

Safety Data Sheet

Issue Date: 20-Nov-2007

Revision Date: 05-Sep-2014

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Purity

Other means of identification

SDS # GAT-019

UN/ID No UN1791

Recommended use of the chemical and restrictions on use

Recommended Use For industrial use.

Details of the supplier of the safety data sheet

Supplier Address

Gator Chemical
2202 Industrial Boulevard
Sarasota, FL 34234

Emergency Telephone Number

Company Phone Number 941-225-7657
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Yellow liquid

Physical State Liquid

Odor Chlorine

Classification

Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Oxidizing Liquids	Category 3

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage
May intensify fire; oxidizer



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep away from heat
 Keep/Store away from clothing/heat/combustible materials
 Take any precaution to avoid mixing with combustibles/heat

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a poison center or doctor/physician
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 Get medical attention
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a poison center or doctor/physician
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting
 Immediately call a poison center or doctor/physician
 In case of fire: Use water to extinguish

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium hypochlorite	7681-52-9	8.5-10
Sodium hydroxide	1310-73-2	1-5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. DO NOT attempt to neutralize with chemical agents. Wash contaminated clothing before reuse. Get medical attention.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. If conscious and alert, wash mouth and nasal passages with water repeatedly. Immediately call a poison center or doctor/physician.
Ingestion	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspirating vomitus into lungs. Immediately call a poison center or doctor/physician.

Most important symptoms and effects**Symptoms**

EYES: CORROSIVE; contact with eyes is painful and irritating and will cause chemical burns, eye damage, blindness.

SKIN: Corrosive: chemical burns may result from contact. Repeated or prolonged skin contact may cause skin damage.

INHALATION: Corrosive and irritating to upper respiratory tract and mucous membranes. May cause severe irritation and sneezing. Prolonged or repeated overexposure by inhalation may cause pneumonia, lung damage, damage to respiratory system, even death.

INGESTION: Corrosive and irritating to digestive tract; may cause severe irritation, tissue ulceration, gastrointestinal damage, circulatory collapse, convulsions, coma, even death.

Indication of any immediate medical attention and special treatment needed**Notes to Physician**

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Preexisting skin, eye, or respiratory disorders may become aggravated through prolonged exposure.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water. Water spray (fog).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product does not burn, but can provide oxygen, which can intensify a fire. Product is an oxidizer. It may react vigorously with organics or other materials resulting in an explosion and fire. Combustion products may be toxic.

Hazardous Combustion Products Chlorine gas. Hydrocarbons. Smoke, fumes or vapors, and oxides of carbon.

Protective equipment and precautions for firefighters

Evacuate non-essential personnel from area to prevent human exposure to fire, smoke, fumes or products of combustion. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures**Personal Precautions**

Use personal protective equipment as required.

Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Evacuate non-essential personnel and eliminate ignition sources. Shut off source of leak only if safe to do so. Contain spill and recover free product. To clean up residue, add reducing agents such as bisulfites or ferrous salt solutions. Some heat will be produced. Maintain pH on alkaline side (>7.5) and dilute with large quantities of water. For spills in excess of allowable limits, refer to CERCLA 40 CFR 302 for detailed instructions.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Keep away from heat. Keep/Store away from clothing/heat/combustible materials. Take any precaution to avoid mixing with combustibles. Keep containers closed when not in use.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep away from direct sunlight and heat. Keep away from oxidizers and incompatible materials.

Incompatible Materials

Amphoteric metals. Aluminum. Copper. Zinc. Brass. Strong reducing agents. Hydrogen. Hydrazine. Sulfides. Sulfites. Nitrites. Inorganic acids. Organic acids. Organic bases. Hydrocarbons. Organic mixtures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Wear chemical goggles and face shield.

Skin and Body Protection

Neoprene, butyl or nitrile rubber gloves with cuffs. Coveralls, apron or other equipment should be worn to minimize skin contact.

Respiratory Protection

If exposure limits are exceeded, or if exposure may occur, use a NIOSH/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSH publications concerning chemical compliance with OSHA requirements in 29 CFR 1310.134 or European Standard EN 149 for complete regulations. For emergencies, a NIOSH/MSHA approved positive pressure breathing apparatus should be readily available.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Chlorine
Appearance	Yellow liquid	Odor Threshold	Not determined
Color	Yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	12.8	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100°C / 212°F	
Flash Point	Non-flammable	
Evaporation Rate	<1	(Water = 1)
Flammability (Solid, Gas)	Liquid-Not Applicable	
Upper Flammability Limits	Not Applicable	
Lower Flammability Limit	Not Applicable	
Vapor Pressure	17 mm Hg @ 20°C	
Vapor Density	>1	(Air=1)
Specific Gravity	1.200	(Water = 1)
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep separated from incompatible substances. Keep out of reach of children.

Incompatible Materials

Amphoteric metals. Aluminum. Copper. Zinc. Brass. Strong reducing agents. Hydrogen. Hydrazine. Sulfides. Sulfites. Nitrites. Inorganic acids. Organic acids. Organic bases. Hydrocarbons. Organic mixtures.

Hazardous Decomposition Products

Chlorine gas. Hydrocarbons. Smoke, fumes or vapors, and oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact

Causes severe eye damage.

Skin Contact

Causes severe skin burns.

Inhalation

Avoid breathing vapors or mists.

Ingestion

Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium hypochlorite 7681-52-9	= 8200 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	-
Sodium hydroxide 1310-73-2	-	= 1350 mg/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Very toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium hypochlorite 7681-52-9	0.095: 24 h Skeletonema costatum mg/L EC50	0.06 - 0.11: 96 h Pimephales promelas mg/L LC50 flow-through 4.5 - 7.6: 96 h Pimephales promelas mg/L LC50 static 0.4 - 0.8: 96 h Lepomis macrochirus mg/L LC50 static 0.28 - 1: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.05 - 0.771: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.03 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.18 - 0.22: 96 h Oncorhynchus mykiss mg/L LC50 static		2.1: 96 h Daphnia magna mg/L EC50 0.033 - 0.044: 48 h Daphnia magna mg/L EC50 Static
Sodium hydroxide 1310-73-2		45.4: 96 h Oncorhynchus mykiss mg/L LC50 static		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

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

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

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Sodium hydroxide 1310-73-2	Toxic Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1791
Proper Shipping Name Hypochlorite solutions
Hazard Class 8
Packing Group II

IATA

UN/ID No UN1791
Proper Shipping Name Hypochlorite solutions
Hazard Class 8
Packing Group II

IMDG

UN/ID No UN1791
Proper Shipping Name Hypochlorite solutions
Hazard Class 8
Packing Group II
Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium hypochlorite 7681-52-9	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
Sodium hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

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

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite 7681-52-9 (8.5-10)	100 lb			X
Sodium hydroxide 1310-73-2 (1-5)	1000 lb			X

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium hypochlorite 7681-52-9	X	X	X
Sodium hydroxide 1310-73-2	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards****Flammability****Instability****Special Hazards****HMIS**

Not determined

Not determined

Not determined

Not determined

Health Hazards**Flammability****Physical Hazards****Personal Protection**

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Not determined

Issue Date:

20-Nov-2007

Revision Date:

05-Sep-2014

Revision Note:

New format

Disclaimer

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet