


Material Safety Data Sheet

Section 1 – Product and Company Identification

Product Name	DL-Lactic acid 90%
Chemical Name	DL-Lactic acid
Chemical Formula	C ₃ H ₆ O ₃
Company Identification	Showa Kako Corporation 18-23, Yoshino-cho, Suita-city, Osaka 564-0054 JAPAN
Telephone Number	+81-6-6384-1501
24-hour Emergency Telephone Number	+81-6-6384-1501
Fax Number	+81-6-6384-2287

Section 2 – Hazards Information

GHS Classification	
Physical Hazards	Not classified
Health Hazards	
Acute toxicity (oral)	Category 2
Skin corrosion / Irritation	Category 2
Serious eye damage / eye irritation	Category 2A
Environmental Hazards	Not classified
GHS Symbol	
Signal Word	Warning
Hazard Statements	
H303	May be harmful if swallowed
H316	Causes mild skin irritation
H319	Causes serious eye irritation
Precautionary Statements	
P264	Wash hand and face, etc. thoroughly after handling.
P280	Wear protective gloves/ protective clothing/eye protection/face protection.
Response Statements	

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
Storage Statements	None
Disposal Statements	None

Section 3 – Composition and Information on Ingredients

Substance/Mixture	Substance
Chemical Name	DL-Lactic acid
CAS #	598-82-3
Percent	90.0 – 92.0% min.

Section 4 – First Aid Measures

Eyes	Immediately flush eyes with copious amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult an ophthalmologist.
Skin	Remove contaminated clothing and shoes. Flush skin with copious amount of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician if symptoms occur.
Ingestion	Immediately wash out mouth with plenty of water and give 1-2 cupfuls of water or milk if victim is conscious and alert. Never give anything by mouth to unconscious person. Consult a physician.
Inhalation	Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.

Section 5 – Fire Fighting Measures

Flash Point	No data found
Autoignition	No data found
Explosion Limits	Lower No data found
	Upper No data found
Extinguish Media	Water, powder, carbon dioxide, foam
Firefighting Instructions	Avoid non-firefighting equipped personnel to enter. Extinguish upwind from the fire wearing appropriate protective gear.

Section 6 – Accidental Release Measures

Spills/ Leaks	Evacuate area. Provide adequate ventilation. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilator area and wash spill site after material pickup is complete.
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Section 7 – Handling and Storage

Handling	Wear appropriate protective gear. Do not contact with eyes, skin and on clothing. Do not inhale. Handle with care. Wash mouth and hand after handling the material.
Storage	Keep container tightly closed. Avoid such conditions as direct sunlight and high piling. Store in low-humid dry area.

Section 8 – Exposure Controls, Personal Protection

Engineering Controls	Facilities storing or utilizing the material should be equipped with an eye wash facilities and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Exposure Limits	No data found
Personal Protective Equipment	
Eyes	Safety goggles
Skin	Rubber gloves
Clothing	Protective clothing and rubber boots
Respirators	Anti-dust mask

Section 9 – Physical and Chemical Properties

Physical State	Liquid
Appearance	Colorless – Almost colorless
Odor	Nearly odorless
Boiling Point	No data found
Melting Point	No data found
Flash Point	No data found
Autoignition	None
Explosibility	None
Vapor Pressure	No data found
Vapor Density	No data found
Solubility	Soluble in: Water, alcohol and acetone
	Insoluble in: Chloroform, n-hexane and carbon disulfide

Section 10 – Stability and Reactivity

Stability	Stable under proper conditions
Conditions to avoid	Direct sunlight, high temperature, high humidity and high piling
Incompatibilities with Other Material	Metals, strong oxidizing agents, strong reducing agents, strong bases and metal nitrates
Hazardous Decomposition Product	Carbon monoxide, carbon dioxide and irritating and toxic fumes and gases
Hazardous Polymerization	Will not occur

Section 11 – Toxicological information

RTECS #	No data found
LD50/ LC50	(as anhydrous) oral-rat LD50: 3543 mg/kg oral-mouse LD50: 4878 mg/kg
Carcinogenicity	No data found
Mutagenicity	No data found
Reproductive Effects	No data found
Teratogenicity	No data found
Immunology	No data found
Irritation	(as anhydrous) skin-rabbit: 5 mg, 24 hr mild eye-rabbit: 750 µg, 24 hr sev.

Section 12 – Ecological Information

Ecotoxicity	No data found
Environmental Standard	No data found

Section 13 – Disposal Consideration

Disposal Method	Federal (national), state or local laws and regulations will determine the proper waste disposal method.
Regulation Method	Federal (national), state or local laws and regulations

Section 14 – Transport Information

Shipping Name	Not applicable
Hazard Class	Not applicable
UN #	Not applicable
Packing Group	Not applicable

Section 15 – Regulatory Information

United States	TSCA	On the list
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EC	EINECS	201-069-1
Canada	WHMIS	Classification E
Japan	PRTR law	Not on the list

Section 16 – Other Information

MSDS Creation Date	October 08, 2013
Revised Date	-
Revised No.	1st

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