

CHEMICAL EQUIPMENT LABS, LLC
CEL 488
Safety Data Sheet (SDS)

Section 1: Identification of the substance/mixture and of the company/undertaking

PRODUCT IDENTIFIER

Product name: CEL 488

Product form: Mixture

EPA Reg. No. 52867-1

Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/aquacade

Details of the supplier of the safety data sheet

Name/Address: Chemical Equipment Labs, LLC
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EMERGENCY TELEPHONE NUMBER

CHEMTREC (800) 424-9300

Section 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

GHS-US classification

Skin Corr. 1A H314

Label Elements

GHS-US labelling

Hazard pictograms (GHS-US)

Signal word (GHS-US)

Hazard statements (GHS-US)

Precautionary statements (GHS-US)

DANGER

H314- Causes severe skin burns and eye damage

P260- Do not breathe vapors, mist, fume

P264- Wash hands, forearms and face thoroughly after handling

P280- Wear eye protection, protective gloves

P301+P330+P331- If swallowed: rinse mouth Do NOT induce vomiting

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September 15, 2016

P303+P361+P353- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310- Immediately call a doctor, a poison center
P321- Specific treatment (see wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work on this label)
P363- Wash contaminated clothing before reuse
P405- Store locked up
P501- Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste

Other Hazards

No additional information available

Unknown acute toxicity (GHS-US)

No data available

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

NAME	PRODUCT IDENTIFER	%
Sodium hypochlorite	(CAS No) 7681-52-9	Proprietary
Inert ingredients		Proprietary

Section 4: FIRST-AID MEASURES

Description of first aid measures

First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to unconscious person.
First aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.

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First-aid measures after skin contact	: IF ON SKIN (or clothing): Removed affected clothing and wash all exposed skin with water for at least 15 minutes. Get medical attention immediately.
First-aid measures after eye contact	: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Causes sever skin burns and eye damage
Symptoms/injuries after inhalation	: May cause respiratory irritation
Symptoms/injuries after skin contact	: Highly corrosive to skin
Symptoms/injuries after eye contact	: Causes serious eye damage
Symptoms/injuries after ingestion	: May cause gastrointestinal irritation

Indication of immediate medical attention and special treatment needed

No additional information available.

Section 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media : Carbon dioxide. Foam. Dry Powder. Sand. Water spray.

Special hazards arising from the substance or mixture

Fire hazard : May cause fire or explosion; strong oxidizer.

Explosion hazard : Product is not explosive.

Reactivity : Acid contamination will produce very irritating fumes similar to chlorine

Suitable Extinguishing Media Not applicable

Unsuitable Extinguishing Media Not applicable

Advice for firefighters

Firefighting instructions : Use water spray or fog cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water

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Protection during firefighting : in the environment. Prevent human exposure to fire, fumes, smoke and products of combustion.
: Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see section8).

For non-emergency personnel

Protective equipment : Wear protective equipment as described in section 8.
Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Do not use sawdust or other combustible materials to absorb hypochlorite solutions. Dilute with plenty of water. Reduce with agents such as bisulfites or ferrous salt solutions. Wash spill area thoroughly with plenty of soap and water. Place in a polyethylene container for disposal in accordance with the waste regulations (see Section 13).

Reference to other sections
No additional information

Section 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Provide good ventilation in process area to prevent formation of vapor. Do not breathe vapors, mist. Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, well-ventilated area. Keep container closed when not in use. Stability decreases upon exposure to heat and light. Store in a dark area.

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Incompatible materials : Heavy metals. Reducing agents. Organic material. Acids. Ether.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Sodium hypochlorite (7681-52-9)	
Remark (ACGHIH)	OELs not established
Remark (OSHA)	OELs not established

EXPOSURE CONTROLS

- Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below recommended exposure limits. Use exposition-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment : Gloves. Wear chemical goggles and face shield in combination. Protective clothing.
- Hand protection : Use gloves chemically-resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under standard EN 347 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate PVC or vinyl. Change contaminated gloves immediately. Suitable gloves for this specific application can be recommended by glove supplier.
- Eye protection : Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles. Chemical goggles and face shield must be worn in combination.
- Skin and body protection : Wear long-sleeves, and chemically impervious PPE/Coveralls to minimize bodily exposure.
- Respiratory protection : Use NIOSH-approved dust/particulate respirator. Where vapor, mist, or dust exceed PELs or other applicable OELs, Use NIOSH-approved respiratory protective equipment.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- Physical state : Liquid.
- Color : Colorless. Light yellow-green.
- Odor : Chlorine-like.
- Odor Threshold : No data available
- pH : 12 @ 100 g/l
- Relative evaporation rate (butyacetate=1) : no data available

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Melting point	: No data available
Freezing point	: -20 °C (-3 °F) approximately
Boiling point	: > 110 °C (230 °F) Decomposes
Flash Point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solids, gas)	: no data available
Vapor pressure	: 12.1 mm Hg @ 20 °C (68 °F)
Relative vapor density at 20 °C	: no data available
Relative density	: 1.2
Solubility	: Water 100%
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

Section 10: STABILITY AND REACTIVITY

Reactivity

Acid contamination will produce very irritating fumes similar to chlorine.

Chemical stability

Stability decreases with concentration, heat, light, decrease in pH and contamination by metals.

Possibility of hazardous reactions

Sodium hypochlorite and its solutions decompose when heated. Decomposition products may cause container to rupture

Conditions to avoid

Heat. Direct light.

Incompatible materials

Heavy metals. Reducing agents. Organic materials. Acids. Ether.

Hazardous decomposition products

Acid fumes.

Section 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity : Not classified

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Sodium hypochlorite (7681-52-9)	
LD50 oral rate	8200 mg/kg
LD50 dermal rabbit	10000 mg/kg

Skin corrosion/irritation : Causes severe skin burns
pH: 12 @ 100g/L

Serious eye damage/irritation : Causes serious eye damage
pH: 12 @ 100 g/L

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause respiratory irritation

Symptoms/injuries after skin contact : Highly corrosive to skin

Symptoms/injuries after eye contact : Causes serious eye damage

Symptoms/injuries after ingestion : May cause gastrointestinal irritation

Section 12: ECOLOGICAL INFORMATION

Toxicity

Ecology – general : No information available

Persistence and degradability

Sodium Hypochlorite Solution	
Persistence and degradability	No information available

Bio accumulative potential

No additional information available

Mobility in soil

No additional information available

Other adverse effects

No additional information available

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.

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Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

Section 14: TRANSPORT INFORMATION

In accordance with DOT

Transport document description : UN1791 Hypochlorite Solutions, 8, III
 UN-No. (DOT) : 1791
 DOT NA no. : UN1791
 Proper Shipping Name (DOT) : Hypochlorite Solutions
 Department of Transportation (DOT) Hazard classes : 8 – Class 8 – Corrosive material 49 CFR 173.136
 Hazard Labels (DOT) : 8 – Corrosive
 Packing Group (DOT) : III – Minor Danger
 DOT Quantity Limitations Passenger aircraft/rail : 5 L
 (49 CFR 173.27)
 DOT Quantity Limitations Cargo aircraft only : 60 L
 (49 CFR 175.75)
 DOT Vessel Stowage Location : A – The material may stowed “on deck” on a cargo vessel and on a passenger vessel.
 DOT Vessel Stowage Other : 40 – Stow “clear living quarters”

Additional information

Other information : No supplementary information available.

Transport by sea

No additional information available

Air transport

No additional information available

Section 15: REGULATORY INFORMATION

US Federal regulations

Sodium Hypochlorite Solutions	
All chemical substances in this product are listed in the EPA (Environment Protection Agency) TSCA (Toxic Substance Control Act) Inventory	
SARS Section 311/312 Hazard Classes	Immediate (acute) health hazard

Sodium hypochlorite (7681-52-9)	
CERCLA RQ (Reportable quantity of EPA’s List of Lists):	100 lb.

International Regulations

No additional information available

US State Regulations

California Proposition 65

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm.

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Sodium hypochlorite (7681-52-9)

U.S. – New Jersey – Right to know Hazardous Substance List
U.S. – Massachusetts – Right to know List
U.S. – Pennsylvania – RTK (Right to Know) – Environmental Hazard List
U.S. – Pennsylvania – RTK (Right to Know) List

Section 16: OTHER INFORMATION

Indication of changes	: Revision 2.0
Revision date	: September 15, 2016
Other information	: ERM
NFPA health hazard	: 3 – Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA fire hazard	: 0 – Materials that will not burn.
NFPA reactivity	: 1 – Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.
HMIS Rating	
Health	: 3
Flammability	: 0
Physical	: 1

NOTE TO EMPLOYER

This Safety Data Sheet contains environmental, health and toxicology information for your employees. Please ensure this information is provided to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this SDS must be given to the buyer or the information incorporated in you SDS. Discard any previous edition of this SDS.

DISCLAIMER

The above information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use or misuse are beyond our control, Chemical Equipment Labs, LLC makes no warranty, either express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for the reliance thereon. Chemical Equipment Labs, LLC assumes no responsibility for any injury or loss resulting from the use of the product described herein. User should satisfy himself that he has all current data relevant to his particular use.

End of Safety Data Sheet

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