

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. Or Absorb in combustible material and incinerate.

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 : Transparent syrupy liquid, having an acid taste.

Color : Colorless or slightly yellow

Odor : Odorless or slightly characteristic odor

pH(1→6) : 6.5~7.5

Flash Point : Not available

Flammability : Not flammable

Specific Gravity : 1.300~1.340 (d₂₀²⁰)

Solubility : Miscible with water

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 2,000mg/kg (Rat, Perit)

Local Effect : No data

Mutagenicity : Ames test : Negative

Skin corrosion : No data

12. Ecological Information

Persistence/degradability : Good.

COD(Mn) : 0.31g/g

BOD : 0.65g/g

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. Pharmaceutical Affairs Act : Japanese Pharmaceutical Codex
2. 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.