

PLA 45

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

PLA 45

1.2 Company Identification

Orbi-Tech GmbH, Motlekstrasse 25, 42799 Leichlingen, Germany

Section 2. Hazards Identification

2.1 Classification

Not dangerous according to Directive 67/548/EEC

2.2 Special advice on hazards:

Danger of burns in contact with hot polymer. Hazardous vapours in case of burning.

Section 3. Composition / information on ingredients

3.1 Chemical characteristics:

Biodegradable polymer-blend based on polylactic acid (PLA), contains additives.

3.2 Additional information:

no harmful ingredients

Section 4. First-aid measures

4.1 On skin contact:

In case of contact with molten polymer immediately cool the skin with cold water. Medical aid may be required to remove adhering material and for treatment of burns.

4.2 After inhalation:

After inhalation of decomposition gases or dust remove patient to fresh air. Contact a doctor in case of discomfort.

4.3 On ingestion:

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

4.4 On eyes contact:

Rinse open eyes thoroughly with water

Section 5. Fire-fighting measures

5.1 Suitable fire extinguishing media:

water, dry chemical extinguisher, foam, carbon dioxide

5.2 Special exposure hazards:

During incomplete combustion release of carbon monoxide, tetrahydrofurane and harmful vapors can occur.

5.3 Special protective equipment:

Self-contained breathing apparatus

5.4 Remark:

Accumulations of dust can be inflammable.

Section 6. Accidental release measures

6.1 Personal precautions:

Use suitable protective clothing. Avoid eye contact and inhalation of dusts. Keep ignition sources away.

6.2 Methods for cleaning up:

Sweep up material and place in a container, risk of slipping. Avoid ingress of material into drainage systems.

Section 7. Handling and storage

7.1 Handling:

Avoid generation of dust and contact with molten polymer. Avoid sources of ignition.

7.2 Storage:

Protect against moisture and extreme heat. Keep packaging closed when not in use.

Section 8. Exposure controls/ personal protection

8.1 Technical safety measures:

With suitable ventilation the threshold limits assumably will not be reached.
Avoid electrostatic charge by use of grounding cables.

8.2 Personal safety equipment:

Use adequate safety equipment, e.g. protective clothing, eye protection glasses, heat protection gloves. In case of dust formation wear mask with particle filter.

8.3 Work hygiene:

No eating or drinking during working. Avoid contact of hot material with the skin.
Avoid breathing dust and vapours.

Section 9. Physical and chemical properties

9.1 Form:

Granules / Filament

9.2 Colour:

yellowish, transparent

9.3 Odour:

almost odourless

9.4 Melting range:

152 -173 °C

9.5 Oxidising properties:

not self igniting / flammable

9.6 Explosions limits:

not applicable

9.7 Density:

1.25 g/cm³

9.8 Solubility in water:

insoluble

Section 10. Stability and reactivity

10.1 Stability:

The product is stable at recommended storage conditions.

10.2 Conditions to be avoided:

Avoid exposure to extreme heat and all sources of ignition.
Thermal decomposition > 235°C.

10.3 Substances to be avoided:

Strong oxidizing agents

10.4 Hazardous decomposition products:

Carbon monoxide, carbon dioxide, aldehydes, tetrahydrofurane, low molecular weight oligomers.

Section 11. Toxicological information

11.1 Local irritation:

Dust can cause irritation of eyes, respiratory organs and skin.
After ingestion stomach pain or nausea are possible.

11.2 Other remarks:

Based on our state of knowledge and experience noninjurious health effects are expected if product is properly handled for the designated use.

Section 12. Ecological information

12.1 Ecotoxicological effects:

No negative ecological effects known at the present state of knowledge, test results are not available.
Due to insolubility in water most probably not hazardous to aquatic organisms.

12.2 Biological degradation:

Biological degradability is to be tested.

12.3 Bioaccumulation:

Due to its consistency and insolubility in water biological accumulation is not expected.

Section 13. Disposal considerations

13.1 Product:

Generation of waste should be minimised, check possibility for recycling.
Waste product can be incinerated or dumped together with domestic waste in compliance with local authority requirements.

13.2 Uncleaned packaging:

Packaging material has to be emptied completely and disposed in accordance with the regulations.
Packaging can be recycled if not contaminated.

Section 14. Transport information

14.1 Transport regulations:

Not classified as hazardous under transport regulations ADR, ADNR, RID, ICAO/IATA, IMDG/GGVSee, ICAO/IATA

Section 15. Regulatory information

15.1 EU regulations:

This product does not require a hazard warning label in accordance with EC Directives.

15.2 Water exposure class (Germany):

'nwg' , no risk of water pollution (classification acc. Att. 1 of VwVwS)

Section 16. Other Information

Orbi-Tech GmbH urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.