

# Safety Data Sheet



## SECTION 1: Identification of the substance/mixture and the company/undertaking

### 1.1 Production identifiers

Product name : LACTIC ACID 88 USP  
Brand : CJ Chemicals LLC  
CAS-No. : 50-21-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : CJ Chemicals LLC  
3469 E Grand River Rd #112  
Howell, MI 48843  
United States

Telephone : +1 (888) 274-1044

### 1.4 Emergency Telephone

Emergency Phone # : 1-800-424-9300 CHEMTREC (USA)  
1-703-527-3887 CHEMTREC (international) 24 hours/day; 7 days/week

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### Label elements

#### Emergency Overview

#### Danger

#### Hazard statements

Causes severe skin burns and eye damage



**Appearance** Syrupy liquid

**Physical state** Liquid

**Odor** None

#### Precautionary Statements - Prevention

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

#### Precautionary Statements - Response

Immediately call a poison center or doctor

Specific treatment (see Section 4 on SDS)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center or doctor

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

#### Precautionary Statements - Storage

Store locked up

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Not Applicable

#### Other Information

- May be harmful if swallowed
- May be harmful in contact with skin

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	weight-%
Lactic acid	50-21-5	88
Water	7732-18-5	12

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES****First aid measures**

<b>Eye contact</b>	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Seek immediate medical attention/advice.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing and shoes before reuse. Get medical attention if irritation develops and persists.
<b>Inhalation</b>	Remove to fresh air. Administer oxygen if breathing is difficult. Call a physician immediately.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.
<b><u>Most important symptoms and effects, both acute and delayed</u></b>	
<b>Symptoms</b>	See Section 11 for symptom information.
<b><u>Indication of any immediate medical attention and special treatment needed</u></b>	
<b>Note to physicians</b>	Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Dry chemical. Water spray (fog). Carbon dioxide (CO<sub>2</sub>). Foam.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

Material is not considered flammable but the residue may burn in the presence of a strong ignition source after the water has been evaporated.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

**For emergency responders** Isolate area. Keep unnecessary personnel away.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up** Collect spillage. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Following product recovery, flush area with water. Do not flush into surface water or sanitary sewer system.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Use only in well-ventilated areas. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing. Keep out of the reach of children. Do not handle or store near open flame, heat or other sources of ignition.

**Incompatible materials** Nitric acid. Hydrofluoric acid. Acids. Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering Controls** Showers, eyewash stations, ventilation system.

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

**Eye/face protection** Splash proof chemical goggles and face shield.

**Skin and body protection** Wear protective Neoprene™ gloves or rubber gloves. Wear suitable protective clothing. Rubber boots recommended.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing and shoes before reuse. Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	None
<b>Appearance</b>	Syrupy liquid	<b>Odor threshold</b>	No information available
<b>Color</b>	Clear to pale yellow	<b>Remarks • Method</b>	
<b>Property</b>	<b>Values</b>		
<b>pH</b>	0.3	@ 21°C	
<b>Melting point/freezing point</b>	< -7 °C / < 20 °F		
<b>Boiling point / boiling range</b>	122 °C / 250 °F	(at 14-15 mm HG)	
<b>Flash point</b>	> 112 °C / > 234 °F		
<b>Evaporation rate</b>	< 1		
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	No information available		
<b>Lower flammability limit:</b>	No information available		
<b>Vapor pressure</b>	30	mmHg @ 190°C	
<b>Vapor density</b>	No information available		
<b>Specific Gravity</b>	1.21 g/cc		
<b>Water solubility</b>	Completely soluble		
<b>Solubility in other solvents</b>	No information available		
<b>Partition coefficient</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>Decomposition temperature</b>	No information available		
<b>Kinematic viscosity</b>	No information available		
<b>Dynamic viscosity</b>	No information available		
<b>Explosive properties</b>	Not an explosive		
<b>Oxidizing properties</b>	No information available		
<b>Molecular weight</b>	90.08		
<b>VOC Content (%)</b>	0.00%		

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Heat.

### Incompatible materials

Nitric acid. Hydrofluoric acid. Acids. Strong oxidizing agents.

### Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Product Information**

**Inhalation** May cause irritation. Inhalation might cause cough.

<b>Eye contact</b>	Irritating to eyes.
<b>Skin Contact</b>	Corrosive. Contact causes severe skin irritation and possible burns.
<b>Ingestion</b>	Harmful if swallowed. Ingestion can cause nausea, vomiting, burns to mouth and esophagus, and shortness of breath.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Lactic acid 50-21-5	= 3543 mg/kg ( Rat )	> 2 g/kg ( Rabbit )	-

**Information on toxicological effects****Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization** No information available.**Germ cell mutagenicity** No information available.**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.**Reproductive toxicity** No information available.**STOT - single exposure** No information available.**STOT - repeated exposure** No information available.**Aspiration hazard** No information available.**Numerical measures of toxicity - Product Information****Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

**Oral LD50** 4,026.00 mg/kg**Dermal LD50** 2,275.00 mg/kg**12. ECOLOGICAL INFORMATION****Ecotoxicity**

88% of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

Readily biodegradable.

**Bioaccumulation**

No information available.

**Mobility**

Soluble in water.

**Other adverse effects** No information available**13. DISPOSAL CONSIDERATIONS****Waste treatment methods****Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.**Contaminated packaging** Dispose of in accordance with federal, state and local regulations.**14. TRANSPORT INFORMATION****DOT**

<b>UN/ID No.</b>	3265
<b>Proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s. (contains lactic acid)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II
<b>Emergency Response Guide Number</b>	153

**15. REGULATORY INFORMATION****International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies

**Legend:****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	Yes

**Sudden release of pressure hazard** No  
**Reactive Hazard** No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not Applicable

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Properties</b> Corrosive, Acid
<b><u>HMIS</u></b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> C (safety glasses, gloves, synthetic apron)

**Prepared By** Technical Department  
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**Version** 2

**Revision Note**

New information on raw ingredient has become available.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

**End of Safety Data Sheet**