

ChlorMateTM Liquid Preparation Date: 03-Dec-2007 Re

Revision Date: 21-Jun-2021

Revision Number: 3

SAFETY DATA SHEET

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

<u>Product Identifier</u> Product Name	ChlorMate™ Liquid
<u>Other means of identification</u> Item#: Synonyms	1821 None
Recommended use of the chemical Recommended use Uses advised against	and restrictions on use Chlorinated alkaline detergent, Restricted to professional users All other
Details of the supplier of the safety	data sheet
Supplier	DeLaval Cleaning Solutions 11100 N. Congress Ave. Kansas City, MO 64153 Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

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 Sub-category A
Serious eye damage/eye irritation	Category 1

Corrosive to metals	Category 1

Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes severe skin burns and eye damage May be corrosive to metals



Appearance Light yellow

Physical state Liquid

Odor Slight chlorine

Precautionary Statements - Prevention

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

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

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/physician. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Sodium hydroxide	1310-73-2	10 - 20
Sodium hypochlorite	7681-52-9	1 - 10

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first-aid measures

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, call a physician.
Ingestion	Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Corrosive. The product causes burns of eyes, skin and mucous membranes.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

No information available.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes.

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.

NFPA

Health hazards 3 Flammability 0

Instability 1

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Incompatible Materials

Acids, organic materials, light metals (e.g. aluminum, copper, brass, zinc galvanized)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	10 mg/m ³
1310-73-2		TWA: 2 mg/m ³	_

Appropriate engineering controls

Engineering Controls Ensui

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection	Goggles.
Skin and body protection	Wear protective gloves and protective clothing.
Respiratory Protection	In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Slight chlorine		
Appearance	Light yellow	Odor Threshold	No information available		
Property_	<u>Values</u>	Remarks/ Method			
рН	12				
Melting point/freezing point	No information available				
Boiling Point/Range	No information available				
Flash Point	No information available				
Evaporation rate	No information available				
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	1.25				
Water Solubility	soluble				
Partition coefficient:	No information available				
n-octanol/water					
Autoignition Temperature	No information available				
Decomposition temperature	No information available				
Viscosity of Product	No information available				
Dynamic viscosity	No information available				
Other information					
Liquid Density	10.4 lb/gal				
	10. STABILITY AND REACTIVITY				

Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials Acids, organic materials, light metals (e.g. aluminum, copper, brass, zinc galvanized)

Hazardous decomposition products

Chlorine.

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure

Eye contact, Skin contact, Ingestion, Inhalation

Information on likely routes of exposure

Eyes	Corrosive to the eyes and may cause severe damage including blindness.
Skin	Extremely corrosive and destructive to tissue.
Ingestion	Ingestion causes burns of the upper digestive and respiratory tracts.
Inhalation	Inhalation of vapours in high concentration may cause irritation of respiratory system.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Mutagenic effects Corpinggeniaity	Product is not identified as a sensitizer according to OSHA regulations. Product is not identified as a mutagen according to OSHA regulations.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	Not Listed	Group 3	Not Listed	Not Listed

Legend:

IARC (International Agency for Research on Cancer) Group 3 - Not classifiable

Reproductive Effects

STOT - single exposureProduct is not identified as having single target organ toxicity (single exposure) according to
OSHA regulations.STOT - repeated exposureProduct is not identified as having single target organ toxicity (repeated exposure)
according to OSHA regulations.Aspiration HazardProduct is not identified as an aspiration hazard according to OSHA regulations.

Product is not identified as having reproductive effects according to OSHA regulations.

Numerical measures of toxicity

If available, toxicity values of individual components are shown below.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide 1310-73-2	2000 mg/Kg	1350 mg/kg	No data available
Sodium hypochlorite 7681-52-9	= 8.91 g/kg (Rat)	10000 mg/kg (Rabbit)	No data available

0.8% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical name	Algae/aquatic plants	Fish	Microtox	Waterflea				
Sodium hydroxide	No data available	LC 50 (96 h) 45.4 mg/l	No data available	EC50 (48h): 40.4 mg/l				
1310-73-2		(Oncorhynchus mykiss)		(Ceriodaphnia dubia)				
Sodium hypochlorite 7681-52-9	0.095: 24 h Skeletonema costatum mg/L EC50	LC50 (96 h) 0.06 mg/l	No data available	0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static 2.1: 96 h Daphnia magna mg/L EC50				

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method	Dispose of in accordance with local regulations. Should not be released into the environment.
Contaminated Packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT

UN-No	3266
Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s (Sodium hypochlorite, Sodium hydroxide)
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania			
Sodium hydroxide 1310-73-2	Х	X	Х			
Sodium hypochlorite 7681-52-9	Х	X	Х			

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

Preparation Date: Revision Date: Revision Note: <u>Disclaimer</u> 03-Dec-2007 21-Jun-2021 None

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 information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS