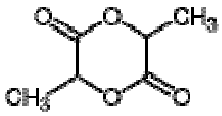
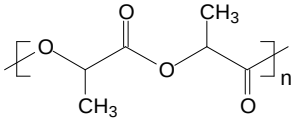
Material Safety Data Sheet PLA

------1000 Series

Ⅰ.Identification

Chemical name: 3, 6-dimethyl-1, 4-dione; polymer.
Chemical family: Polyester
Common names: Polylactide, polylactic acid, PLA.
Chemical formula: $(C_6H_8O_4)_x$.
Chemical structure:

Lactide: 

Polylactide: 

Ⅱ.Components

Material	CAS#	Hazard
L-Lactide	4511-42-6	none known
DL-Lactide	95-96-5	none known
Poly (DL-lactide)	51063-13-9	none known
Poly (L-lactide)	33135-50-1	none known

Ⅲ.Physical Properties of Selected Polymers

Solubility in water: React very slowly with water to become soluble.
Appearance: Solid pellets.

Ⅳ.Quality of Selected Polymers

polymer	
Residual monomer	< 0.5%
Residual solvent	< 0.05%

Residual catalyst	< 200ppm
Heavy Metal	< 10ppm
Water Content	≦ 0.5%

Ⅴ.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 from during the combustion of this product.

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

Ⅶ.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.

Ⅷ.Precautions for Safe Handling and Use

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

Ⅸ.Emergency and First Aid

Skin Contact: Wash affected area with copious of water and soap.
Eyes: Flush eyes with water for at least 15 minutes.
Inhalation: No harmful effects expected. Consult a physician.

Swallowing: No harmful effects expected. Consult a physician.

Ⅹ.Special Protection Information

General Control Measures and procedures: None for normal use.
Personal Protective Equipment: Rubber gloves, safely lasses, Respirator.

Ⅺ.Disposal Information

Spillage of 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.

Ⅻ.Recommended Storage Conditions

Precautions should be taken in handing and storage: Avoid contacting with atmospheric moisture. Store materials at <50.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.

ⅩⅢ.Shipping Information

Shipping Containers: Samples bottles; Moisture proof laminated pouches.
Proper Shipping name: Not regulated as a hazardous by DOT OR IMO.

****The Material Safety Data Sheet relates to specific material designated and does not relate to uses in combination with other materials in any other process. The information contained herein is current as of the data of the latest revision.**