

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : L 10429

Product Name : LACTIC ACID

Manufacturer/supplier identification

Company : NICE Chemicals (P) Ltd., Cochin, India

Tel - 0484 2800212, 2802755

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 2-Hydroxypropionic Acid; Lactol

3. HAZARDS IDENTIFICATION: Irritating to skin. Risk of serious damage to eyes.

4. FIRST AID MEASURES : After inhalation : Fresh air.

After skin contact: Wash off with plenty of water. Remove contaminated clothing.

After eye contact: Rinse out with plenty of water with the eyelid held

wide open. Summon eye specialist.

After swallowing: Make victim drink plenty of water, induce vomiting,

Summon doctor.

5. FIRE-FIGHTING MEASURES: Suitable extinguishing media: Powder, foam, water

Fire extinguisher: Carbon Dioxide, water, powder

Special risks: Combustible.

Special protective equipment for fire fighting: Do not stay in dangerous

zone without self - contained breathing apparatus.



Product Name : LACTIC ACID

Other information:

Prevent fire-fighting water from entering surface water or groundwater.

6. ACCIDENTAL RELEASE : Person related precautionary measures : Do not inhale

Measures vapours/aerosols. Avoid substance contact.

Procedures for cleaning/absorption : Take up with liquid-absorbent material (e.g. Chemizorb@). Forward for disposal. Clean up affected area.

7. HANDLING AND STORAGE : Handling : No further requirements.

Storage: Tightly closed. Dry. Protected from light. At +15° C to +25° C

Protective clothing should be selected specifically for the working place, depending

on concentration & quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: Required when vapours/aerosols are generated.

Eye Protection : Required Hand Protection : Required

Industrial hygiene: Change contaminated clothing. Application of skin protective barrier cream recommended. Wash hands after working with substance.



Product Name : LACTIC ACID

8. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
Colour : Colourless

Odour : Odourless

pH value at 10g/l H₂ O : ~ 2.8 Melting temperature : 18° C Boiling temperature(15mmHg) : 122° C

Ignition temperature : Not available
Flash Point : Not available
Explosion limit lower : Not available

upper : Not available

Relative vapour density : Not available Density $(20 \,^{\circ} \,^{\circ} \,^{\circ} \,^{\circ})$: $1.21 \,^{\circ} \,^{\circ} \,^{\circ}$

Solubility in Water (20° C) : Soluble

log P(oct) : -0.62 (calculated on the pure substance)

10. STABILITY & REACTIVITY: Conditions to be avoided: Strong heating

Substances to be avoided: Not known to date.

Hazardous decomposition products: Toxic vapours.

Further information: None.

11. TOXICOLOGICAL INFORMATION: Acute toxicity:

 LD_{50} (oral,rat) : 3543 mg/kg; (calculated on the pure substance);

 LD_{50} (dermal, rabbit) : > 2000 mg/kg; (calculated on the pure substance);

Further toxicological information:

After swallowing: Burns in oesophagus and stomach.

After skin contact: Irritant effect. possibly followed by secondary inflammation.

After eye contact: Strong irritant effect. Risk of serious damage to eyes.

Absorption of large quantities may result in damage of the following: kidneys.



Product Name : LACTIC ACID

Further data: Further hazardous properties cannot be excluded. The product should be handed with the care usual when dealing with chemicals.

12. ECOLOGICAL INFORMATION: Behavior in environmental compartments:

Distribution: log P(oct): -0.62

No bioaccumulation is to be expected ($\log P(o/w < 1)$).

Ecotoxic effects: Biological effects: Harmfull

effect on aquatic organisms. Harmful effect due to pH shift.

Fish toxicity: S.gairdnerii LC₅₀: 100 mg/lt/24 h(calculated on the pure substance);

Further ecologic data : BOD₅ : 0.64 g/g (calculated on the pure substance);

ThoD: 1.067 gm/gm (calculated on the pure substance);

BOD 22% of ThoD/5 d (calculated on the pure substance);

COD: 100 % of ThOD (calculated on the pure substance):

No ecological problems are to be expected when the product is handled and used with due care and attention.

13. DISPOSAL METHOD : Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like house-hold waste or recycled.

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. Approved waste disposal companies which will advise you on how to dispose of special waste.

14. TRANSPORT INFORMATION: Not subject to transport regulations.



Product Name : LACTIC ACID

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol : Xi Irritant

R-phrases : 38-41 Irritating to skin. Risk of serious damage to eyes.

S-phrases : 26-39 In case of contact with eyes, rinse immediately with plenty of

water and seek medical advice. Wear eye/ face protection.

Water pollution class: 1 (slightly polluting substance) (own classification)

16. OTHER INFORMATION

Reason for alteration.

Change in labelling.

Change in the chapter on toxicology.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.