



To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrant or guarantee the information. We provide vendor SDSs to assist our customers in their compliance efforts. The attached document is in compliance with one of the respective country regulatory requirements noted below:

The OSHA Hazard Communication Standard (in the United States)  
The Hazardous Products Regulations (in Canada)

We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Product Stewardship Team  
Zep Inc.



Issuing Date Apr-06-2017

Revision Date Mar-02-2018

# Safety Data Sheet

OSHA format

Revision Number 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product name CHLORINE REAGENT 2

### Other means of identification

Product Code(s) 4499

UN-No 3265

### Recommended use of the chemical and restrictions on use

Recommended Use Use as a laboratory reagent. Laboratory chemicals. Industrial (not for food or food contact use).

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

#### **Manufacturer Address**

LaMotte Company, Inc.  
802 Washington Avenue  
P.O. Box 329  
Chestertown, MD 21620 USA  
T 410-778-3100  
F 410-778-9748

### Emergency telephone numbers

(CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

**2. HAZARDS IDENTIFICATION**

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

**EMERGENCY OVERVIEW****DANGER****Hazard statements**

Causes severe skin burns and eye damage.



**Appearance** Colorless

**Physical state** liquid

**Odor** Slight Acid

**Precautionary Statements - Prevention**

Do not taste or swallow. Do not breathe dust /fume /gas /mist /vapors /spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves /protective clothing /eye protection /face protection.

**Response:** Immediately call a poison center or physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/container to an approved waste disposal plant.

**Other Hazards**

May be harmful in contact with skin.

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

Chemical name	CAS No	Weight-%
Lactic acid	50-21-5	53

**4. FIRST AID MEASURES****First Aid Measures****General advice**

Do not get in eyes, on skin, or on clothing.

**Eye contact**

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

**Skin contact**

Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.

<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician immediately. Drink plenty of water. Never give anything by mouth to an unconscious person.
<b><u>Self-protection of the first aider</u></b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protection recommended in Section 8.

## 5. FIREFIGHTING MEASURES

### **Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### **Hazardous combustion products**

Contact with metals may evolve flammable hydrogen gas.

### **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.

## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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

<b>Methods for containment</b>	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose of contents/containers in accordance with local regulations.
<b>Methods for cleaning up</b>	Neutralize spill with alkaline material (sodium bicarbonate), being careful to prevent splattering, then containerize slurry and hold for later disposal. If local regulations permit, dilute slurry with water and rinse to drain with excess water. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling**

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Do not taste or swallow. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.
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### **Conditions for safe storage, including any incompatibilities**

<b>Storage:</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials. Keep away from heat. Keep away from oxidizing agents. Store away from strong bases or metals. Keep out of the reach of children.
<b>Incompatible Products</b>	Strong acids. Strong oxidizing agents. Iodides. Metals. Contact with metals (aluminum, iron, steel) may release hydrogen gas.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Lactic acid 50-21-5	*_	*_	Not Established

Appropriate engineering controls

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Impervious clothing. Protective gloves. Rubber gloves. Neoprene gloves.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<b>Physical state</b>	liquid		
<b>Appearance</b>	Colorless	<b>Odor</b>	Slight Acrid

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	<2	
Melting point / freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	Not Applicable 113 °C / 235 °F	CC for 85% Lactic acid (based on .?)
Evaporation rate		
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable under recommended storage conditions.
<b>Hazardous Reactions</b>	Contact with metals may evolve flammable hydrogen gas.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Excessive heat. Incompatible Products.
<b>Incompatible materials</b>	Strong acids. Strong oxidizing agents. Iodides. Metals. Contact with metals (aluminum, iron, steel) may release hydrogen gas.
<b>Hazardous decomposition products</b>	Carbon oxides (COx).

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Component identification**

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Lactic acid 50-21-5	= 3543 mg/kg ( Rat )	> 2 g/kg ( Rabbit )	Not Established

**Information on toxicological effects**

Chemical name	ACGIH	IARC	NTP	OSHA
Lactic acid 50-21-5	Not Established	Not Established	Not Established	Not Established

IARC (International Agency for Research on Cancer)  
Group 1 - Carcinogenic to Humans

ATEmix (oral) 6,685.00 mg/kg  
ATEmix (dermal) 3,774.00 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

**Unknown Aquatic Toxicity** 100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Lactic acid 50-21-5	Not Established	Not Established	Not Established

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

When released into the soil, this material may leach into ground water. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet or dry deposition.

Chemical name	Log Pow
Lactic acid 50-21-5	Not Established

**13. DISPOSAL CONSIDERATIONS**

<b>Disposal Methods</b>	Dispose of contents/containers in accordance with local regulations. Dispose according to federal, state, and local regulations. If permitted, neutralize reagent with sodium bicarbonate/sodium carbonate, add slurry to large volume of water to dilute, rinse to drain with excess water.
<b>Contaminated packaging</b>	Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Lactic acid 50-21-5	Not Established	-	Not Established	Not Established

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Lactic acid 50-21-5	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Lactic acid 50-21-5	*_

#### 14. TRANSPORT INFORMATION

##### DOT

**Proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (53% Lactic Acid)  
**UN-No** 3265  
**Hazard Class** 8  
**Packing group** III

##### TDG

Not regulated

##### MEX

Not regulated

##### ICAO

Not regulated

##### IATA

**UN-No** 3265  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (53% Lactic Acid)  
**Hazard Class** 8  
**Packing group** III

##### IMDG/IMO

**UN-No** 3265  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (53% Lactic Acid)  
**Hazard Class** 8  
**Packing group** III

##### RID

**UN-No** 3265  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (53% Lactic Acid)  
**Hazard Class** 8  
**Packing group** III

##### ADR

**UN-No** 3265  
**Proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (53% Lactic Acid)  
**Hazard Class** 8  
**Packing group** III

##### ADN

Not regulated

#### 15. REGULATORY INFORMATION

##### International Inventories

**TSCA** Complies  
**DSL/NDL** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Complies  
**IECSC** Complies

KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of 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

Chemical name	SARA 313 - Threshold Values %
Lactic acid 50-21-5	Not Established

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
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)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Lactic acid 50-21-5	Not Established	Not Established	Not Established	Not Established

**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

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Lactic acid 50-21-5	*	Not Established	-

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical name	California Proposition 65
Lactic acid 50-21-5	Not Established

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Lactic acid 50-21-5	Not Established	Not Established	Not Established



CPSC (Consumer Product Safety Commission) - Specially Regulated Substances**16. OTHER INFORMATION**NFPA

Health hazard 2

Flammability 1

Instability 0

Physical and Chemical  
Hazards N/A

Health hazard 2

Flammability 1

Stability 0



Health Hazard	2
Fire Hazard	1
Reactivity	0

Prepared by

Issuing Date

Revision Date

Disclaimer

Regulatory Affairs Department

Apr-06-2017

Mar-02-2018

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**