HI-PLA MSDS

High Impact Polylactide

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

Product Name: AzureFilm HI-PLA
CAS No.: See Section 3
Identified Uses: For fused deposition modeling (FDM) 3D printing

Manufacturer: AzureFilm d.o.o
Address: Orleška cesta 16, 6210 Sežana, Slovenia
Tel/Fax: +386-05-731-19-02
Emergency telephone number: +386-05-731-19-02 or call LOCAL POISON CONTROL CENTER

2. Hazards identification

Emergency Overview
Not likely to be irritant in the solid form. Burning produces obnoxious and toxic fumes. Avoid prolonged contact with skin and contact with eyes. Not likely to form a dust in the solid filament form

Potential Acute Health Effects
Inhalation: Not likely to form an inhalable dust in the solid filament form and for the intended use**.** Aerosols generated during printing may cause shortness of breath, tightness of the chest, a sore throat and cough.
Eye: Direct contact with exes may cause irritation
Skin: May cause slight skin irritation
Ingestion: Ingestion may cause gastrointestinal irritation, nauseam, vomiting and diarrhea.

Potential Chronic Health Effects
Carcinogenic Effects: No known carcinogenic effects
Mutagenic Effects: No known mutagenic effects
Teratogenic Effects: No known teratogenic effects
Developmental Toxicity: No known developmental toxicity

3. Composition/information on ingredients

Chemical Name	CAS No.	Weight %	Exposure Limits
Polylactide (PLA)	26100-51-6	80-100 %	None
Acrylic polymers	Company secret	0-20 %	None

4. First aid measures

Inhalation: In the case of inhalation of gases generated during combustion of the material, it is necessary to move the injured person outside and supply with fresh air. Seek medical treatment
Skin contact: Wash hands with soap and water. In contact with molten material, immediately flush with cool water. DO NOT PULL solidified material off skin.
Eye contact: Rinse immediately with plenty of water. In contact with molten product, immediately flush with cool water. Seek medical treatment.
Ingestion: Do not induce vomiting. Get medical advice/attention if you feel unwell
Notes for the doctor: Treat symptomatically

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5. Fire-fighting measures

General information: As in any fire, wear self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Suitable Extinguishing Agents: Foam, water, carbon dioxide (CO_2), Dry chemical, Alcohol resistant foams are preferred if available. General-purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively
Products of Combustion: Burning produces obnoxious and toxic fumes, aldehydes, carbon monoxide (CO) and carbon dioxide (CO_2).
Special Fire Fighting Procedures: Firefighters should wear self-contained breathing apparatus and full fire-fighting turn-out gear (bunker gear). Keep personnel removed and upwind of fire. Water should be used to keep fire-exposed containers cool.
Special Remarks on Fire and Explosion Hazards: Toxic gases/vapors/fumes may emit in a fire.

6. Accidental release measures

General: Wear gloves when handling hot melt of the material. Do not inhale vapors and fumes generated if the material is overheated – Use local exhaust ventilation during processing
Environmental precautions: Prevent entry to sewers and public waters
Methods and material for containment and cleaning up: Shovel into suitable container for disposal.

7. Handling and storage

Precautions: Avoid contact with the molten material. Avoid eating, drinking and smoking in work areas
Handling: Wear gloves when handling molten material. Low hazard for usual industrial or commercial handling.
Storage: Do not store outside. Keep container dry and store in original packing. Keep in cool, well-ventilated place.

8. Exposure controls/personal protection

Ventilation protection: Use local exhaust ventilation during processing.
Skin protection: Avoid contact with molten material or wear gloves.
Eye and face protection: Safety glasses if necessary.
General: Wear protective clothing to prevent contact with molten material.

9. Physical and chemical properties

Appearance: Filament, Solid
Color: Various
Odor: Odorless
pH: Not applicable
Melting point: > 140 °C
Boiling point: Not applicable
Density: 1.20 - 1.30 g/cm3 at 20 °C
Vapor pressure: Not applicable
Partition coefficient (n -octanol/water): Not applicable

Solubility(ies): Not determined
Flash point: Not determined
Auto-ignition temperature: Not determined

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10. Stability and Reactivity

Stability: Stable under recommended storage conditions
Polymerization: Not applicable
Dangerous Decomposition Products: Burning produces obnoxious and toxic fumes. Aldehydes. Carbon monoxide (CO). carbon dioxide (CO_2).
Conditions to avoid: Temperatures above 230 °C.
Materials to avoid: Organic solvents, strong bases, oxidizing agents

11. Toxicological information

Routes of entry: N.A.
Acute toxicity: Not likely to cause targeted organ effects or skin allergic reactions.

12. Ecological information

Mobility: No data available
Bioaccumulation: The main resin is biodegradable.
Ecotoxicity effects: Data not available.

13. Disposal considerations

Waste Disposal Methods: In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. Contact manufacturer if needed.

14. Transport information

No a DOT controlled material (United States)
Proper Shipping Name: Not regulated
Hazzard Class: Not regulated
UN. NO.: Not regulated
Packing Group: Not regulated
IMDG EMS: Not regulated

15. Regulatory information

European/International Regulations
This product is on the European Inventory of Existing Commercial Chemical Substances.
European Labeling in Accordance with EC Directives
Hazard Symbols: N/A
Risk phrases: N/A
Safety phrases: N/A
HMIS (U.S.A.):
Health Hazard: 0
Fire Hazard: 1
Reactivity: 0
Personal Protection:

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15. Regulatory information

National Fire Protection Association(U.S.A.):
Health: 0
Flammability: 1
Reactivity: 0
Specific Hazard:

Federal and State Regulations:
TSCA 8(b) inventory: Listed
Canada–WHMIS:
Not controlled
For details regulations you should contact the appropriate agency in your country.

16. Other information

Revision information
Date of this revision: 9.9.2016

Declare to reader
The information in this document is based on our current knowledge and is intended to describe the product for the purposes of Health, Safety and Environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. The information, data and recommendations are made to our reasonable ability in good faith and obtained from reliable sources. Completeness is not guaranteed. The Material Safety Data Sheet is guidance for product users. We believe the information set forth in this document to be true and accurate, but any recommendations, statements or suggestions made in the foregoing text are without any warranty or guarantee whatsoever, and shall stablish no legal duty or responsibility on the part of the author or their employer. AzureFilm d.o.o. for itself expressly disclaims any and all liability for any damages or injuries arising out of any activities relating in any way to this publication.