SAFETY DATA SHEET

Issuing Date 23-Feb-2015 **Revision Date** 23-Feb-2015 **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name **Chlorbrite**

Other means of identification

Product Code(s) **7762**

UN-Number UN1791

Synonyms Sodium Hypochlorite

Recommended use of the chemical and restrictions on use

Recommended Use Chlorine Bleach

Uses advised against No information available

Supplier's details

Supplier Address
Sunburst Chemicals, Inc.
220 W. 86th St.
Bloomington, MN 55420
TEL: 952-884-3144

Emergency telephone number

Emergency Telephone Number 1-866-303-6943

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 1 Subcategory 1B
Serious Eye Damage/Eye Irritation	Category 1
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1
Corrosive to Metals	Category 1
Oxidizing Liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word **Danger**

Hazard Statements
- Harmful if swallowed
- Causes severe skin burns and eye damage
- Very toxic to aquatic life with long lasting effects
- May be corrosive to metals
- May intensify fire; oxidizer

Appearance Colorless to Yellow **Physical State** Liquid **Odor** Chlorine

Precautionary Statements

Prevention
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wear protective gloves/protective clothing/eye protection/face protection
- Keep away from heat/sparks/open flames/hot surfaces – no smoking
- Take any precaution to avoid mixing with combustibles
- In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

General Advice
- Immediately call a POISON CENTER or doctor/physician
- Immerse in cool water/wrap in wet bandages
- Absorb spillage to prevent material damage

Eyes
- 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
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse

Inhalation
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Ingestion
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- Do NOT induce vomiting

Storage
- Store locked up
- Store in corrosive resistant aluminum container with a resistant liner
- Keep/store away from clothing/combustible materials

Disposal
- Dispose of contents/container to an approved waste disposal plant
- Dispose of contents/container to industrial incineration plant
- Avoid release into the environment

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Very toxic to aquatic life with long lasting effects

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Sodium hypochlorite	7681-52-9	10-15.6	*
Sodium hydroxide	1310-73-2	.08	*

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

4. FIRST AID MEASURES

Description of necessary first-aid measures

General Advice Immediate medical attention is required.

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.

Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation Move to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.

Self-protection of the First Aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician 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. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water. Carbon dioxide (CO_2). Dry chemical.

Unsuitable Extinguishing Media None

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.

Hazardous Combustion Products Chlorine gas.

Explosion Data

Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None

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 face piece operated in the pressure-demand or other positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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

Environmental Precautions

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

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

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

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Use personal protective equipment as required. Use only with adequate ventilation. 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.

Conditions for safe storage, including any incompatibilities

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

Incompatible Products Strong acids and bases; Oxidizing agents; Ammonia; Amines; Ammonium salts, aziridine, methanol, phenyl acetonitrile, cellulose, ethyleneimine, soaps, and bisulfates.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines

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

Appropriate engineering controls

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). Ensure adequate ventilation, especially in confined areas.

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Face protection shield.
Skin and Body Protection Gloves made of plastic or rubber. Rubber boots. Suitable protective clothing. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate.
Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Hygiene Measures Wash contaminated clothing before reuse. When using do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. 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

Information on basic physical and chemical properties

Physical State	Liquid	**Appearance**	Colorless to Yellow
Odor	Chlorine	**Odor Threshold**	No information available

Property	Values	Remarks/ - Method
pH	10	None known
Melting Point/Range	-26 °C / -15 °F	None known
Boiling Point/Boiling Range	40 °C / 104 °F	None known
Flash Point	None	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
upper flammability limit	No data available	
lower flammability limit	No data available	
Vapor Pressure	Dependent on Concentration	None known
Vapor Density	No data available	None known
Relative Density	No data available	None known
Specific Gravity	1.20	None known
Water Solubility	Completely soluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known

Flammable Properties Not flammable

Explosive Properties Not explosive
Oxidizing Properties No information available

Other information

VOC Content (%) No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Slowly decomposes on contact with air, increases depending on temperature and concentration; Exposure to sunlight accelerates decomposition.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods; Exposure to light; Incompatibles: Heat

Incompatible materials

Strong acids and bases, Oxidizing agents, Ammonia, Amines, Ammonium sales, aziridine, methanol, phenyl acetonitrile, cellulose, ethyleneimine, soaps, and bisulfates.

Hazardous decomposition products

Thermal decomposition can lead to the release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye Contact Eye contact with corrosive substances can cause eye burns.

Skin Contact Skin contact with corrosive substances can cause skin burns.

Ingestion Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	LC50 (Lethal Concentration)
Sodium hydroxide		1350 mg/kg (Rabbit)	
Sodium hypochlorite	8200 mg/kg (Rat)	10000 mg/kg (Rabbit)	

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Chemical Name	IARC
Sodium hypochlorite	Group 3

IARC: (International Agency for Research on Cancer)

Group 3: Not Classifiable as to its Carcinogenicity to Humans

12. ECOLOGICAL INFORMATION

Ecotoxicity

86.4% of the mixture consists of components(s) of unknown hazards to the aquatic environment. Very toxic to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium hydroxide		*45.4: 96 h Oncorhynchus mykiss mg/L LC50 static*		
Sodium hypochlorite	*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*

Persistence and Degradability No information available.

Bioaccumulation No information available.

Other Adverse Effects
No information available.

13. DISPOSAL CONSIDERATIONS

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

Contaminated Packaging Do not reuse container

14. TRANSPORT INFORMATION

DOT

UN-Number	UN1791
Proper shipping name	Hypochlorite solutions
Hazard Class	8
Packing Group	III
Reportable Quantity (RQ)	Sodium hypochlorite: RQ kg= 100 lbs
Description	UN1791, Hyprochlorite solutions, 8, PG III

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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	No
Sudden Release of Pressure Hazard	No

Reactive Hazard No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide	1000 lb			X
Sodium hypochlorite	100 lb			X

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	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hydroxide	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium hypochlorite	100 lb	1000 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

U.S. 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	Illinois	Rhode Island
Sodium hydroxide	X	X	X		X
Sodium hypochlorite	X	X	X		

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	**Health Hazard**	3	**Flammability**	0	**Instability** 1	**Physical and Chemical Hazards**	-
HMIS	**Health Hazard**	3	**Flammability**	0	**Physical Hazard** 1	**Personal Protection**	B

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Issuing Date 23-Feb-2015
Revision Date 23-Feb-2015
Revision Note New Issue

General Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet