

Safety Data Sheet

According to Regulation (EC) No 1907/2006, Annex II,
Amended by COMMISSION REGULATION (EU) 2020/878,
According to REGULATION (EC) No 1272/2008

PLA+

Version 2.0
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SDS ID: LD00002

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : PLA+

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

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/compound : 3D-Printer filament

1.2.2. Uses advised against

Restrictions on use : This product must not be used in applications other than those identified above, without first seeking advice of the supplier

1.3. Details of the supplier of the safety data sheet

Supplier: Landu Innovations Technology Co., Ltd.
Address: Room 1504, Building D, Block 3, Tian'an Industrial Park, No. 2018
Xuegang North Road, Longgang District, Shenzhen City, 518129, China
Contact E-mail: support@landu3d.com
Telephone: 0755-28502126

1.4. Emergency telephone number

0755-28502126 Only available during office hours (9:00a.m.-18:30p.m. Beijing Time Zone)

Available outside office hours? Yes ☐ No ☒

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3. Other hazards

Other hazards not contributing to the classification : Risk of thermal burns on contact with molten product.

SECTION 3: Composition/information on ingredients

3.1. Substances/Mixture

Mixture

3.2. Ingredient(s):

This product does not contain hazardous ingredients above cut-off value according to HCS2012.

SECTION 4: First aid measures

4.1. Description of first aid measures

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

4.1.2 In case of skin contact:

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water. Keep warm and in a quiet place. Call a physician or poison control center immediately. Wash contaminated clothing before re-use.

4.1.3 In case of eyes contact:

Immediately flush eyes with plenty of water, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

4.1.4 In case of ingestion:

Call a physician or poison control centre immediately. Take victim immediately to hospital. If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Artificial respiration and/or oxygen may be necessary.

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

Causes serious eye irritation.

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

If skin irritation or rash occurs, get medical advice/attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire: Water spray, Dry powder, Foam, Carbon dioxide
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Explosion hazard	: Material can accumulate some static charge during transfer. Prevent build-up of electrostatic charges (e.g. by grounding).
Hazardous decomposition products in case of fire	: Under fire conditions, hazardous fumes will be present: Carbon dioxide, Carbon monoxide.

5.3. Advice for firefighters

Precautionary measures fire	: Do not allow run-off from fire-fighting to enter drains or water courses.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment. Remove contaminated clothing and shoes.
Emergency procedures	: None in particular. In molten state: Do not breathe vapours. Ventilate spillage area. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

No additional information available

6.2. Environmental Precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Sweep up and put in a closed container for disposal. If melted: allow liquid to solidify before taking it up.
Other information	: Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. In molten state: Do not breathe vapours. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: To guarantee the quality and properties of the product: Store in a well-ventilated place. Store in original container. Keep container tightly closed to avoid moisture absorption and contamination.
Incompatible materials	: Oxidising agents. Strong acids.
Storage temperature	: -4 – 86 °F (Relative air humidity: <50%)
Heat and ignition sources	: Keep away from heat, sparks and flames. Keep out of direct sunlight.

7.3. Specific and use(s)

3D-Printer filament.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Allowable concentration:	Not available
8.1.2 Monitoring method	Not available
8.1.3 components with workplace control parameters	In accordance with good industrial and safety regulations. Wash hand before rest and at the end of work.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:	Ensure adequate ventilation. Apply technical measures to comply with the occupational exposure limits.
8.2.2 Individual protection measures, such as personal protective equipment:	
Eye/face protection:	Safety goggles.
Hand protection:	Wear protective gloves.
Body protection:	Wear protective clothing.
Respiratory protection:	Use with adequate ventilation. In case of insufficient local exhaust ventilation, wear protective mask.
Thermal hazards:	Wear suitable protective clothing to prevent heat.
8.2.3 Environmental exposure controls:	Avoid discharge into the environment. According to local regulations, Official regulations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Thread
Colour	Various colours
Odour	Not available
Boiling point or initial boiling point and boiling range	Not available
Melting point/range	1 9 0 ° C
Explosion Upper Limits	Not available
Kinematic viscosity(mm ² /s):	Not available
Ignition temperature	Not available
Solubility	Not available
pH	Not available
Density	1.23 g/cm ³
Flashing Point	Not available
Explosion Lower Limits	Not available
Particle characteristics	Not available
Decomposition temperature	Not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Do not expose to temperatures above 446 °F

10.5. Incompatible materials

Oxidising agents. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under fire conditions, hazardous fumes will be present: Carbon dioxide, Carbon monoxide, Aldehydes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

Acute toxicity:	Not available
Skin corrosion/Irritation:	Not available
Serious eye damage/irritation:	Not available
Respiratory or skin sensitization:	Not available
Germ cell mutagenicity:	Not classified
Carcinogenicity:	The filament product itself (mixture) is not carcinogenic
Reproductive toxicity:	Not classified
Specific target organ toxicity–single exposure:	Not available
Specific target organ toxicity–repeated exposure:	Not available
Aspiration hazard:	Not available
Information on other hazards	
Endocrine disrupting properties	The mixture does not contain endocrine disruptor
Other information	Not available

SECTION 12: Ecological information

12.1. Toxicity

Ecology – general	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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12.2. Persistence and degradability

Not available.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Dispose of in accordance with relevant local regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Ensure all waste water is collected and treated via a waste water treatment plant. Ensure all national/local regulations are observed.
Product/Packaging disposal recommendations	: Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	Not regulated	Not regulated	Not regulated	Not regulated
UN Proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
Transport hazard Class(es)	Not regulated	Not regulated	Not regulated	Not regulated
Packing group	Not regulated	Not regulated	Not regulated	Not regulated
Environmental hazards	No	No	No	No
Transport in bulk according to Annex II of Marpol and the IBC Code	Not regulated	Not regulated	Not regulated	Not regulated

SECTION 15: Regulatory information

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

Relevant information regarding authorization:	Not applicable.
Relevant information regarding restriction:	Not applicable.
Other EU regulations:	Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.
Other National regulations:	Not applicable

15.2. Chemical safety assessment

Not available

SECTION 16: Other information

16.1. Indication of changes:

Version 1.0 Amended by (EU) 2015/830

Training advice : Ensure staff are informed of and trained on the nature of exposure and basic actions to minimise exposure.

16.2. Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
RID: Regulation for rail International transportation of Dangerous goods
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: Code international maritime dangerous goods code
ICAO: International Civil Aviation Organization
IATA: International Air Transport Association
LC50: median lethal concentration
EC50: The effective concentration of substance that causes 50% of the maximum response.
NOEC: No Observed Effect Concentration
DNEL: derived no-effect level
PNEC: predicted no-effect concentration
MARPOL: International Convention for the Prevention of Pollution From Ships

16.3. Key literature references and sources for data

ECHA Registered substances data

16.4. Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
Eye Irrit. 2	H319	Calculation method

16.5. Relevant H-statements (number and full text):

H319: Causes serious eye irritation.

16.6. Training instructions:

Not applicable.

16.7. Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.8. Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.