

Version 1.19

Revision Date: 02/01/2023

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	SODIUM HYPOCHLORITE 12.5%				
Recommended use of the chemical and restrictions on use					
Recommended use	Industrial chemical				
Manufacturer or supplier's details					
Company	: Univar Solutions USA, Inc.				
Address	3075 Highland Pkwy Suite 200				
	Downers Grove, IL 60515				
	United States of America (USA)				
Emergency telephone number:					
Transport North America: CHEMTREC (1-800-424-9300)					
CHEMTREC INTERNATIONAL Tel # 703-527-3887					
Additional Information:	Responsible Party: Product Compliance Department				
	E-mail: SDSNA@univarsolutions.com				
	SDS Requests: 1-855-429-2661				
	Website: www.univarsolutions.com				

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Corrosive to metals Skin corrosion Serious eye damage	Category 1 Category 1 Category 1	
GHS label elements Hazard pictograms	Category 1	
Signal word	Danger	
Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.	
Precautionary statements	Prevention: P234 Keep only in original container. P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protective face protection. Response: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NC induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immedia all contaminated clothing. Rinse skin with water/ shower. P304 + P340 + P310 IF INHALED: Remove person to fresh and keep comfortable for breathing. Immediately call a POIS CENTER/ doctor.	DT ately air



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None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture
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CAS-No.	Chemical name	Weight percent
7681-52-9	Sodium hypochlorite	12.5
1310-73-2	Sodium hydroxide	0 - 5

Actual concentration is withheld as a trade secret

Any Concentration shown as a range is due to batch variation.

Synonyms

: Bleach,

SECTION 4. FIRST AID MEASURES

General advice	 Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	 Take victim immediately to hospital. Move to fresh air. If breathing has stopped, apply artificial respiration.
	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
	Remove contaminated clothing. If irritation develops, get med- ical attention. Burns must be treated by a physician.
In case of eye contact	 In case of eye contact Immediately flush eye(s) with plenty of water. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.



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If swallowed	 If easy to do, remove contact lens, if worn. If eye irritation persists, consult a specialist. Take victim immediately to hospital. Take victim immediately to hospital. Do NOT induce vomiting. Rinse mouth with water. If victim is fully conscious, give a cupful of water. If a person vomits when lying on his back, place him in the recovery position.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Carbon dioxide (CO2) Foam Dry powder
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire- fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion prod- ucts	:	No hazardous combustion products are known
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if nec- essary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Use personal protective equipment.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Neutralise with acid. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	: Normal measures for preventive fire protection.
Advice on safe handling	: Do not breathe vapours/dust.



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Conditions for safe storage	 Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
7681-52-9	Sodium hypochlorite	STEL	2 mg/m3	US WEEL
1310-73-2	Sodium hydroxide	С	2 mg/m3	ACGIH
		С	2 mg/m3	NIOSH REL
		TWA	2 mg/m3	OSHA Z-1
		С	2 mg/m3	OSHA P0
		С	2 mg/m3	CAL PEL

Personal protective equipment

Respiratory protection Hand protection	:	General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are un- known, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respi- rator if there is any potential for uncontrolled release, expo- sure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.	
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.	
Eye protection	:	: Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processin problems.	
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concen- tration of the dangerous substance at the work place.	
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.	



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colour Odour Odour Threshold pH Freezing Point (Melting point/freezing point) Boiling Point ()	 liquid clear yellow Chlorine No data available 11.5 - 13 -2015 °C (-4 - 5 °F) 230 °F (230 °F) Decomposition: Decomposition temperature
Flash point	: Not Flammable
Evaporation rate Flammability (solid, gas) Upper explosion limit	No data availableNo data availableNo data available
Lower explosion limit	: No data available
Vapour pressure	: 12 - 17.5 mmHg @ 20 °C (68 °F)
Relative vapour density Relative density	 No data available 1.17 @ 20 °C (68 °F) Reference substance: (water = 1)
Density Solubility(ies) Water solubility Solubility in other solvents Partition coefficient: n- octanol/water Auto-ignition temperature Thermal decomposition	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reac- tions	 No dangerous reaction known under conditions of normal use. Stable No hazards to be specially mentioned.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Acids Combustible material Halogenated compounds Metals metal salts Organic materials



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organic nitro compounds Zinc

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

 7681-52-9:

 Acute oral toxicity
 : LD50 (Rat, male): > 2,000 mg/kg

1310-73-2: Acute oral toxicity

: LD50 (Rabbit): 325 mg/kg

Skin corrosion/irritation

Components: 7681-52-9: Species: Rabbit Result: Causes burns.

1310-73-2:

Species: Rabbit Result: Causes severe burns.

Serious eye damage/eye irritation

Components:

7681-52-9: Species: Rabbit Result: Risk of serious damage to eyes.

1310-73-2:

Species: Rabbit Result: Risk of serious damage to eyes.

Carcinogenicity	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.



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STOT - single exposure

Components:

7681-52-9:

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity		
<u>Components:</u> 7681-52-9: Toxicity to fish	: LC50 (Salmo gairdneri (Rainbow Fish)): 0.06 mg/l Exposure time: 96 h Test Type: flow-through test	
	LC50 (Pimephales promelas (fathead minnow)): 5.9 m Exposure time: 96 h Test Type: static test	ıg/l
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0.141 mg/l Exposure time: 48 h Test Type: flow-through test	
	EC50 (Ceriodaphnia dubia): 0.035 mg/l Exposure time: 48 h Test Type: flow-through test	
Toxicity to algae	: IC50: 0.023 mg/l Exposure time: 7 d Test Type: flow-through test	
M-Factor (Acute aquatic tox- icity)	: 10	
Acute aquatic toxicity- As- sessment	: Very toxic to aquatic life.	
Chronic aquatic toxicity- As- sessment	: Toxic to aquatic life with long lasting effects.	
Persistence and degradabili No data available		
Bioaccumulative potential No data available		



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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Uni- var Solutions ChemCare: 1-800-637-7922
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

UN1791, Hypochlorite solutions, 8, III, Marine Pollutant (SODIUM HYPOCHLORITE) (SODIUM HYPOCHLORITE)

IATA (International Air Transport Association):

UN1791, Hypochlorite solution, 8, III

IMDG (International Maritime Dangerous Goods):

UN1791, HYPOCHLORITE SOLUTION, 8, III, Marine Pollutant (SODIUM HYPOCHLORITE) (SODIUM HYPOCHLORITE)

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity



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Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium hypochlorite	7681-52-9	100	800
Sodium hydroxide	1310-73-2	1000	20000

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	Corrosive to metals Skin corrosion or irritation Serious eye damage or eye irritation
SARA 302	:	This material does not contain any components with a section 302 EHS TPQ.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

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The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:				
7681-52-9	Sodium hypochlorite			
1310-73-2	Sodium hydroxide			
The following Hazardous	Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:			
7681-52-9	Sodium hypochlorite			
1310-73-2	Sodium hydroxide			
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307				

Massachusetts Right To Know

7681-52-9	Sodium hypochlorite
1310-73-2	Sodium hydroxide

Pennsylvania Right To Know	v
7732-18-5	Water
7681-52-9	Sodium hypochlorite
1310-73-2	Sodium hydroxide
California Prop 65	: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
The components of this proc	duct are reported in the following inventories:
TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL

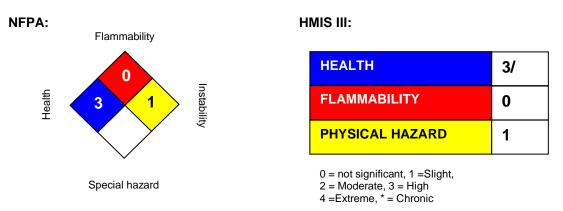


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AICS	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory

SECTION16. OTHER INFORMATION



The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

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Legacy SDS:	:	R0004191
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Material number:

16056658, 691814, 65964, 132750, 707559, 161023, 160052, 16185565, 16182803, 16182803, 16182803, 16182146, 16151747, 16144335, 16164762, 16164766, 16164347, 16164686, 16164337, 16147922, 16160423, 16160441, 16147117, 16145833, 16148433, 16148162, 16161401, 16142035, 16112157, 746448, 653645, 16023856, 16023855, 560182, 161166, 146774, 132681, 167734, 20464, 20461, 573786, 554377, 160127, 160809, 115370, 98722, 674528, 116864, 501223



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Key or legend to abbreviations and acronyms used in the safety data sheet									
ACGIH	American Conference of Govern- ment Industrial Hygienists	LD50	Lethal Dose 50%						
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level						
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency						
NDSL	Canada, Non-Domestic Substanc- es List	NIOSH	National Institute for Occupational Safety & Health						
CNS	Central Nervous System	NTP	National Toxicology Program						
CAS	Chemical Abstract Service	NZloC	New Zealand Inventory of Chemi- cals						
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level						
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration						
EGEST	EOSCA Generic Exposure Scenar- io Tool	OSHA	Occupational Safety & Health Administration						
EOSCA	European Oilfield Specialty Chem- icals Association	PEL	Permissible Exposure Limit						
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commer- cial Chemical Substances						
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic						
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act						
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit						
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.						
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value						
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average						
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act						
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composi- tion, Complex Reaction Products, and Biological Materials						
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System						
LC50	Lethal Concentration 50%								