



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.



Univar USA Inc Safety Data Sheet

SDS No:

Version No:

Order No:

3075 Highland Pkwy, Ste 200, Downers Grove, IL 60515
(425) 889 3400

Emergency Assistance

For emergency assistance involving chemicals call
Chemtrec - (800) 424-9300



Univar
3075 Highland Pkwy STE 200
Downers Grove, IL 60515
425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: SODIUM HYPOCHLORITE 10-16%

Other means of identification

Synonyms: Liquichlor, Bleach

CAS NUMBERS: 7681-52-9

SDS number: 000100001054

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Univar

3075 Highland Pkwy STE 200

Downers Grove, IL 60515

425-889-3400

Emergency telephone number:For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Corrosive to metals Category 1

Health Hazards

Acute toxicity (Oral) Category 4

Skin Corrosion/Irritation Category 1

Serious Eye Damage/Eye Irritation Category 1

Environmental HazardsAcute hazards to the aquatic environment Category 1

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Label Elements

Hazard Symbol



Signal Word

Danger

Hazard Statement

May be corrosive to metals.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Very toxic to aquatic life.

Precautionary Statements

Prevention

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

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Storage Store locked up.

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.

Other hazards which do not result in GHS classification None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hypochlorite		7681-52-9	10 - 16%
Sodium hydroxide		1310-73-2	0.3 - 5%
Water		7732-18-5	80 - 89.7%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention.

Ingestion: Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately.

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

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

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Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use: Foam. Carbon dioxide or dry powder.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: 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: Absorb spillage with non-combustible, absorbent material.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions: Do not contaminate water sources or sewer. Avoid release to the environment.

7. Handling and storage

Precautions for safe handling: Do not taste or swallow. Wash hands thoroughly after handling. Do not get in eyes. Do not get in eyes, on skin, on clothing.

Conditions for safe storage, including any incompatibilities: Store locked up.

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8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Sodium hydroxide	Ceiling	2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Sodium hydroxide - Particulate.	ST ESL	20 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	2 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
Sodium hydroxide	Ceiling	2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	Ceiling	2 mg/m3	US. ACGIH Threshold Limit Values (03 2016)
	Ceil_Tim e	2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
	Ceiling	2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate Engineering Controls

Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

General information:

Provide easy access to water supply and eye wash facilities. Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Eye/face protection:

Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection

Hand Protection:

Chemical resistant gloves

Other:

Chemical resistant clothing

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Respiratory Protection: In case of inadequate ventilation use suitable respirator.
Hygiene measures: Do not eat, drink or smoke when using the product. Wash hands after handling. Do not get in eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Physical state:	liquid
Form:	liquid
Color:	Pale yellow-green, Clear
Odor:	Odor of chlorine
Odor threshold:	No data available.
pH:	10 - 12
Melting point/freezing point:	-20 °C
Initial boiling point and boiling range:	> 40 °C
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.224
Solubility(ies)	
Solubility in water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.

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Viscosity: No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Stable
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	Oxidizers, acids Ammonia. Amines.
Hazardous Decomposition Products:	By heating and fire, toxic vapors/gases may be formed.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:	LD50 (Rat): 3 - 5 g/kg
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Dermal

Product:	LD50 (Rabbit): > 2 g/kg
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Inhalation

Product:	May be harmful if inhaled.
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Repeated dose toxicity

Product:	No data available.
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Skin Corrosion/Irritation

Product:	Causes severe skin burns.
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Serious Eye Damage/Eye Irritation

Product:	Causes serious eye damage.
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Respiratory or Skin Sensitization

Product:	Not a skin sensitizer.
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Carcinogenicity

Product:	No data available.
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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

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:

Fish

Product: LC50 (Shiner perch (*Cymatogaster aggregata*), 96 h): 0.033 - 0.097 mg/l
LC50 (Bluegill (*Lepomis macrochirus*), 48 h): 0.6 mg/l

Aquatic Invertebrates

Product: LC50 (Aquatic crustacea): 1 mg/l LC50 (*Daphnia magna*, 96 h): 2.1 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: EC50 (Green algae (*Dunaliella bioculata*), 24 h): 0.6 mg/l

Persistence and Degradability

Biodegradation

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Product:	The product solely consists of inorganic compounds which are not biodegradable.
BOD/COD Ratio	
Product:	No data available.
Bioaccumulative Potential	
Bioconcentration Factor (BCF)	
Product:	The product is not bioaccumulating.
Partition Coefficient n-octanol / water (log Kow)	
Product:	No data available.
Mobility in Soil:	No data available.
Known or predicted distribution to environmental compartments	
Sodium hypochlorite	No data available.
Sodium hydroxide	No data available.
Water	No data available.
Known or predicted distribution to environmental compartments	
Water	No data available.

13. Disposal considerations

Disposal instructions:	Discharge, treatment, or disposal may be subject to national, state, or local laws.
Contaminated Packaging:	Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN Number:	UN 1791
UN Proper Shipping Name:	Hypochlorite solutions
Transport Hazard Class(es)	
Class:	8
Label(s):	8
Packing Group:	III
Marine Pollutant:	Marine Pollutant

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Special precautions for user: —

IMDG

UN Number: UN 1791
UN Proper Shipping Name: HYPOCHLORITE SOLUTION
Transport Hazard Class(es)
Class: 8
Label(s): 8
EmS No.: F-A, S-B
Packing Group: III
Marine Pollutant: Not regulated.
Special precautions for user: —

15. Regulatory information

US Federal Regulations US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Sodium hypochlorite Reportable quantity: 100 lbs.
Sodium hydroxide Reportable quantity: 1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

☒ Acute (Immediate) ☐ Chronic (Delayed) ☐ Fire ☐ Reactive ☐ Pressure Generating

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	RQ
Sodium hypochlorite	100 lbs.
Sodium hydroxide	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Sodium hypochlorite	10,000 lbs
Sodium hydroxide	10,000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Sodium hypochlorite Reportable quantity: 100 lbs.
Sodium hydroxide Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

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US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Sodium hypochlorite Listed

Sodium hydroxide Listed

US. Massachusetts RTK - Substance List

Sodium hypochlorite Listed

Sodium hydroxide Listed

US. Pennsylvania RTK - Hazardous Substances

Sodium hypochlorite Listed

Sodium hydroxide Listed

US. Rhode Island RTK

Sodium hypochlorite Listed

Sodium hydroxide Listed

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Inventory Status: Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EU EINECS List:	On or in compliance with the inventory
EU ELINCS List:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory

16.Other information, including date of preparation or last revision

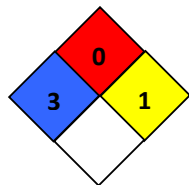
HMIS Hazard ID

Health	3
Flammability	0
Physical Hazards	1
PERSONAL PROTECTION	B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Red	Flammability
Blue	Health
Yellow	Reactivity
White	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 03/15/2017
Revision Date: No data available.
Version #: 1.0
Further Information: No data available.

Version: 1.0
Revision Date: 03/15/2017



Univar USA Inc Safety Data Sheet

For Additional Information contact SDS Coordinator during business hours, Pacific time: (425) 889-3400

Notice

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