PLA-36

UPDATE: 1.09.2020

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier	Trade name Filament PLA 1,75mm; Filament PLA 2,85mm

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses	Thermal processing: FDM/FFF
1.2.2. Uses advised against	No additional information.

1.3. Company

Producent/Dostawca: Omni3d sp z o.o.
Adres: ul. Św Michała 43 Poznań 61-119
Telefon: 886 618 690
Adres e-mail: sales@omni3d.com

1.4. Emergency telephone number	EU-wide emergency number: 112

2. HAZARD IDENTIFICATION

2.1. Classification of the substance/mixture

This product is not classified according to 29CFR1910.1200 Hazard Communication Standard 2021.

2.2. Label elements

Hazard Statement: None.
Precautionary Statement: None.
Signal word: None.
Potential health effects: See Section 11 for more information.
Environmental precautions: See Section 12 for more information.

2.3. Other hazards

If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. See Section 7 and 8 for additional information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical name	CAS No.	Weight %	OSHA Exposure Limits	ACGIH Exposure Limits
Polylactide resin	9051-89-2	> 98	None	None

Other standards: This material can generate Particulates Not Otherwise Classifiable (PNOC). This Occupational Safety and Health Administration (OSHA) PEL/TWA for PNOC is 15 mg/m3for total dust and 5 mg/m3 the respirable fraction. The American Conference of Governmental Industrial Hygienists (ACGIH) TLV/TWA for PNOC is 10 mg/m3for inhalable particulates and 3 mg/m3for respirable particulates.

3.2. Mixtures

Not applicable.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Eye contact

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

Skin contact

Adverse effects are not expected from accidental skin contact following occupational exposure. After contact with skin, wash immediately with plenty of water. If skin irritation persists, call a physician. Cool skin rapidly with cold water after contact with hot polymer. Do not attempt to remove hot polymer from skin or contaminated clothing as skin may be easily damaged. Call a physician immediately.

Inhalation

Move to fresh air. Call a physician immediately.

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.

4.2. Most important symptoms and effects, both acute and delayed

No additional information.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

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.

5.2. Special hazards arising from the substance or mixture

No additional information.

5.3. Advice for firefighters

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.
Under fire conditions: cool containers with water spray. Water mist may be used to cool closed containers. Fine dust dispersed in air may ignite. Risks of ignition followed be flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with skin and eyes. Avoid dust formation. Remove all sources of ignition. 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 and material for containment and cleaning up

Clean up promptly by scoop or vacuum. Sweep up and shovel into suitable containers for disposal.

6.4. Reference to other sections

No additional information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Use personal protective equipment. Avoid contact with skin and eyes. Low hazard for usual industrial or commercial handling. Workers should be protected from the possibility of contact with molten material during fabrication. Avoid dust formation. If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form.

7.2. Conditions for safe storage, including any incompatibilities

Store at temperatures not exceeding 50°C/ 122°F. Keep cool. No special restrictions on storage with other products.

7.3. Specific end use(s)

See section 1 for information on 1.2. Relevant identified uses.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

None established. 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.

8.2. Exposure controls

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.

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 in Section 3 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.

Special hazard

Workers should be protected from the possibility of contact with molten material during fabrication.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	solid (filament).
Odor	sweet.
pH	not applicable.
Vapor pressure	not determined.
Vapor density	not determined.
Evaporation rate	not determined.
Density	1.25
Decomposition temperature	250°C.
Boiling point/boiling range	not applicable.
Melting point/melting range	150 – 180°C.
Glass Transition Temperature	55 – 60°C.
Autoignition temperature	388°C.
Water solubility	insoluble.
Solubility in other solvents	not determined.

9.2. Other information

No additional information.

10. Stability and reactivity

10.1. Reactivity

None expected under conditions of normal use.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

None under normal use conditions are anticipated.

10.4. Conditions to avoid

Temperatures above 230°C. Avoid keeping resin molten for excessive periods of time at elevated temperatures. Prolonged exposure will cause polymer degradation

10.5. Incompatible materials

Oxidizing agents, Strong bases.

10.6. Hazardous decomposition products

Burning produces obnoxious and toxic fumes, Aldehydes, Carbon monoxide, carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1. Acute toxicity

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

11.2. Skin corrosion/irritation

May cause skin irritation and/or dermatitis.

11.3. Eye corrosion/irritation

Product dust may be irritating to eyes. Resin particles, like other inert materials, are mechanically irritating to eyes.

11.4. Respiratory sensitization

Product dust may be irritating to respiratory system. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Burning produces irritant fumes.

11.5. Skin sensitization

Product dust may be irritating to skin.

11.6. Mutagenicity

Not mutagenic in AMES Test.

11.7. Carcinogenicity

None of the components of this product are listed as carcinogens by IARC, NTP, or OSHA.

11.8. Reproductive toxicity

No data is available on the product itself.

11.9. Specific target organ toxicity (single exposure)

In animal studies, no effects on target organs were found after ingestion or dermal exposure.

11.10. Specific target organ toxicity (repeated exposure)

Did not cause skin allergic reactions in skin sensitization studies using guinea pigs.

11.11. Aspiration hazard

No data.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

EC50/72h/algae > 1100mg/L

12.2. Persistence and degradability

Does not bioaccumulate. Inherently biodegradable.

12.3. Bioaccumulative potential

Does not bioaccumulate. Inherently biodegradable.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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 material. The information presented here pertains only to the product as shipped in its intended condition.

Contaminated packaging
Empty remaining contents. Empty containers should be transported/delivered using a registered waste cattier to local recyclers for disposal.

14. TRANSPORT INFORMATION

14.1. Un number

IMDG: none. .
ASR/RID: none.

14.2. UN proper shipping name

IMDG: none.
ICAO/IATA: none.
ASR/RID: none.

14.3. Transport hazard class(es)

IMDG: none.
ICAO/IATA: none.
ASR/RID: none.

14.4. Packing group

IMDG: none.
ICAO/IATA: none.
ASR/RID: none.

14.5. Environmental hazard

No data available.

14.6. Special precautions for user

No data available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulation/legislation specific for the substance or mixture

(Not meant to be all inclusive--selected regulations represented)
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INTERNATIONAL INVENTORIES
Canada DSL Inventory List: listed.
REACH/EU EUNECS List: listed.
Japan (ELC): listed.
Australia (ACIS): listed.
Korean chemical inventory: listed.
Philippines (PICCS) inventory: not listed.
China inventory of existing chemical substances list: listed.

15.2. Chemical safety assessment

This product is NOT classified as hazardous according to Regulation EU 1272/2008 or with Directive 67/548/EEC as amended.

16. OTHER INFORMATION

16.1. Indication of changes

Updated to comply with 1907/2006/EC

16.2. Abbreviations and acronyms

No additional information.

16.3. Key literature references and sources for data

The product safety data sheet has been prepared based on the documentation provided by the manufacturer of the granulate from which the filament product was made.

16.4. Relevant R phrases and H statements

No data available.

16.5. Training advice

None.

16.6. Further information

To the best of our knowledge, the information contained in this statement is accurate as of the date of publication. The information relates only to the product identified in this document when not used in conjunction with other products or materials. Omni3D Sp. z o.o. makes no warranties, expressed or implied, and assumes no liability in connection with the use of this information.

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