

PLA

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

1.1 Product identifiers

Product Name PLA

1.2 Company Identification

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

Section 2. Hazards Identification

2.1 Emergency Overview

CAUTION! May cause eye/skin irritation. Burning produces obnoxious and toxic fumes. Avoid contact with skin and eyes. Avoid formation of dust and aerosols

Appearance:	Clear, translucent, opaque, pellets.	noted following ingestion or dermal exposure in animal studies.
Color:	Clear Translucent Opaque	Sensitization: Did not cause sensitisation on laboratory animals
Physical state:	Solid	Specific hazards: No information available
Odor:	Sweet	Flammability: Fine dust dispersed in air may ignite.
Potential health effects:		Environmental precautions: Not determined See Section 12 for more information.
Eye contact: irritation.	Contact with eyes may cause	NFPA rating: Data not available
Skin contact: irritation.	Substance may cause slight skin	Health: 1 Flamm: 1 Reactivity: 1
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.	HMIS classification: Health: 1 Flamm: 1 Reactivity: 0
Inhalation:	Inhalation	Personal Protective Equipment: Not determined
Target organ effects:	There were no target organ effects	

Section 3. Information on Ingredients

This material can generate Particulates Not Otherwise Classifiable (PNOC). The Occupational Safety and Health Administration (OSHA) PEL/TWA for PNOC is 15 mg/m³ for total dust and 5 mg/m³ for the respirable fraction. The American Conference of Governmental Industrial Hygienists (ACGIH) TLV/TWA for PNOC is 10 mg/m³ for inhalable particulates and 3 mg/m³ for respirable particulates.

Section 4. First Aid Measures

4.1 Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

4.2 Skin contact

Rinse immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Cool skin rapidly with cold water after contact with hot polymer.

4.3 Inhalation

Move to fresh air. Call a physician immediately.

4.4. Ingestion

Drink water as a precaution. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a physician immediately.

4.5 Notes to physician

Treat symptomatically.

Section 5. Fire Fighting Measures

5.1 Flammability

Autoignition temperature: 388C

5.2 Flammability Limits in Air

Flammable limits in air - lower (%): Not applicable

Flammable limits in air - upper (%): Not applicable

5.3 Suitable extinguishing media

Foam. Water. Carbon dioxide (CO₂). Dry chemical. Alcohol resistant foams are preferred if available. General-purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively.

5.4 Extinguishing media which must not be used for safety reasons

No information available

5.5 Hazardous decomposition products

Burning produces obnoxious and toxic fumes Aldehydes Carbon monoxide (CO) carbon dioxide (CO₂)

5.6 Special protective equipment for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.7 Under fire conditions

Cool containers / tanks with spray water. Water mist may be used to cool closed containers.

5.8 Other information

Fine dust dispersed in air may ignite. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

Section 6. Accidental Release Measures

6.1 Personal precautions

Use personal protective equipment. See Section 8. Remove all sources of ignition. Avoid dust formation. Avoid contact with skin and eyes. Sweep up to prevent slipping hazard.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

6.3 Methods for cleaning up:

Shovel into suitable container for disposal.

Section 7. Handling and Storage

7.1 Safe handling advice

Avoid contact with skin and eyes. Avoid dust formation. Workers should be protected from the possibility of contact with molten material during fabrication. Low hazard for usual industrial or commercial handling. Use personal protective equipment. See Section 8.

7.2 Storage:

Store in cool place. Keep at temperatures below 122F (50 °C). No special restrictions on storage with other products

7.3 Precautions:

No special precautions required

Section 8. Exposure Controls / Personal Protection

8.1 Engineering measures

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide appropriate exhaust ventilation at places where dust is formed.

8.2 Control parameters

None

8.1 PERSONAL PROTECTIVE EQUIPMENT

Eye protection: Safety glasses with side-shields. Goggles.

Skin and body protection: Impervious clothing.

Respiratory protection: Respirator must be worn if exposed to dust. Wear respirator with dust filter.

Respiratory protection is needed if any of the exposure limits are exceeded. Consult an industrial hygiene professional prior to respirator selection and use. Use a positive-pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Hand protection: Preventive skin protection.

Hygiene measures: Avoid contact with skin, eyes and clothing.

Section 9. Physical and Chemical Properties

Appearance:	Clear, translucent, opaque, pellets.	Evaporation rate:	Not determined
Color:	Clear, Translucent, Opaque	Density:	1.24 g/cc
Physical state:	Solid	Boiling point/range:	Not applicable
Odor:	Sweet	Decomposition temperature:	482F (250C)
pH:	Not applicable	Melting point/range:	Not determined
Vapor pressure:	Not determined	Water solubility:	Insoluble
Vapor density:	Not determined	Solubility in other solvents:	None known

Section 10. Stability and Reactivity

Stability: Stable under recommended storage conditions

Conditions to avoid: Temperatures above 446F (230 °C).

Materials to avoid: Oxidizing agents. Strong bases.

Hazardous decomposition products: Burning produces obnoxious and toxic fumes. Aldehydes. Carbon monoxide (CO). carbon dioxide (CO₂).

Polymerization: Not applicable

Section 11. Toxicological Informations

Principle Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Acute toxicity: There were no target organ effects noted following ingestion or dermal exposure in animal studies.

Local effects: May cause eye/skin irritation. Product dust may be irritating to eyes, skin and respiratory system. Caused mild to moderate conjunctival irritation in eye irritation studies using rabbits. Caused very mild redness in dermal irritation studies using rabbits (slightly irritating). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Long term toxicity: Did not cause skin allergic reactions in skin sensitization studies using guinea pigs.

Specific effects: May cause skin irritation and/or dermatitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Burning produces irritant fumes.

Mutagenic effects: Not mutagenic in AMES Test.

Reproductive toxicity: No data is available on the product itself.

Carcinogenic effects: No data is available on the product itself.

Target organ effects: There were no target organ effects noted following ingestion or dermal exposure in animal studies.

Skin: LD50/dermal/rabbit > 2000 mg/kg

Ingestion: LD50/oral/rat > 5000 mg/kg.

Section 12. Ecological Information

Mobility: No data available

Bioaccumulation: Does not bioaccumulate. Inherently biodegradable.

Ecotoxicity effects: EC50/72h/algae > 1100 mg/L

Section 13. Disposal Considerations

Waste from residues / unused products: In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. Contact manufacturer.

THE COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION.

Contaminated packaging: Empty remaining contents. Do not re-use empty containers. Empty containers should be transported/delivered using a registered waste carrier to local recyclers for disposal.

Section 14. Transport Information

U.S. Department of Transportation (DOT):

Proper shipping name: Not regulated as a hazardous material.

IMDG:

Proper shipping name: None

Hazard class: Not regulated.

ICAO/IATA:

Proper shipping name: None

UN/Id No.: None

Packing group: None

Hazard Class: Not regulated.

Packing group: None

Section 15. Regulatory Information

(Not meant to be all inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the print date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

Sara 313 title III: Not Listed

TSCA Inventory List - Listed

STATE REGULATIONS

California Proposition 65 Not Listed

INTERNATIONAL INVENTORIES

Canada DSL Inventory List : Listed

REACH/EU EINECS List : Components are in compliance with and/or are listed.

Japan (ECL) : Listed

Australia (AICS): Listed

Korean chemical inventory: Listed

Phillipines (PICCS) inventory: Not Listed

China inventory of existing chemical substances list : Listed

Section 16. Other Information

The information herein is given in good faith, but no warranty, express or implied, is made. Consult the company for further information.

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: The company does not recommend any of its products, including samples, for use: (A) in any application which is intended for any internal contact with human body fluids or body tissues (B) as a critical component in any medical device that supports or sustains human life; and (C) specifically pregnant women or in any applications designed specifically to promote or interfere with human reproduction.

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.