

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

PolyLite™ PLA Silk

Version 1.1

Issue date: 09-04-2019

Revision date: 03-11-2021

SDS Record Number: CSSS-TCO-010-130558

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

1.1 Product identifier:

Identification on the label/Trade name: PolyLite™ PLA Silk
Additional identification: Not available
Identification of the product: CAS# 26100-51-6; EC# N/A
Index Number: Not available
REACH registration No.: Not available

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

1.2.1 Identified uses:

3D Printing Filament

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): -
Supplier(Manufacturer): JF Polymers (Suzhou) Co., Ltd.
Address: Haicheng Industrial Park, Bldg 7, Changshu Economic Development Zone (CEDZ), Changshu, Jiangsu Province 215513, China
Contact person(E-mail): zhenggang.cai@polymaker.com
Telephone: +86-512-52058005
Fax: -

1.4 Emergency telephone Number:

+86-512-52058005

Available outside office hours? YES ☐ NO ☒

Section 2 Hazards Identification

2.1 Classification of the substance or mixture:

2.1.1 Classification:

According to REGULATION (EC) No 1272/2008, based on available data, the classification criteria are not met:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
Not classified	N/A

2.2 label elements:

Hazard Pictograms: No hazard pictogram is used.
Signal Word(S): No signal word is used.
Hazard Statement: Not applicable.
Precautionary statement:2. Not applicable.

3 Other hazards:

Not available.

Section 3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
POLYLACTIC ACID	N/A	26100-51-6	N/A	> 90%

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:

Wash off with soap and plenty of water.

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:

If large amounts were swallowed, get medical advice.

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

The product is not classified as harmful to human health effect.

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 measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

No specific fire or explosion hazard.

5.3 Advice for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Avoid dust formation.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental Precautions:

Do not let large amount of product enter drains.

6.3 Methods and material for Containment and Cleaning up:

Sweep up and shovel. Keep in suitable, closed and properly labelled containers for disposal.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

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|---|--|
| 7.1.1 Protective measures: | Provide appropriate exhaust ventilation at places where dust is formed. |
| 7.1.2 Advice on general occupational hygiene: | Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas. |

7.2 Conditions for safe storage, including any incompatibilities:

Keep container closed in a cool, dry place.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters:

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|---|----------------|
| 8.1.1 Occupational exposure limits: | Not available. |
| 8.1.2 Additional exposure limits under the conditions of use: | Not available. |
| 8.1.3 DNEL/DMEL and PNEC-Values: | Not available. |

8.2 Exposure controls:

- | | |
|---|--|
| 8.2.1 Appropriate engineering controls: | Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. |
|---|--|

8.2.2 Individual protection measures, such as personal protective equipment:

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|-------------------------|---|
| 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, Federal and official regulations. |
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Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

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|---------------------------------|---|
| Appearance: | Solid |
| Colour: | Different colors corresponding to different masterbatch |
| Odour: | Not available |
| Odour threshold: | Not available |
| pH: | Not available |
| Melting point/range (°C): | 170°C |
| Boiling point/range (°C): | Not available |
| Flash point (°C): | Not available |
| Evaporation rate: | Not available |
| Flammability limit - lower (%): | Not available |
| Flammability (solid, gas): | Not available |
| Ignition temperature (°C): | Not available |
| Upper/lower explosive limits: | Not available |
| Vapour pressure (20°C): | Not available |

Vapour density:	Not available
Relative Density:	1.20
Bulk density (kg/m ³):	Not available
Water solubility (g/l):	Insoluble
n-Octanol/Water (log Po/w):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity, dynamic (mPa.s):	Not available
Explosive properties:	Not available
Oxidising properties:	Not available
Molecular Formula:	Not available
Molecular Weight:	Not available

9.2. Other information:

Fat solubility(solvent-oil to be specified)	Not available
etc:	
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available

Section 10 Stability and reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials.
10.5 Incompatible materials:	Strong oxidizing agents
10.6 Hazardous decomposition products:	Carbon oxides.

Section 11 Toxicological information

11.1 Information on toxicological effects:	
Acute toxicity:	
LD50(Oral, Rat):	Not available
LD50(Dermal, Rabbit):	Not available
LC50(Inhalation, Rat):	Not available
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

Section 12 Ecological information

12.1 Toxicity:

Product name: PolyLite™ PLA Silk
Version #: 1.1 Issue date: 09-04-2019.

Revision date: 03-11-2021.

Acute (short-term) toxicity:

LC50(96h, Fish): Not available.

EC50(48h, Crustacea): Not available.

EC50(72h, Algae/aquatic plants): Not available

Chronic (long-term) toxicity:

NOEC(Fish): Not available.

NOEC(Crustacea): Not available.

EC50(Algae/aquatic plants): Not available.

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: Not available.

12.6 Other adverse effects: Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: Any disposal practice must be in compliance with all local and national laws and regulations. Do not dump into any sewers, on the ground, or into any body of water.

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
Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
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 YES ☐ NO ☒

Section 16 Other information

16.1 Indication of changes:

Version 1.1 Amended by (EU) 2020/878

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

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Training instructions:

Not applicable.

16.5 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.

16.6 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.

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