

***Remember to attach the *Material Safety Data Sheets*, complete product labels and any other information on chemical composition, aquatic toxicity, human health, and environmental fate for each chemical additive.**

Please make a copy for your records.

Refer to the *Transmittal Form* for mailing instructions.

Section 1 - Chemical Product and Company Information

Product Name: Sodium Hypochlorite 12.5% SDS: 8490

COMPANY IDENTITY: Webb Chemical Service Corp.
 COMPANY ADDRESS: 2708 Jarman Street
 COMPANY CITY: Muskegon Hts., MI 49444
 COMPANY PHONE: 1-231-733-2181

EMERGENCY PHONE: CHEMTREC: 1-800-424-9300 (USA)

Product Use: Primarily used as a water treatment chemical as a disinfectant. Also used as a bleaching agent.

Section 2 - Hazards Identification

GHS Ratings:

Corrosive to metals	1
Skin corrosive	1
Eye corrosive	1

GHS Hazards

H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H401	Toxic to aquatic life

GHS Precautions

P234	Keep only in original container
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P264	Wash face, hands and any exposed skin thoroughly after handling
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P310	Immediately call a POISON CENTER or doctor/physician
P363	Wash contaminated clothing before reuse
P390	Absorb spillage to prevent material damage
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P405	Store locked up
P406	Store in a corrosive resistant/... container with a resistant inner liner
P501	Dispose of contents/container to an approved waste disposal plant.

Signal Word: Danger



Section 3 - Composition/Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Sodium chloride	7647-14-5	5-20%
Sodium hypochlorite	7681-52-9	5-20%
Sodium hydroxide	1310-73-2	1-5%

Section 4 - First Aid Measures

Inhalation - Move to fresh air. Call a physician if symptoms develop or persist.

Skin Contact - Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye Contact - Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion - Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed - Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed - Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General Information - Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5 - Fire Fighting Measures

Suitable extinguishing media - Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media - Do not use water jet as an extinguisher, as this will spread the fire.

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

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

Fire fighting equipment/instructions - Move containers from fire area if you can do so without risk.

Specific methods - Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures - Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up -

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions - Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Section 7 - Handling and Storage

Precautions for safe handling - Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities - Store locked up. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS).

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Sodium hypochlorite 7681-52-9	Not Established	Not Established	WEEL: 2 mg/m3 STEL
Sodium chloride 7647-14-5	Not Established	Not Established	Not Established
Sodium hydroxide 1310-73-2	2 mg/m3 PEL	2 mg/m3 Ceiling	NIOSH: 2 mg/m3 Ceiling

Biological limit values - No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls - Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment:

Eye/face protection - Wear safety glasses with side shields (or goggles) and a face shield.

Hand protection - Wear appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Nitrile or neoprene gloves are recommended.

Other - Wear appropriate chemical resistant clothing.

Respiratory protection - In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards - Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations - Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance:	Light greenish yellow. liquid
Odor:	Chlorine
Vapor Pressure:	Not available
Odor threshold:	Not available
Vapor Density:	Not available
pH:	11.5 ±0.3
Relative density:	1.09 -1.21
Melting point:	-150 °F (-101.11 °C)
Freezing point:	-150 °F (-101.11 °C)

Solubility (water):	Completely soluble in water
Boiling range:	>212 °F (> 100 °C)
Flash point:	Not available
Evaporation rate:	Not available
Flammability:	Not available
Explosive Limits:	Not available
Partition coefficient (n-octanol/water):	Not available
Autoignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Grams VOC less water:	Not available

Section 10 - Stability and Reactivity

Reactivity - May be corrosive to metals.

Chemical stability - Material is stable under normal conditions.

Possibility of hazardous reactions - No dangerous reaction known under conditions of normal use.

Conditions to avoid - Contact with incompatible materials.

Incompatible materials - Acids. Metals. Strong oxidizing agents.

Hazardous decomposition products - No hazardous decomposition products are known. Contact with acids liberates toxic gas.

Section 11 - Toxicological Information

Component Toxicity

7647-14-5	Sodium chloride Dermal LD50: >10000 mg/kg (Rabbit) Inhalation LC50: >42 mg/l, 1 Hours (Rat) Oral LD50: 550 mg/kg (Rat)
1310-73-2	Sodium hydroxide Dermal LD50: 1,350 mg/kg, (Calculated) (Rabbit) Oral LDLo: 500mg/kg, (Calculated) (Rabbit)
7681-52-9	Sodium Hypochlorite Dermal LD50: >20000 mg/kg (Rabbit) Inhalation LC50: >10.5 mg/l, 1 Hours (Rat) Oral LD50: 8.91 g/kg (Rat)

Information on likely routes of exposure:

Inhalation - May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact - Causes severe skin burns.

Eye contact - Causes serious eye damage.

Ingestion - Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics - Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Skin corrosion/irritation - Causes severe skin burns and eye damage.

Serious eye damage/eye irritation - Causes serious eye damage.

Respiratory or skin sensitization:

Respiratory sensitization - Not classified.

Skin sensitization - This product is not expected to cause skin sensitization.

Germ cell mutagenicity - No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity - This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Sodium hypochlorite (CAS 7681-52-9) 3 Not classifiable as to carcinogenicity to humans

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Reproductive toxicity - This product is not expected to cause reproductive or developmental effects .

Specific target organ toxicity -single exposure - Not classified.

Specific target organ toxicity -repeated exposure - Not classified.

Aspiration hazard - Not classified.

Chronic effects - Prolonged inhalation may be harmful.

Section 12 - Ecological Information

Persistence and degradability - No data is available on the degradability of this product.

Bioaccumulative potential - No data available.

Mobility in soil - No data available.

Other adverse effects - No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Component Ecotoxicity

Sodium chloride (CAS 7647-14-5)	Aquatic			
	Crustacea	LC50	Daphnia magna	874 mg/l, 48 hours
	Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	4747-7824 mg/l, 96 hours
Sodium hydroxide (CAS 1310-73-2)	Aquatic			
	Crustacea	LC50	Water flea (Ceriodaphnia dubia)	34.59 - 47.13 mg/l, 48 hours
	Fish	LC50	Western mosquitofish (Gambusia affinis)	125 mg/l, 96 hours

Section 13 - Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Hypochlorite Solution	UN1791	PG-II	8

Section 15 - Regulatory Information

Additional regulatory listings, where applicable.

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
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Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:
 - None

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Not regulated

Section 16 - Other Information

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD) IMPORTANT: Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

EMPLOYEE TRAINING: See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

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Reviewer Revision

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