



SAFETY DATA SHEET

Version 2

1. Identification of the Substance / Preparation and of the Company / Undertaking

Product Name: Azone 15 - EPA Reg. No. 7870-5
UN/ID No UN1791
Synonyms: Sodium hypochlorite; bleach; hypochlorous acid, sodium salt
Recommended Use Industrial, Manufacturing or Laboratory use.
Company Name: Hawkins, Inc., 2381 Rosegate, Roseville, MN 55113 (612-331-6910)

Emergency Telephone:
 CHEMTREC (US): 1-800-424-9300

2. Hazards Identification

GHS - Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Category 1B
Serious eye damage/eye irritation	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1



Signal Word: Danger

- Hazard Statements:**
- Harmful if swallowed
 - Causes severe skin burns and eye damage
 - Very toxic to aquatic life with long lasting effects

Physical Hazards

Corrosive to metals	Category 1
Oxidizing liquids	Category 2

- May be corrosive to metals
- May intensify fire; oxidizer



Precautionary Statements:

- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep/Store away from clothing/ combustible materials
- Take any precaution to avoid mixing with combustibles
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Avoid release to the environment
- Wear protective gloves/protective clothing/eye protection/face protection
- Immediately call a POISON CENTER or doctor/physician
- Rinse mouth
- Immerse in cool water/wrap in wet bandages
- Wash contaminated clothing before reuse
- Absorb spillage to prevent material damage
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
- Store locked up
- Store in corrosive resistant aluminum container with a resistant inliner
- Dispose of contents/container to industrial incineration plant
- Dispose of contents/ container to an approved waste disposal plant
- Dispose of contents/container to industrial incineration plant

3. Composition / Information on Ingredients

Hazardous

Chemical Name	CAS No	Weight-%	EC No
Sodium Hydroxide	1310-73-2	0.8	215-185-5
Sodium hypochlorite	7681-52-9	10-15.6	231-668-3

4. First Aid Measures

- General Advice:** Immediate medical attention is required.
- Eye Contact:** Keep eye wide open while rinsing. Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area.
- Skin Contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
- Inhalation:** Move to fresh air. Call a physician or poison control center immediately. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
- Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Immediate medical attention is required. Call a physician or poison control center immediately. Clean mouth with water and drink afterwards plenty of water. Remove from exposure, lie down.
- Note to Physicians:** Treat symptomatically. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.
- Self-protection of the First Aider:** Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

5. Fire-fighting Measures

Flammable Properties:

Not considered to be a fire hazard, Incomplete combustion and thermolysis may produce gases of different levels of toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons , aldehydes and soot. They can be highly dangerous if inhaled in a limited or a high concentration place, Substance releases oxygen when heated, which may increase the severity of an existing fire

Explosive Properties:

Not considered to be an explosion hazard

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment, Incomplete combustion and thermolysis may produce gases of different levels of toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons , aldehydes and soot. They can be highly dangerous if inhaled in a limited or a high concentration place

Unsuitable Extinguishing Media:

No information available

Specific Hazards Arising from the Chemical:

The product causes burns of eyes, skin and mucous membranes, Thermal decomposition can lead to release of irritating and toxic gases and vapors, In the event of fire and/or explosion do not breathe fumes

Protective Equipment and Precautions for Firefighters:

In the event of a fire, wear full protective clothing and MSHA/NIOSH (approved or equivalent) self-contained breathing apparatus with full facepiece operated in the pressure-demand or other positive pressure mode

5. Accidental Release Measures

Personal Precautions:

Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Should not be released into the environment.

Methods for Cleaning Up:

Dam up. Soak up with inert absorbent material. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take up mechanically, placing in appropriate containers for disposal. Dike far ahead of liquid spill for later disposal.

Other Information:

Not applicable.

7. Handling and Storage

Advice on Safe Handling:

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Use only with adequate ventilation.

Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials:

Strong acids and bases; Oxidizing agents; Incomplete combustion and thermolysis may produce gases of different levels of toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons , aldehydes and soot. They can be highly dangerous if inhaled in a limited or a high concentration place

8. Exposure Controls / Personal Protection

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	Ontario TWA
Sodium Hydroxide	Ceiling: 2 mg/m ³	2 mg/m ³ Ceiling 2 mg/m ³ TWA	CEV: 2 mg/m ³

Chemical Name	European Union	China	Japan	Korea	Australia	Taiwan
Sodium Hydroxide		Ceiling: 2 mg/m ³ Ceiling	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	2 mg/m ³ Peak	TWA: 2 mg/m ³

Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

Engineering Controls: Ensure adequate ventilation, especially in confined areas

Personal protective equipment (PPE)

Eye/Face Protection: Tight sealing safety goggles. Face protection shield.
Body Protection: Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate. Rubber boots. Suitable protective clothing. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Gloves made of plastic or rubber.

General Hygiene Considerations:

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State:	Liquid	Odor:	Odorless, Chlorine-like odor
Appearance:	Aqueous solution	Odor Threshold:	No information available
Color:	Colorless to yellowish		
Property	Values	Remarks • Method	
pH:	11	Incomplete combustion and thermolysis may produce gases of different levels of toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. They can be highly dangerous if inhaled in a limited or a high concentration place	
"Salt Out" Point (°F):		No information available	
Melting Point/Freezing Point:	-26 °F / -15 °C	Incomplete combustion and thermolysis may produce gases of different levels of toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. They can be highly dangerous if inhaled in a limited or a high concentration place	
Boiling Point/Boiling Range:	104 °C / 219.2 °C	Decomposes slightly	
Flash Point:		No information available	
Evaporation Rate (BuAc=1):		No information available	
Flammability (solid, gas):		No information available	
Flammability Limits in Air:		No information available	
Upper Flammability Limit:		Lower Flammability Limit:	
Vapor Pressure (mm Hg) :		Dependent on concentration	
Vapor density (Air =1)		No information available	
Specific Gravity (H₂O=1):	1.2		
Specific Gravity (2nd value):			
Water Solubility:	100% soluble in water		
Solubility(ies):		No information available	
Partition Coefficient (n-octanol/water)		No information available	
Autoignition Temperature:		No information available	
Decomposition Temperature:		No information available	
Kinematic Viscosity:		No information available	
Dynamic Viscosity:		No information available	
Oxidizing Properties:	No information available		
Explosive Properties:	Not considered to be an explosion hazard		

9.2. Other information

Softening Point: No information available
Molecular Weight: 74.45
VOC Content(%): No information available
Density: No information available
Bulk Density: No information available

10. Stability and Reactivity

Stability: Incomplete combustion and thermolysis may produce gases of different levels of toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons , aldehydes and soot. They can be highly dangerous if inhaled in a limited or a high concentration place

Conditions to Avoid: Heat, flames and sparks; Incompatibles; Exposure to air or moisture over prolonged periods; Exposure to light

Incompatible Materials: Strong acids and bases, Oxidizing agents, Incomplete combustion and thermolysis may produce gases of different levels of toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons , aldehydes and soot. They can be highly dangerous if inhaled in a limited or a high concentration place

Hazardous Decomposition Products: Thermal decomposition can lead to release of irritating and toxic gases and vapors; Sodium oxides; Emits toxic chlorine fumes when heated to decomposition

Possibility of Hazardous Reactions: None under normal processing

11. Toxicological Information

Product Information

Acute Toxicity: 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

Chemical Name	Oral LD ₅₀	Dermal LD ₅₀	LC ₅₀ (Lethal Concentration)
Sodium Hydroxide		1350 mg/kg (Rabbit)	
Sodium hypochlorite	8200 mg/kg (Rat)	10000 mg/kg (Rabbit)	

Chronic Toxicity:

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	IARC
Sodium hypochlorite	Group 3

IARC (International Agency for Research on Cancer)
 Not classifiable as a human carcinogen

12. Ecological Information

Ecotoxicity

84.2% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Toxic to aquatic life with long lasting effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates

Sodium Hydroxide		45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	
Sodium hypochlorite	0.095: 24 h <i>Skeletonema costatum</i> mg/L EC50	0.06 - 0.11: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 4.5 - 7.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 0.4 - 0.8: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 0.28 - 1: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 0.05 - 0.771: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 0.03 - 0.19: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 0.18 - 0.22: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	2.1: 96 h <i>Daphnia magna</i> mg/L EC50 0.033 - 0.044: 48 h <i>Daphnia magna</i> mg/L EC50 Static

Ceriodaphnia dubia Acute Toxicity Evaluation:

Azone 15: 48-hour NOEC: 0.25 ppm, 48-hour LOEC: 0.5 ppm, 48-hour LC50: 0.44 ppm (0.37 - 0.52 ppm)

Persistence and Degradability:

No information available.

Bioaccumulation:

No information available.

Mobility:

No information available.

13. Disposal Considerations

Waste from Residues/Unused Products:

Disposal should be in accordance with applicable regional, national and local laws and regulations

Contaminated Packaging:

Do not reuse container.

14. Transport Information

DOT

Proper shipping name	HYPOCHLORITE SOLUTIONS (SODIUM HYPOCHLORITE)
Hazard Class	8
UN/ID No	UN1791
Packing Group	III
Reportable Quantity (RQ)	100 lbs
Description	UN1791, HYPOCHLORITE SOLUTIONS (SODIUM HYPOCHLORITE), 8, PG III



15. Regulatory Information

International Inventories

All of the components in the product are on the following inventory lists: TSCA (United States);, Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), South Korea (KECL);, China (IECSC), ENCS (Japan);, Philippines (PICCS), This product contains a substance not listed on international inventories - it is for research and development use only.

AICS	Complies
TSCA	Complies
DSL/NDSL	Complies

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EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies

Chemical Name	AICS	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS
Sodium Hydroxide	Listed	Listed	Listed	-	Listed	-	(2)-1972 (1)-410	Listed	KE-31487	Listed
Sodium hypochlorite	Listed	Listed	Listed	-	Listed	-	(1)-237	Listed	KE-31506	Present

Inventory Legend

AICS - Australian Inventory of Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

RESTRICTIONS - REACH TITLE VII No information available

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	CERCLA Hazardous Substances and the Reportable Quantities	SARA Extremely Hazardous Substances EPCRA RQ	SARA Extremely Hazardous Substances TPQ
Sodium Hydroxide	1000 lb 454 kg	-	-
Sodium hypochlorite	100 lb 45.4 kg	100 lb	-

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic health hazard No
Fire hazard Yes
Sudden release of pressure hazard No
Reactive hazard Yes

U.S. State Right-to-Know Regulations

California Proposition 65:
 This product does not contain any Proposition 65 chemicals

16. Other Information

National Fire Protection Association (NFPA) Ratings



NSF/ANSI 60 Certification



Maximum Use (mg/L unless otherwise indicated): 40

Prepared By: HSE Department

Issue Date: 15-Mar-2013

Revision Date: 26-May-2016

Revision Note: Updated section(s) 16

Disclaimer:

Please be advised that it is your responsibility to inform your employees of the hazards of this substance, to advise them of what these properties mean and be sure they understand exposure information. 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 presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, express or implied, is made regarding performance, stability, or otherwise. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage. Other factors may require additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, the handling and use remains the responsibility of the consumer. No suggestions are intended as, and should not be constructed as, a recommendation to infringe on any existing patents or to violate any Federal, State, or local laws.

End of Safety Data Sheet