

SAFETY DATA SHEET

1. Chemical Product and Company Identification

Product Name : Calcium Lactate
 Other Name : Bis-(2-Hydroxypropanoic Acid) Calcium salt
 Manufacturer : Musashino Chemical Laboratory, Ltd.
 Address : Tekko Bldg., 8-2, Marunouchi 1-Chome,
 Chiyoda-Ku, Tokyo 100-0005
 TEL : +81-3-6810-0242
 FAX : +81-3-6810-0148

2. Hazards Identification

Hazard Classification : Not classified
 Hazard Statement : Nothing

3. Composition/Information of Ingredients

It is single substance of Calcium Lactate.

Ingredient and Content :

Formula
$$\left[\begin{array}{c} \text{CH}_3 - \text{CH} - \text{COO} \\ | \\ \text{OH} \end{array} \right]_2 \text{Ca} \cdot n \text{H}_2\text{O}$$
 (n = 0~5)

MITI No. : 2-1376
 CAS No. : 814-80-2, 5743-47-5 (Pentahydrate)
 EINECS : 212-406-7, 611-530-2 (Pentahydrate)
 TSCA : On Inventory (Anhydrous)

4. First Aid Measures

First Aid Measures under different exposure routes :

Inhalation :

Move the exposed person to fresh air at once. Get medical attention.

Skin Contact :

Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

Eye Contact :

Continue to rinse for at least 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing. Get medical attention if any discomfort continues.

Ingestion :

Immediately rinse mouth and drink plenty of water. Get medical attention immediately.

Most important symptoms and effects :

No information available.

Protection of first aider :

No information available.

Notes for the physician :

No information available.

5. Fire Fighting Measures

Suitable extinguishing media :

This product is not flammable. Use fire extinguishing media appropriate for surrounding materials. Dry chemicals. Foam.

Special hazards arising from the product :

No information available.

Special fire-fighting methods :

Fire-fighting in the wind. Remove from fire and move to empty place. Cool containers with water spray. Provide adequate ventilation. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Protection for fire-fighters :

Fire-fighters should wear appropriate breathing apparatus and protective equipment.

6. Accidental Release Measures

Personal precautions :

Wear personal protective equipment (See section 8).

Environmental precautions :

It is biodegradable. And it is thought that fish toxicity is low.

Methods cleaning up :

Flush area with water.

7. Handling and Storage

Handling :

Avoid spilling, skin and eye contact. Wear appropriate clothing to prevent any possibility of skin contact.

Storage :

Store in tightly closed original container. Protect from light, including direct sunrays. Store below room temperature.

8. Exposure Controls/Personal Protection

Engineering control :

Provide local exhaust or process enclosure ventilation system.

Personal protective equipment :

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Hand protection : Wear protective gloves.

Eye protection : Wear approved safety goggles.

Skin and body protection : Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures :

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

9. Physical and Chemical Properties

Appearance : Powder.

Color : White

Odor : Odorless or slightly characteristic odor

pH(1→20) : 6.0~8.0

Flash Point : Not available

Flammability : Not flammable

Solubility : 4.8g/100ml Water (25°C) (Pentahydrate)
187.7g/100ml Water (80°C) (Pentahydrate)
It is almost insoluble in alcohol.

10. Stability and Reactivity

Stability : Stable under normal conditions of handling, storage use.

Reactivity : Not available.

Hazardous decomposition products : Not available.

11. Toxicological Information

Acute Toxicity : LD₅₀ 140mg/kg (Mouse, Intravenous Injection) (Calcium Lactate)

Local Effect : No data

Chronic Toxicity : Nothing (Calcium Lactate 2.5, 5% Rat Oral 104 weeks)

Subacute Toxicity : Nothing (Calcium Lactate 0.3~5% Rat Oral 13 weeks)

Carcinogenicity : Nothing (Calcium Lactate 2.5, 5% Rat Oral 104 weeks)

Skin corrosion : No data

12. Ecological Information

Persistence/degradability : Good.

13. Disposal Consideration

Waste Disposal methods : Incinerate in suitable combustion chamber. Dispose of waste and residues in accordance with local authority requirements.

14. Transport Information

UN Number : Not regulated
 UN Proper shipping name : Not regulated
 UN Classification : Not regulated
 Packing Group : Not regulated
 Mark/Label(s) : Not regulated
 Marine pollutant (Yes/No) : No
 Additional information :

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.

15. Regulatory Information

Applicable regulations :

1. Food Sanitation Act : Food additives

16. Other Information

References :

- 1) The Sigma-Aldrich Library of Chemical Safety Data Edition II ;Robert E. Lenga.
- 2) "The Handbook of Prevention for Dangerous Substances Accident and Emergencies"
KOBEKAINAN BOSHIKENKYUKAI published by SEIZANDO (Japanese)
- 3) "Encyclopedia Chimica (KAGAKU DAIJITEN)"
KYORITSU SHUPPAN (Japanese)
- 4) "Lactic Acid"; C.H.Holten, Verlag Chemie
- 5) International Chemical safety Cards(ICSC) (Japanese version) 4th
The Chemical Daily Co., Ltd.
- 6) Unpublished data (for Company use ;Japanese)
- 7) WHO Food Additive Series. No.5 (1974)
- 8) JJMT(HEN'IGEN TO DOKUSEI) 5(6)579-587(1982) (Japanese)
- 9) TSUSANSHO KOHO 1993.12.28 (Japanese)

Disclaimer :

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.