SAKATA 3D FILAMENTS® PLA 850
Revision date: 09/08/2022, revision number: 3.0
In accordance with Regulation (CE) 1907/2006 (REACH), Annex II, modified by Regulation (UE) 2015/830

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

1.1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE

Product name: SAKATA 3D FILAMENTS® PLA 850
REACH registration number: None
Type of product: Thermoplastic material

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Use of the substance/mixture: FDM 3D printing

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

POLIMERSIA GLOBAL S. L.
Polígono Industrial ASEGRA
C/ Granada, 20
18210 Peligros (Granada)
Phone: +34 958 99 38 24
E-mail: info@sakata3d.com

1.4 EMERGENCY TELEPHONE NUMBER

Emergency telephone number: 112 (Spain)

SECTION 2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Definition of the product: Mixture
The product is NOT classified as hazardous according EC 1272/2008

2.2 LABEL ELEMENTS

Hazard symbol: None
Signal Word: None
Hazard Statement: None
Precautionary statement: None

2.3 OTHER HAZARDS

May form combustible dust concentrations in air if small particles are generated during post-processing.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 SUBSTANCE

N/A

3.2 MIXTURE

SUBSTANCE NAME	CAS NUMBER	% WEIGHT
PLA resin	CAS 9051-89-2	> 95 %
Additives and color masterbatches		< 5%

SECTION 4. FIRST AID MEASURES

4.1 DESCRIPTION OF THE FIRST AID MEASURES

Eye contact: Rinse immediately with plenty of water, also under the eyelids. Verify if the victim uses contact lenses. If so, take them out. Call a physician immediately if symptoms persist.

Inhalation: Move the victim to fresh air. Call a physician immediately if symptoms persist.

Skin contact: Cool skin rapidly with plenty of water after contact with hot material. Remove contaminated clothes and shoes. Call a physician immediately if symptoms persist.

Ingestion: Rinse mouth immediately with water. Move the victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting without medical advice. If the person is conscious, drink small amounts of water as a precaution. Call a physician immediately if symptoms persist.

Protection of first aiders: No action shall be taken involving any personal risk or without adequate training.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE AND DELAYED

Acute effects

Eye contact: No information available.

Inhalation: No information available.

Skin contact: No information available.

Ingestion: No information available.

Delayed effects

Eye contact: No information available.

Inhalation: No information available.

Skin contact: No information available.

Ingestion: No information available.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Note to physicians: Treat symptomatically.

Antidote: None known. Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 ESTINGUISHING MEDIA

Suitable extinguishing media: Foam, water, carbon dioxide (CO_2), regular dry chemical are preferred if available.

Unsuitable extinguishing media: High pressure water jet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Hazards arising from the substance or mixture: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Hazardous combustion products: Oxides of carbon, aldehydes. May decompose upon heating to produce corrosive and/or toxic fumes.

5.3 RECOMMENDATIONS FOR FIRE-FIGHTERS

Fire-fighting special measures: In case of fire, isolate immediately the hazard area and keep unnecessary people away. No action shall be taken involving any personal risk or without adequate training.

Special protective equipment and precautions for fire-fighters: As in any fire, wear full protective fire-fighting gear and a self-contained breathing apparatus pressure-demand. Personal protective equipment (including helmets, gloves and shoes) covered by European Regulation EN 469 provides a basic level of

protection in case of incident.
Additional information: None.

SECTION 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

Avoid release to the environment. Comply with all applicable regulations on spill and release reporting. Prevent entry into waterways, sewers, basements, or confined areas.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Collect spilled material in appropriate container for reuse or disposal. Dispose in accordance with all applicable regulations.

6.4 REFERENCES TO OTHER SECTIONS

Refer to Section 1 for more information on contacts in case of emergency.
Refer to Section 8 for more information on personal protective equipment (PPE).
Refer to Section 13 for additional information on waste management.

SECTION 7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Protection measures: Use personal protective equipment as required (refer Section 8).
General hygiene considerations: Eating, drinking, or smoking should be prohibited where this product is handled, stored, or treated. Wash hands and face before drinking, eating or smoking. Remove the personal protective equipment before entering eating areas. Refer to Section 8 for additional information on hygiene measures.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store at temperatures not exceeding 50 ºC. Keep cool.

7.3 SPECIFIC END USES

Recommendations: No information available.
Specific solutions for the industrial sector: No information available.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

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.

This material can generate Particulates Not Otherwise Classifiable (PNOC). The Occupational Safety and Health Administration (OSHA) PEL/TWA for PNOC is 15 mg/m^3 for total dust and 5 mg/m^3 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 controls: Provide local exhaust ventilation system. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.

Individual protection measures:

Hygiene measures: Handle respecting good industrial hygiene and safety practices.

Eye/face protection: None during normal use. Protect with safety glasses with side-shields against molten solid.

Skin protection:

Hand protection: Protect against molten solid. In the molten form: Wear protective gloves.

Body protection: Impervious clothing.

Respiratory protection: No respirator is required under normal conditions of use. If respirable dusts are generated, respiratory protection may be needed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid
Colour: Different colours
Odour: Sweet
Water solubility: Insoluble
Solubility in other solvents: Not available
Density: > 1.20 g/cm^3
Freezing point: Not available
Boiling point: Not available
Melting point: 150-180 ºC
Decomposition temperature: 250 ºC
Autoignition temperature: 388 ºC
Flash point: Not available
Flammability: Fine dust dispersed in air may ignite
% Volatile: Not available

9.2 OTHER INFORMATION

Not available

SECTION 10. STABILITY AND REACTIVITY

10.1 REACTIVITY

None under normal use conditions.

10.2 CHEMICAL STABILITY

Stable under normal conditions of use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None under normal use conditions.

10.4 CONDITIONS TO AVOID

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

10.5 MATERIALS TO AVOID

Oxidizing agents, strong bases.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

May decompose upon heating to produce corrosive and/or toxic fumes.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

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.

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

Local effects: Product dust may be irritating to eyes, skin and respiratory system. Resin particles, like other inert materials, are mechanically irritating to eyes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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.

Irritation / Corrosivity: No data available.

Mutagenic effects: Not mutagenic in AMES Test.

Carcinogenic effects: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Reproductive toxicity: No data available.

Tumorigenic data: No data available.

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

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

Specific Target Organ Toxicity: No target organs identified.

SECTION 12. ECOLOFICAL INFORMATION

12.1 ECOTOXICITY

EC50/72h/algae > 1100 mg/L.

12.2 PERSISTENCE AND DEGRADABILITY

No data available.

12.3 BIOACCUMULATION

No data available.

12.4 MOBILITY

In the terrestrial environment, it is expected that the material remains in the soil. In the aquatic environment material, it will sink and remain in the sediment.

12.5 RESULTS OF PBT Y mPmB

Not applicable.

12.6 OTHER ADVERSE EFFECTS

No data available.

SAKATA 3D FILAMENTS® PLA 850
Revision date: 09/08/2022, revision number: 3.0
In accordance with Regulation (CE) 1907/2006 (REACH), Annex II, modified by Regulation (UE) 2015/830

SECTION 13. DISPOSAL CONSIDERATIONS

The information in this section contains general advice and guidelines.

13.1 DISPOSAL METHODS

Product

Disposal method: Dispose of contents / container in accordance with local, regional, national, and international regulations. Avoid release to the environment. Incineration should be done in accordance with prevailing municipal, state, and federal laws and standards from local environmental agencies.

Hazardous residues: The product is NOT classified as hazardous according EC 1272/2008.

Packaging

Disposal method: Packaging should be recycled after using.

SECTION 14. TRANSPORT INFORMATION

ADR: Not classified as hazardous according to transport regulations.
ICAO/IATA: Not classified as hazardous according to transport regulations.
OMI/IMDG: Not classified as hazardous according to transport regulations.

SECTION 15. REGULATORY INFORMATION

15.1 NORMS / SECURITY, HEALTH AND ENVIRONMENTAL LAW SPECIFIC TO THE MIXTURE SUBSTANCE

No data available

15.2 CHEMICAL SAFETY EVALUATIONS

No data available.

SECTION 16. OTHER INFORMATION

The information contained in this safety data sheet is based on our knowledge and experience. Neither the provider nor any of its subsidiaries assumes any responsibility for the accuracy or completeness of the information contained herein. Final determination as to the suitability of the printed product is the sole responsibility of the user. We do not recommend the use of this product for food contact or medical applications.