	Solid.
<b>Smell:</b>	Odourless
<b>Softening temperature:</b>	170°C to 180°C (depending on type)
<b>Density:</b>	ca. 1,25 g/cm <sup>3</sup>
<b>Vapour pressure:</b>	not applicable
<b>Solubility in water (20°C):</b>	insoluble
<b>Solubility in solvents:</b>	soluble in some solvents
<b>Temperature of decomposition:</b>	≥ 270°C (depending on type)

**8.2 Other Information**

None

**SECTION 9: Stability and reactivity**

**9.1 Reactivity**

None

**9.2 Chemical stability**

Chemically stable

**9.3 Possibility of hazardous reactions**

Poly lactide fibres can be decomposed by:

- strong bases
- strong acids
- strong oxidants

**9.4 Conditions to avoid**

Temperatures above 270°C

**9.5 Incompatible materials**

strong bases, strong acids, strong oxidants

**9.6 Hazardous decomposition products**

Carbon monoxide, carbon dioxide, soot and low molecular weight organic decomposition products

**SECTION 10: Toxicological information**

**10.1 Information on toxicological effects**

The intended use of the fibre product has not been known to produce adverse health consequences.

## SECTION 11: Ecological information

### 11.1 Toxicity

The product is not known to be toxic to the environment.

### 11.2 Persistence and degradability

The product is biodegradable

### 11.3 Bioaccumulative potential

The product is insoluble in water and not bioaccumulable

### 11.4 Mobility in soil

None

### 11.5 Result of PBT and vPvB assessment

No evaluation carried out. The product is not bioaccumulative

### 11.6 Other adverse effects

The product is not hazardous to water in the sense of § 19g WHG paragraph 5 (Water Resources Act).

## SECTION 12: Disposal considerations

### 12.1 Waste treatment methods

Where recycling is not possible, the article may be landfilled in compliance with local regulations or burned in suitable incineration plants.

## SECTION 13: Transport information

### 13.1 GGVSee/IMDG Code:

Non-hazardous substance

### 13.2 GGVSE, RID/ADR:

Non-hazardous substance

### 13.3 ADNR:

Non-hazardous substance

### 13.4 ICAO/IATA-DGR:

Non-hazardous substance

### 13.5 Additional information

Protect the product from dirt, moisture, direct sunlight and open flames! Keep separate from oxidising agents, acids and bases!

## SECTION 14: Regulatory information

### 14.1 EU legislation

The fibre article is not subject to classification according to EC directives.

### 14.2 National regulations for Germany

Water pollution class (WGK):

Not a water hazard according to § 19g Section 5 WHG (Water Resources Act) as well as in accordance with VwVwS (Administrative Regulations for Water Polluting Substances): Identification Code 766 (plastics, granules, for example, molded parts, fibres, films, plastic resins, as far as these are solid, not dispersed, insoluble in water and indifferent)

## SECTION 15: Other information

### 15.1 Miscellaneous

The information in this data sheet relate solely to the fibre articles described herein, and are not to be used in combination with any other substance or preparation or product or in any other procedure. The purpose of this data sheet is the protection of humans and the environment on the basis of information provided to the commercial users of chemical fibres. It is not intended for private consumers. In the event that the article is intended for usage in specific applications, such as for example, the food industry, the hygiene, medical or surgical sector, please contact the manufacturer first. The information in this data sheet reflect the current knowledge of the party completing the form at the data of issue. These are not contractually binding guarantees of article properties.

\*) The synthetic fibre is an article and not subject to the European Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Safety Data Sheets or chemical safety reports under Article 31 or rather Article 14 of this act are therefore not necessary. This data sheet was voluntarily drawn up in line with Annex II to this regulation under the aspect of Responsible Care.

## SECTION 16: Emergency contact

**Contact:**

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