

MATERIAL SAFETY DATA SHEET

L-CALCIUM LACTATE

MSDS NO.005

SECTION 1- MATERIAL/COMPANY IDENTIFICATION

Chemical Name	L-Calcium Lactate
Company Name	Musashino Chemical (China) Co., Ltd.
Address	No.66 Chunfeng Rd. Economic & Technological Development Zone of Yichun, Jiangxi. 336000 China
Charge Department for MSDS	Safety Management Department
Responsibility for MSDS	Fan Gui-Zeng
Tel.	+86-795-3156266
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Emergency Tel.	+86-795-3156282

SECTION 2- HAZARDS IDENTIFICATION

Hazards	Not applicable
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SECTION 3- COMPSITION/INFORMATION ON INGREDIENTS

Chemical name	L-Calcium-Lactate
Component	98%up
Formula	$\text{Ca}[\text{CH}_3\text{CH}(\text{OH})\text{COO}]_2 \cdot 5\text{H}_2\text{O}$
Molecular Weight	218.22(anhydrous)
CAS NO.	28305-25-1

SECTION 4- FIRST AID MEASURES

General advice	Show this safety data sheet to the doctor in attendance.
Skin contact	Immediately remove all contaminated clothing, including footwear. Flush skin and hair with plenty of water or tepid water.
Eye contact	Immediately hold eyelids apart and flush eyes with plenty of water at least 15minutes. If irritation persists, call a physician.
Inhalation	Immediately remove to fresh air. If breathing is difficult, give oxygen, call a physician.
Ingestion	If swallowed, drink plenty of water or salt water. If in doubt, Call a physician immediately.

SECTION 5- FIRE FIGHTING MEASURES

Fire extinguish	Use water spray or extinguishing media
Extinguishing media	Carbon dioxide(CO ₂), foam

SECTION 6- ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation, Wear personal protective equipment, Avoid contact with skin and eyes.
Environmental precautions	Prevent further leakage or spillage. Avoid generating dust.
Methods for cleaning up	Place spilled material in clean, dry, sealable, labeled container Clean up the leaked place with plenty of water.

SECTION 7- HANDLING AND STORAGE

Handling	Keep the container well when handling. Handle the materials on clean clothes and in a cleaned room. Avoid dust formation.
Storage	Keep container tightly closed. Keep in properly labeled containers. Store in areas shielded the light, and below room temperature. Keep away from strong acids and strong oxidizers.
Packaging material	Plastic containers, Paper drum with plastic liner.

SECTION 8- EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures to reduce exposure	Ensure adequate ventilation, especially in confined areas.
Personal protection equipment	Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures	Set up safety shower, hands washer and eyes washer nearby handling the materials. Indicate the positions distinctly. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White powder or granular, Odorless or a slight characteristic odor.
PH (5%)	6~8
Melting point	>200°C
Decomposition temperature	>200°C
Explosion limits	Max. Explosion overpressure: 5.1 Bar Max. Pressure increase rate: 105 bar/s Min. Ignition Temperature: 610°C Min. Ignition Energy: >8,700 mJ Dust Explosion Class: ST 1 Dust Explosion Constant: 29 bar.m/s
Bulk Density	300~500 kg/m ³
Solubility	Water 4.8g/100g(25°C), 187.7g/100g(80°C) (Both is the data of pentahydrate) The test non soluble in alcohol

SECTION 10- STABILITY AND REACTIVITY

Stability	Stable at normal conditions. Avoid temperatures above 200°C Hazardous polymerization does not occur.
Materials to avoid	Avoid oxidizing agents, acid.
Hazardous decomposition products	Carbon oxides

SECTION 11- TOXICOLOGICAL INFORMATION

Acute toxicity	LD50 140 mg/kg bw. (mouse, ivll)
Sub-chronic toxicity	After free taking drinking water added 0.3, 0.6, 1.25, 2.5, 5% calcium lactate for 13 weeks, there is no change that should be write.
Chronic toxicity	Free taking drinking water added 2.5% calcium lactate for 104 weeks is not effective.
Carcinogenicity	Bacterial mutagen city test: Negative

SECTION 12- ECOLOGICAL INFORMATION

Mobility	Completely soluble, readily biodegradable does not occur hazardous polymerization.
Chemical Oxygen Demand (COD)	0.86 g O ₂ /g

SECTION 13- DISPOSAL CONSIDERATIONS

Contaminated packaging	Decontaminate empty containers with water, dilute with water and flush to waste system. Recycle containers if possible.
Further information	Treatment, storage, transportation, and disposal must be in accordance with local regulations.

SECTION 14- TRANSPORTATION INFORMATION

Transportation information	Sticking properly on label, indicating material name, lot No., net weight etc. The materials transportation by vehicles, the sender serves deliverers with instructions for safe handling. In transportation confirm leakless of the container, and load the materials not to upset, fall and damage. Secure preventing the load from falling.
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SECTION 15- REGULATORY INFORMATION

US Regulations	US TSCA Inventory Status Y
FDA	GRAS
China Regulations	The safe use of chemicals regulation workplace China: Food additives (Food safety law)

SECTION 16- OTHER INFORMATION

Revision Date	2020/06/01
EEC-NO.	E327
EC-NO.	248-953-3
LD50	Median lethal dose
FDA	The food and drug administration