



## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: LACTIC ACID

CAS Number: 50-21-5

**1. IDENTIFICATION:**

**Product Code** : 91887, 93461, 91142, 91216

**Company Name** : ADVENT CHEMBIO PRIVATE LIMITED

**Address** : W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE,  
NAVI MUMBAI - 400 701, MAHARASHTRA, INDIA.

**E-mail** : [sales@adventchembio.com](mailto:sales@adventchembio.com)

**WEBSITE** : [www.adventchembio.com](http://www.adventchembio.com)

**Company Phone Number** : +91 77770 84837

**2. HAZARDS IDENTIFICATION:****Hazard classification****Health hazards**

**Skin irritation** : Category 2

**Serious eye damage** : Category 1

**Labels elements** :

**Hazard symbol** : 

**Signal word** : Danger

**Hazard statement** : Causes skin irritation.  
: Causes serious eye damage.

**Precautionary statement**

**Prevention** : Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.  
Keep container tightly closed.

**Response** : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/  
shower.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if  
present and easy to do. Continue rinsing.  
IF INHALED: Remove person to fresh

**Storage** : Store in a dry & well-ventilated place. Keep container tightly closed. Containers which are  
opened must be carefully resealed and kept upright to prevent leakage.

**Disposal** : Dispose of contents/container to an appropriate treatment and disposal facility in  
accordance with applicable laws and regulations, and product characteristics at time of  
disposal.



## MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: LACTIC ACID

CAS Number: 50-21-5

**Other hazards which do not result in GHS classification** : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS:**

Ingredient	CAS Number	Percent	Hazardous
Lactic Acid	50-21-5	88.0 - 92.0 %	Yes

**4. FIRST AID MEASURES:**

**General information** : Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

**Ingestion** : Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Inhalation** : Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen.

**Skin contact** : Get medical attention if symptoms persist.

**Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Most important symptoms/effects, acute and delayed** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Indication of immediate medical attention and special treatment needed** : The most important known symptoms and effects are described in the labelling.

: No data available

**5. FIRE FIGHTING MEASURES:**

**General information** :

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media** : Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

**Unsuitable extinguishing media** : For this substance/mixture no limitations of extinguishing agents are given.

**Specific hazards arising from the chemical** : Carbon oxides  
Combustible.  
: Vapors are heavier than air and may spread along floors.  
Forms explosive mixtures with air on intense heating.  
Development of hazardous combustion gases or vapors possible in the event of fire.

**Special protective equipment and precautions for firefighters**

**Special firefighting procedures** : Fight fire from a protected location. Move containers from fire area if you can do so without risk.



## MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: LACTIC ACID

CAS Number: 50-21-5

**Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. ACCIDENTAL RELEASE MEASURES:**

**Personal precautions, protective equipment and emergency procedures** : Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up** : Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions** : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. HANDLING AND STORAGE:**

**Precautions for safe handling** : Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye, protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe the mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities** : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a dry, well-ventilated place.

**8. EXPOSURE CONTROLS PERSONAL PROTECTION:****Control parameters****Appropriate engineering**

**controls** : No data available

**Individual protection measures, such as personal protective equipment**

**General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

**Eye/face protection** : Wear safety glasses with side shields (or goggles).

**Hand protection** : Chemical resistant gloves.

**Other** : Wear suitable protective clothing.

**Respiratory protection** : Required when vapors/aerosols are generated. Recommended Filter type: Filter type ABEK



## MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: LACTIC ACID

CAS Number: 50-21-5

**Hygiene measures** : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower. Avoid contact with eyes, skin, and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

**Appearance** : Clear, odourless, syrupy liquid.

**Odor** : Odorless

**Solubility** : Miscible with water, ethanol and ether.

**Formula** :  $C_3H_6O_3$

**Molecular Weight** : 90.08 g/mol

**Specific Gravity** : 1.200 - 1.220 g/cm<sup>3</sup> at 25°C

**pH** : No data available

**% Volatiles by volume @ 21C (70F)** : No data available

**Boiling Point** : 122°C

**Melting Point** : 18°C

**Flash Point** : 113 °C

**Vapor Density (Air=1)** : No data available

**Vapor Pressure (mm Hg)** : No data available

**Evaporation Rate (BuAc=1)** : No data available

**10. STABILITY AND REACTIVITY:**

**Reactivity** : Forms explosive mixtures with air on intense heating.

**Chemical stability** : Material is stable under ambient conditions..

**Possibility of hazardous reactions** : No data available

**Conditions to avoid** : Avoid moisture. Strong heating.

**Incompatible materials** : No data available

**Hazardous decomposition products** : In the event of fire: see section 5

**11. TOXICOLOGICAL INFORMATION:**

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)



## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: LACTIC ACID

CAS Number: 50-21-5

Oral Product	: LD 50 (Rat): 3.543 mg/kg
Dermal Product	: LD 50 (Rabbit): 2.000 mg/kg
Inhalation Product	: LC 50 (Rat): 7.94 mg/l
Repeated dose toxicity Product	: No data available.
Skin corrosion/irritation Product	: Skin irritation
Serious eye damage/eye irritation Product	: Irreversible effects on the eye - 10 s
Respiratory or skin sensitization Product	: Result: negative
Carcinogenicity Product	: No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans	: No data available.
US. National Toxicology Program (NTP) Report on Carcinogens	: No data available.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	: No data available.
Germ cell mutagenicity	
In vitro Product	: No data available.
Reproductive toxicity Product	: No components toxic to reproduction.
Specific target organ toxicity - single exposure Product	: No data available.
Specific target organ toxicity - repeated exposure Product	: No data available.
Aspiration hazard Product	: No data available.
Other effects	: No data available.

**12. ECOLOGICAL INFORMATION:****Ecotoxicity****Acute hazards to the aquatic environment**

Toxicity to daphnia and other aquatic invertebrates	: Static test EC50 - Daphnia magna (Water flea) - 130 mg/l - 48 h
Toxicity to algae	: Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - ca. 3,5 g/l - 72 h



## MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: LACTIC ACID

CAS Number: 50-21-5

**Toxicity to bacteria** : static test EC50 - activated sludge - > 88,2 mg/l - 3 h

**Chronic hazards to the aquatic environment**

**Fish Product** : No data available.

**Aquatic invertebrates Product** : No data available.

**Toxicity to Aquatic Plants Product:** : No data available.

**Persistence and degradability**

**Biodegradation Product** : Readily biodegradable.

**BOD/COD ratio Product** : aerobic Biochemical oxygen demand - Exposure time 20 d

**Bioaccumulative potential**

**Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.

**Partition coefficient n-octanol / water (log Kow) Product** : No data available.

**Mobility in soil** : No data available.

**Other adverse effects** : No data available.

**13. DISPOSAL CONSIDERATION:**

**Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal recommendations are based on uncontaminated material.

**Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. TRANSPORT INFORMATION:**

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR/RID	NA	Lactic Acid	NA	Not dangerous goods	NA
IMDG	NA	Lactic Acid	NA	Not dangerous goods	NA
IATA	NA	Lactic Acid	NA	Not dangerous goods	NA

**15. REGULATORY INFORMATION:**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture

No Data Available.

## MATERIAL SAFETY DATA SHEET

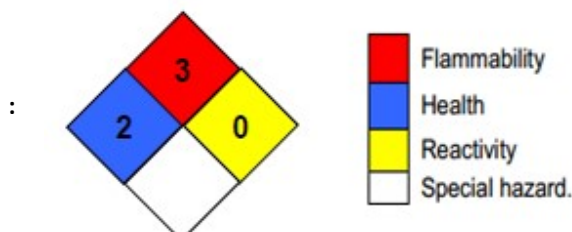
Version :02

PRODUCT NAME: LACTIC ACID

CAS Number: 50-21-5

## 16. OTHER INFORMATION:

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date : 23/04/2025

Version : 02

**Disclaimer:** This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. ADVENT CHEMBIO PRIVATE LIMITED makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the technical instructor in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of ADVENT CHEMBIO PRIVATE LIMITED and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).