Information sheet pursuant to art. 32 of REACH Regulation

SECTION 1. Substance/mixture and company/firm identification

1.1. Product identifier

Code: *PLA*****

Name **PLA**

1.2. Relevant use of substance or mixture and non-recommended uses

Description/Use **Filament for 3D printers**

Base material: **Polylactic acid (>90%)**

1.3. Details of safety data sheet provider

Business Name Ciceri De Mondel s.r.l. Single partnership company

Address Via Galvani 13,

District and country 20080 Ozzero (MI), Italy

Tel 02 94969697-Fax 029421720

E-mail of person
responsible for safety data sheet INFO@FILOALFA3D.COM

1.4. Emergency telephone number
For urgent information contact **Tel: +39 0294969697**

SECTION 2. Hazard identification.

2.1. Substance or mixture classification.

Product is not classified as hazardous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and supplements).

2.2. Labelling.

Product does not require hazard label in accordance with Regulation (EC) 1272/2008 (CLP) and subsequent amendments and supplements.

2.3. Other hazards.

Based on the available data, this product does not contain more than 0.1% of PBT or vPvB substances.
Product is a filament shaped polymer compound.
Product may generate powder during processing.
Any volatile powder and particles, released during handling, could irritate eyes, skin and mucous membranes. Grinding printed pieces could exacerbate these phenomena.
This product is not flammable, however, if powder is dispersed into the air, explosive atmospheres could form if subject to a source of ignition.

SECTION 3. Composition/information on ingredients.

3.2. Mixtures.

Product does not contain such quantities of substances classified as hazardous to health or the environment pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and supplements) to be declared in this section

SECTION 4. First aid measures.

4.1. Description of first aid measures.

Product is not classified as hazardous in accordance with the provisions set out in reg. (EC) 1272/2008 (CLP) and subsequent amendments and supplements and therefore does not require specific first aid measures to be identified. However, the following measures are included as a precautionary measure:

EYES: remove any contact lenses. Wash with water for at least 10 minutes, opening the lids well. Consult a doctor if the problem persists, or if you experience irritation.
SKIN: take off contaminated clothing. Wash the affected area with water. Seek medical attention if the problem persists.
INHALATION: take the individual into the open air. Call a doctor immediately if they are having difficulty in breathing.
INGESTION: Seek medical attention immediately. Induce vomiting only on the advice of the doctor. Do not give anything by mouth if the person is unconscious and unless authorized by the doctor.

4.2. Main symptoms and effects, both acute and delayed.

For symptoms and effects caused by the substances it contains, see Chapter 11.

4.3. Indication of possible need to seek immediate medical attention and special treatment.

Information not available.

SECTION 5. Fire-fighting measures.

5.1. Fire-extinguishing agents.

SUITABLE FIRE EXTINGUISHING AGENTS
Traditional agents are used such as: carbon dioxide, foam, powder and water spray.
UNSUITABLE FIRE EXTINGUISHING AGENTS
None in particular.

5.2. Special hazards resulting from substance or mixture.

HAZARDS DUE TO EXPOSURE IN THE EVENT OF A FIRE
Avoid breathing in products of combustion (mainly carbon monoxide, but also products resulting from the partial decomposition or oxidation of polymers: carbon monoxide, toxic fumes and aldehydes. This product is combustible and could result in an explosive mixture with the air when there is a sufficient concentration of powder dispersed in the air and a source of ignition. Fire can even develop or be further fuelled by solid material escaping from the container, when it reaches high temperatures or comes into contact with sources of ignition.

5.3. Recommendations for fire-fighters.

GENERAL INFORMATION
Cool down containers with water to prevent product from decomposing and avoid substances potentially hazardous to human health developing. Always wear full fire protection equipment. Collect water used to extinguish fire that must not be drained into sewers. Dispose of contaminated water used to extinguish fire and waste in accordance with the regulations in force.
EQUIPMENT
Normal fire-fighting clothing, such as flame resistant (EN469) open-circuit compressed air breathing equipment (EN 137), flame resistant gloves (EN 659) and firefighter boots (HO A29 or A30).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

For those not intervening directly
Alert staff responsible for managing these emergencies. Move away from the area in question if dust forms following the leakage of material.

For emergency responders

Get all staff not adequately equipped to deal with the emergency to move away from the area. Remove any source of ignition or fuel from the area where the leak occurred.
Wear suitable protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of the skin, eyes and personal clothing. Wear a protective mask if the leakage of material has resulted in the formation of dust.
Only make the affected area available to workers once it has been adequately decontaminated. Ventilate the premises involved in the incident.

6.2. Environmental precautions.

Contain leakage and prevent leaked materials dispersing into the environment or draining into sewers. Contaminated surfaces may be sippery**.**

6.3. Containment and Cleaning methods and materials.

Collect all scattered product with mechanical equipment and eliminate traces of dust; recover or dispose of material according to the regulations in force. It is best to wash any surfaces contaminated with dust with water, preventing contaminated liquid draining into the sewers. Use of absorbent material (sand, diatomaceous earth, acid binder, universal binder, sawdust): normally not required.

6.4. Reference to other sections.

Refer to section 2 for any precautions mentioned, section 7 for handling regulations and section 8 for personal protective equipment.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Safety precautions: this product should be used by appropriately trained staff in accordance with the code of good practice applied to the operational situation. See section 8 for personal protective equipment.
Containment, local and general ventilation: do not inhale any dust present, avoiding contact with the skin or eyes; contain possible spread of dust and fumes. Electrical equipment must be adequately protected in accordance with the appropriate standards. Preparation may become electrostatically charged, make sure systems are earthed correctly when transferring the product from one container to another.
Collection and disposal of spillages: check and remove any leaked or spilt materials. Make sure areas where materials are moved and handled are perfectly clean.
Recommended equipment and user procedures: it is best to wear protective gloves and comply with good industrial hygiene practices when handling material. Wash your hands thoroughly before accessing eating areas.

7.2. Safe storage conditions, including any incompatibilities.

Keep material stored in clearly identified containers. Protect from humidity and direct sunlight.
Incompatible materials: avoid storing in warehouses for flammable products.

7.3. Specific end uses.

Information not available.

SECTION 8. Personal exposure/protection control.

8.1. Control parameters.

Dust could form when handling the product.
It is recommended that professional exposure limits provided for in ACGIH governing inert particles not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3) are considered during the risk assessment process. It is recommended that a type P filter is used if these limits are exceeded. Its class (1, 2 or 3) must be chosen according to the outcome of the risk assessment.
Machining at high temperatures (e.g. extrusion or injection moulding) may result in compounds which are potentially harmful to health (carbon monoxide, toxic fumes).

8.2. Exposure controls.

Observe the usual precautionary measures when handling chemicals.

HAND PROTECTION
Not necessary, unless otherwise specified in chemical risk assessment.

SKIN PROTECTION
Not necessary, unless otherwise specified in chemical risk assessment.

EYE PROTECTION
Not necessary, unless otherwise specified in chemical risk assessment.

RESPIRATORY PROTECTION
It is best to use a facial mask with type P filter (ref. standard EN 149), or equivalent device, whose class (1, 2 or 3) and actual need must be defined according to outcome of risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS.

Production process emissions, including those from ventilation equipment should be checked to make sure they comply with environmental protection standards.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Physical State	Solid filament
Colour	Various
Smell	Characteristic of plastic material.
Odour threshold	Not available.
pH	Not applicable.
Melting or freezing point	160-165° c.
Initial boiling point	Not applicable.
Boiling range	Not available.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability of solids or gases	Non-flammable solid.
Lower flammability limit.	Not available.
Upper flammability.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Relative density.	1.24 g/cc
Solubility	Insoluble in water.
Distribution coefficient: n-octanol/water	Not available.
Auto-ignition temperature.	388° c.
Decomposition temperature.	230° c.
Viscosity	Not applicable.
Explosive properties	Not applicable (no chemical groups associated with explosive properties in accordance with the provisions of accompanying document I, part 2, chap. 2.1.4.3 of Reg. (EC) 1272/2008-CLP).
Oxidizing properties	Not applicable (no requirements linked to the presence of atoms and/or chemical binding agents associated with the oxidizing properties in the molecules of components in accordance with the provisions set out in accompanying document I, part 2, 2.13.4 of Reg. (EC) 1272/2008 – CLP).

9.2. Other information.

Information not available.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

There are no particular dangers of reaction with other substances under normal operating conditions.

10.2. Chemical stability.

Product is stable under normal user and storage conditions.

10.3. Possibility of hazardous reactions.

Hazardous reactions should not occur under normal user and storage conditions.

10.4. Conditions to avoid.

Avoid temperatures over 230° C (446° F). Decomposition products that are a danger to human health may develop above this threshold such as toxic fumes and carbon monoxide.

10.5. Incompatible materials.

Oxidants. Strong bases.

10.6. Hazardous decomposition products.

Machining at high temperatures (e.g. extrusion or injection moulding) may result in compounds which are potentially harmful to health (carbon monoxide, toxic fumes and aldehydes**).**

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

There are no known episodes of damage to health as a result of exposure to the product. However, we do recommend that operators work in accordance with industrial health standards.

Acute toxicity

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Skin corrosion/irritation

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Serious eye damage/eye irritation

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Respiratory or skin sensitisation
Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard clas**Germ cell mutagenicity**

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Carcinogenicity

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Reproductive toxicity

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Specific target organ toxicity (STOT) – single exposure

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Specific target organ toxicity (STOT) – repeated exposure

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

Aspiration hazard

Based on component classification assessments and the classification provisions of accompanying document I, part 3 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, this mixture is not classified for this hazard class.

SECTION 12. Ecological information.

12.1. Toxicity.

Based on component classification assessments and the classification provisions of accompanying document I, part 4 of Reg. (EC) 1272/2008 and subsequent amendments and supplements, the mixture is not classified as hazardous for the environment. Therefore, this section does not contain any specific ecotoxicology data.

12.2. Persistence and degradability.

Information not available.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available**.**

12.5. PBT and vPvB assessment results.

Based on the data available, this product does not contain over 0.1% of PBT or vPvB substances.

1**2.6. Other adverse effects.**

Information not available**.**

SECTION 13. Disposal.

13.1. Waste treatment methods.

Reuse if possible. Leftover product is to be considered as non-hazardous special waste.
Disposal must be carried out by authorised waste management company, in accordance with national and, where appropriate, local regulations in force. Solid waste should be disposed of in authorized landfill site.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recycling or disposal in accordance with national waste management regulations.

SECTION 14. Transport information.

14.1. UN number.

Not applicable.

14.2. UN shipping name

Not applicable**.**

14.3. Transport hazard class.

Not applicable**.**

14.4. Packing Group.

Not applicable**.**

14.5. Environmental hazards.

Not applicable**.**

14.6. Special precautions for user.

Not applicable**.**

14.7. Bulk shipment in accordance with accompanying document II of MARPOL 73/78 and the IBC Code. Irrelevant Information**.**

SECTION 15. Regulatory information.

15.1. Safety, health and environmental regulations/legislation specific to the substance or mixture.

Seveso Category. None

Restrictions relating to the product or substances it contains in accordance with accompanying document XVII of Regulation (EC) 1907/2006.

None

Substances in Candidate List (article 59 REACH).
None

Substances subject to authorisation (acc.doc. XIV REACH).
None

Substances subject to export notification reg. (EC) 649/2012:
None

Substances subject to Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Health Controls.

Information not available.

Product not intended for use provided for in Dir. 2004/42/CE.

15.2. Chemical safety assessment.

Chemical safety assessment was not carried out for the mixture and the substances contained therein.

SECTION 16. Other information.

LEGEND
-ADR: European Agreement relating to transport of hazardous goods by road
-CAS NUMBER: Chemical Abstract Service number
-EC50: concentration that gives half-maximal response
-EC NUMBER: identification number in ESIS (European archive of existing substances)
-CLP: EC Regulation 1272/2008
-DNEL: derived no-effect level
EmS: Emergency Schedule
-GHS: globally harmonized system for the classification and labelling of chemicals
-IATA DGR: international air transport association regulation on the transport of dangerous goods
-IC50: concentration where the response is reduced by half
-IMDG: International Maritime Dangerous Goods Code
-IMO: International Maritime Organization
-INDEX NUMBER: identification number in acc. doc. VI of the CLP
-LC50: lethal concentration 50%
- LD50: lethal dose 50%
-OEL: occupational exposure Level
-PBT: persistent, bioaccumulating and toxic in accordance with REACH
-PEC: predictable environmental Concentration
-PEL: Predicted exposure Level
-PNEC: predicted no effect concentration
-REACH: EC Regulation 1907/2006
-RID: Regulations governing the international transport of dangerous goods by train
-TLV: threshold limit value
-TLV CEILING: concentration that should not be exceeded within the workplace at any time.
-TWA STEL: short term exposure limit
-TWA: Weighted average exposure limit
- VOC: volatile organic compound
-vPvB: very persistent and very bioaccumulating according to REACH
-WGC: water hazard class (Germany).

GENERAL BIBLIOGRAPHY:
European Parliament (EU) Regulation 1907/2006 (REACH)
European Parliament (EU) Regulation 1272/2008 (CLP)
European Parliament (EU) Regulation no 790/2009 (I Atp. CLP)

European Parliament (EU) Regulation 2015/830
European Parliament (EU) Regulation 286/2011 (II Atp. CLP)
European Parliament (EU) Regulation 618/2012 (III Atp CLP)
European Parliament (EU) Regulation 487/2013 (IV Atp. CLP)
European Parliament (EU) Regulation 944/2013 (V Atp. CLP)
European Parliament (EU) Regulation 605/2014 (VI Atp. CLP)
-The Merck Index. -10th Edition
-Handling Chemical Safety
-INRS-Fiche Toxicologique (toxicological sheet)
-Patty-Industrial Hygiene and Toxicology
-N.I. Sax-Dangerous properties of Industrial Materials-7, 1989 Edition
-ECHA Agency Website

Note for users:
The information contained in this data sheet is based on the facts available to us at the date of the latest version. Users must make sure the information is appropriate and complete as regards the specific product use.
This document should not be interpreted as a guarantee of any specific property of the product.
Users must observe the rules and regulations governing health and safety in force as product use is not under our direct control. We are not liable for improper use.
Provide staff involved in the use of chemicals with appropriate training.

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