

MATERIAL SAFETY DATA SHEET

Company Name: Musashino Chemical Laboratory, Ltd.
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 Factory: Isohara Plant
 1077-2, Isohara, Isohara-Machi, Kitaibarakishi,
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 Charge Department: Isohara Plant Quality Control Department
 Responsibility for MSDS: Quality Control Manager Masanobu Yamagata
 MSDS Preparation Date July 1, 2007

Trade Name LACTIC ACID POWDER 60

Identification Mixture of two product

Content

Name	Lactic Acid (2-hydroxy propanoic acid)	Calcium Lactate (2-hydroxy propanoic acid calcium salt)
Content	60%	40%
Formula	$\begin{array}{c} \text{CH}_3\text{CHCOOH} \\ \\ \text{OH} \end{array}$	$\begin{array}{ccc} \text{CH}_3\text{CHCOO} & & \text{Ca} \\ & & \\ \text{OH} & 2 & \end{array}$
MITI No. <small>(Law Concerning Examination and Regulation Manufacturing, et Chemical substances)</small>	(2)-1369	(2)-1376
CAS No.	598-82-3	814-80-2

Hazard Identification

Hazards Class Not applicable

Human Health Effects

Prolonged skin contact may cause skin burns or ulceration.

First Aid 1)

Skin Contact

Immediately flush skin with plenty of water or tepid water.

Eye Contact

Immediately flush eyes with plenty of water at least 15 minutes.

Immediately remove contact lenses if wore.

If irritation persists, call a physician.

Inhalation

Immediately remove to fresh air.

If breathing is difficult, give oxygen, call a physician.

Ingestion

If swallowed, give large quantities of water or solution of salt.

Call a physician immediately.

Fire Fighting Measures**Fire Extinguish**

Remove a source of fire. Use a fire extinguisher.

Extinguishing Media

Dry Chemicals, Foam.

Leakage

Wear chemical splash goggles, rubber boots and rubber gloves.

Sweep up, place in a bag and hold for waste disposal.

Wash spill site after material pickup is complete.

Treatment, disposal must be in accordance with applicable local regulations.

Handling and Storage**Handling**

Wear protective clothing to prevent skin contact because of acidic, hygroscopic powder.

Storage

Store in a well-closed container at dry and cool place.

Exposure Controls**Protection**

Wear protective clothing, safety glasses, face shield and rubber gloves.

Set up safety shower, hands washer and eyes washer nearby handling the materials. Indicate the positions distinctly.

Physical And Chemical Properties**Appearance**

White acidic powder or granular, having a characteristic odor.

Solubility

Hazards Information**Instability**

Hygroscopic, but Stable

Reactivity

Exothermic reaction with alkaline substances.

Toxicological

Information (Health Hazards Information) 2) 3)

No data applicable

(for reference)

Lactic acid

LD₅₀ 4875 mg/kg (rat, oral) (as 100% lactic acid)LD₅₀ 3730 mg/kg (rabbit, oral) (as 100% lactic acid)

Irritation

500 mg/24 hr severe (rabbit skin)

750 μ g severe (rabbit eye)750 μ g/24 hr severe (rabbit eye)

Carcinogenicity

Bacterial mutagenicity test : Negative

Ecological Information 4) 5)

No data available

Biodegradability

Lactic acid : good

Calcium lactate: good

Disposal Information

Burning out

Treatment, storage, transportation, and disposal must be in accordance with local regulations.

Transport 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.

Regulatory Information

JAPAN Food Additive (JSFA on Food Sanitation Law)

Additional Information

Inquiry about informations

Address : Musashino Chemical Laboratory, Ltd.
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References

- 1) The Sigma-Aldrich Library of Chemical Safety Data
Edition II ; Robert E. Lenga
- 2) WHO Food Additives Servies No.5 1974
- 3) JJMT(HEN' IGEN TO DOKUSEI) 5(6)579-587(1982) (Japanese)
- 4) TSUSANSHO KOHO 1993.12.28 (Japanese)
- 5) TSUSANSHO KOHO 1994.12.28 (Japanese)

While MSDS presented here is correct and reliable to the best of our knowledge and belief, because we do not control any applications and conditions of use, they are given without guarantee, and we assume no responsibility with respect thereto.

The information on products is intended for common products use, so care for extraordinary handling.

End of MSDS