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PLA Material Safety Data Sheet

1. IDENTIFICATION

Chemical name: polylactic acid.
Common names: polylactic acid, PLA
Chemical formula: (C₆H₈O₅)_n

2. Components

Chemical Name	Weight	OSHA Exposure Limits:	ACGIH Exposure Limits:
Poly lactide resin 9051-89-2	>90%	None	None
N,N Ethylene bistearamide	<5%	None	None
Typical Antioxidant	<5%	None	None
Typical Pigment	<5%	None	None

3. Physical Properties

Solubility in water: React moderate with water to become soluble. Will absorb water

Appearance: Solid filament

Density: 1.24g/cc

Melt temperature: 175~220°C

4. Hazardous Reactivity

Instability: None.

Incompatibility: Stable.

Decomposition: Slow reaction in the presence of water.

Polymerization: Will not occur, already a polymer.

Combustion: Carbon monoxide and / or carbon dioxide may form during the combustion of this product.

5. Explosion Hazard and Fire Data

Unusual Explosion Hazard and Fire : The material will burn if exposed to sufficient heat and an ignition source. Avoid dispersion of dust in the air to reduce dust explosion hazard potential.

Extinguished Media: Water, Carbon dioxide, Dry chemical powder, Foam.

Special Extinguishing Procedures: Firefighters must wear self-contained breathing apparatus and fully protective equipment.

6. Health Hazard Data

Health Hazards: May cause mild skin and eye irritation if reacted with water.

Medical Conditions Aggravated by exposure: None expected based on available information.

7. Precautions for Safe Handling and Use

Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Wash thoroughly after handling. Hot and/or melted polymer can severely burn the skin. Handle with care.

8. Emergency and First Aid

Skin Contact: Solid or dust may cause irritation or corneal injury due to mechanical action

Eyes Contact: Essentially nonirritating to skin, Mechanical injury only

Inhalation: No harmful effects expected. Consult a physician.

Swallowing: No harmful effects expected. Consult a physician.

9. Special Protection Information

General Control Measures and procedures: None for normal use.

Personal Protective Equipment: Rubber gloves, safety glasses, Respirator.

10. Disposal Information

Spillage or Release : Collect for disposal. Use appropriate personal protective equipment during clean-up.

Waste disposal: Bury in a landfill in compliance with all federal, state and local regulations.

Material is non-hazardous and biodegradable.

11. Recommended Storage Conditions

Precautions should be taken in handling and storage: Avoid contacting with atmospheric moisture. Store materials at <60 with a desiccant in original containers to maintain product quality. Keep the container closed until it is ready for use. Purge container with high-purity dry nitrogen after opening, before resealing or repackaging.

12. TRANSPORT INFORMATION

Shipping Containers: Samples bottles; Moisture proof laminated pouches.

Proper Shipping name: Not regulated as a hazardous by DOT OR IMO.

**The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made.

Consult the Company for Further Information.

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: The company does not recommend any of its products, including samples, for use: (A) in any application which is intended for any internal contact with human body fluids or body tissues (B) as a critical component in any medical device that supports or sustains human life; and (C) specifically pregnant women or in any applications designed specifically to promote or interfere with human reproduction.