

Section 1: Product and company identification

1. Identification of the material

INTAMSYS PLA Filament

2. Identified Uses

Used primarily for extrusion-based 3D printing processes

3. Manufacturer information

Manufacturer:

INTAMSYS TECHNOLOGY CO., LTD.

Address:

Building E11, 3188 Xiupu Road, Pudong New Area, Shanghai, China

Tel/Fax:

+86 021 58465932 / +86 021 58463623

4. Emergency contact number

Emergency telephone number:

+86 021 58465932; or call LOCAL POISON CONTROL CENTER

Section 2: Hazards identification

1. Classification of the substance of mixture

1.1. Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This substance does not meet the criteria for classification according to Directive 67/548/EEC as amended.

1.2. Classification according to Regulation (EC) No 1272/2008 as amended

This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

2. Label elements

Not applicable.

3. Other hazards

Not likely to be an irritant in the solid form. Danger of burns when heated/molten material is handled.

Section 3: Composition/information on ingredients

1. Substances

Chemical Name	CAS No.	Weight (%)	Exposure Limits
Poly(lactic acid) resin	9051-89-2	> 90%	None

Section 4: First aid measures

1. Description of first aid measures

1.1. Inhalation

Safety Data Sheet

Move to fresh air. Call a physician immediately if irritation persists.

1.2. Skin contact

Rinse immediately with plenty of water. If skin irritation persists, call a physician. Cool skin rapidly with cold water after contact with hot polymer.

1.3. Eye contact

Rinse immediately with plenty of water. Call a physician immediately.

1.4. 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.

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

Burns resulted from contacting or handling heated/molten materials

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

Provide general supportive measures and treat symptomatically.

Section 5: Fire-fighting measures

1. 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.

2. Special hazards arising from the substance or mixture

No specific hazard.

3. Advice for fire fighters

Follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Use standard firefighting procedures and consider the hazards of other involved materials. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6: Accidental release measures

1. Personal precautions, protective equipment and emergency procedures

Lab coat. Impervious gloves. Safety glasses with side shields.

2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

3. Methods and materials for containment and cleaning up

Shovel into suitable container for disposal.

Section 7: Handling and storage

1. Precautions for safe handling

Safety Data Sheet

Avoid prolonged contact with skin and eyes. Avoid dust formation. Workers should be protected from the possibility of contact with molten material. Low hazard for usual industrial or commercial handling.

2. Conditions for safe storage

Store in a cool, dry, well-ventilated area. Keep away from heat, sparks and flames. Keep containers closed. Avoid moisture contamination. Transferring dry pellets or granules between containers or charging into solvents can cause a build-up of static electricity which can be sufficient to cause fires and/or explosions in the presence of flammable materials. Equipment should provide a means of dissipating any charges that may develop.

Section 8: Exposure controls/personal protection

1. Control parameters

Exposure Limits:

None established

2. Engineering controls

Provide appropriate exhaust ventilation at places where dust is formed or the material is molten, such as during printing.

3. Personal protective equipment

Wear gloves when handling hot/molten material.

Section 9: Physical and chemical properties

1. Information on basic physical and chemical properties

Appearance: Solid

Color: Various

Odor: Almost Odorless

Odor threshold: Not available

pH: Not applicable

Melting point/freezing point: 150°C

Softening temperature: 63°C

Boiling point: Not applicable

Flash point: Not applicable

Evaporation rate: Not applicable

Flammability: Not available

Upper/lower flammability or explosive limits: Not available

Vapor pressure: Not applicable

Vapor density: Not applicable

Relative density: 1.25 g/cm³

Solubility: No available

Partition coefficient (n-octanol/water): No available

Auto-ignition temperature: > 350°C

Decomposition temperature: No available

Viscosity: Not applicable

Section 10: Stability and reactivity

1. Reactivity

The product is stable.

2. Chemical stability

Safety Data Sheet

Material is stable under normal conditions.

3. Possibility of hazardous reactions

Burning produces obnoxious and toxic fumes. Aldehydes. Carbon monoxide (CO). carbon dioxide (CO₂).

4. Conditions to avoid

Temperatures above 446F (230 °C).

5. Incompatible materials

Not available.

6. Hazardous decomposition products

Unlikely under normal industrial use. If the product is heated to temperatures excessively higher than those recommended on the technical data sheet, thermal decomposition is possible. Combustion products may include: carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂ etc.), hydrocarbons, HCN

Section 11: Toxicological information

1. Likely routes of exposure

Inhalation:

Dust irritates the respiratory system, and may cause coughing and difficulties in breathing.

Skin contact:

Dust may irritate skin.

Eye contact:

Dust may irritate the eyes.

Ingestion:

May cause discomfort if swallowed.

2. Symptoms

Dust may irritate throat and respiratory system and cause coughing. Direct contact with eyes may cause temporary irritation.

3. Information on toxicological effects

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data. May cause irritations.

eye damage/eye irritation: Lack of data. May cause irritations.

Sensitisation to the respiratory tract: Lack of data. Not to be expected

Skin sensitization: Lack of data. Not to be expected

Germ cell mutagenicity/Genotoxicity: Lack of data. Not to be expected

Carcinogenicity: Lack of data. Not to be expected

Reproductive toxicity: Lack of data. Not to be expected

Specific target organ toxicity - single exposure: Lack of data.

Dusts: Irritating to eyes, respiratory system and skin.

Specific target organ toxicity - repeated exposure: Lack of data.

Section 12: Ecological information

1. Toxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Safety Data Sheet

2. Persistence and degradability

No data available.

3. Bioaccumulative potential

Does not bioaccumulate. Inherently biodegradable.

4. Mobility in soil

No data available.

5. Other adverse effects

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Section 13: Disposal considerations

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

Section 14: Transport information

UN/ID No.: Not regulated

UN Proper shipping name: Not regulated

IMDG Code: Not regulated

Hazard Class: Not regulated

Packing Group: Not regulated

Special precautions: No information available

Marine pollutant: Non-marine pollutant.

Section 15: Regulatory information

REGULATIONS

The product needs to follow local regulations.

Section 16: Other information

Revision information

Date of this revision: May 15, 2021

Declare to reader

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