Safety Data Sheet

Issue Date: 26-Dec-2013 **Revision Date:** 14-Sep-2023 **Version** 1

1. IDENTIFICATION

Product Identifier
Product Name All Purpose Bleach

Other means of identification
SDS # EMS-018

Product Code 5297
UN/ID No UN1791

Recommended use of the chemical and restrictions on use **Recommended Use** Sanitizer.

Details of the supplier of the safety data sheet
Supplier Address
EMS Detergent Services
2865 Stoner Ct.
Liberty, IA 52317

Emergency Telephone Number
Company Phone Number (319) 665-2216
Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Odor Chlorine

Appearance Clear liquid **Physical State** Liquid

Classification

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

Signal Word
Danger

Hazard Statements
Causes severe skin burns and eye damage

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

Precautionary Statements - Response
Immediately call a poison center or doctor/physician
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
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

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	40

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Immediately call a poison center or doctor/physician. Do not apply any medicated agents except on the advice from a physician.

Skin Contact Immediately remove contaminated clothing and flush affected areas with plenty of water for at least 15 minutes. Wash contaminated clothing before reuse, discard footwear, which cannot be decontaminated. Get medical attention immediately. Do not apply any medicated agents except on the advice from a physician.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. If breathing is irregular or stopped, administer artificial respiration. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Call a physician or poison control center immediately.

Ingestion Wash mouth out with water provided the person is fully conscious. WARNING: never give anything by mouth to an unconscious person. Move victim to fresh air. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, lean the victim forward and keep head below hips to prevent breathing in vomitus and aspiration of liquid into the lungs. Keep airway clear and give more water. Seek medical attention immediately. If victim is not breathing and convulsing take to hospital immediately.

Most important symptoms and effects

Symptoms Causes severe skin burns and eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray (fog). Dry chemical. Carbon dioxide (CO2). Alcohol resistant foam. Water spray may be used to keep fire exposed containers cool.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Material is corrosive. May generate potentially explosive oxygen.

Hazardous Combustion Products Chlorine gas. Reacts with acids to release poisonous chlorine gas. Sodium oxides.

Protective equipment and precautions for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Evacuate non-essential personnel from area to prevent human exposure to fire, smoke, fumes or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	CAUTION - material is corrosive. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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. Dike far ahead of liquid spill for later disposal.
Methods for Clean-Up	Clean up with absorbent, non-combustible material. Flush spill area with water, avoiding sewers, water courses, basements or confined areas. Ventilate closed spaces before entering. Do NOT reuse any product that has been spilled, as it could be contaminated or lessen the effectiveness of the product for its intended uses. Do not reuse container after spill.

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 vapors or spray mist. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat or drink while handling this material. Use non-sparking tools. Do NOT pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or static electricity or other sources or ignition.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away from heat, sparks, flame. Do not handle or store near any sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Keep separate from food items. Store locked up. Store away from incompatible materials. Store away from direct sunlight. Keep from freezing. Relieve pressure in container weekly. Product degrades more rapidly with increasing temperature over 70 degrees Fahrenheit. Use appropriate containment to avoid environmental contamination.
Incompatible Materials	NEVER mix Ammonia with Sodium Hypochlorite (bleach or bleach-containing products). Organic materials. Acids. Amines, Ammonium salts. Aziridine. Methanol. Reducing agents. Oxidizing agents. Iron. Copper. Bisulfates, Phenyl acetonitrile. Cellulose. Ethyleneimine. Oxidizable metals. Soaps.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Face shield and chemical anti-splash safety goggles. Contact lenses should not be worn.
Skin and Body Protection	Wear suitable protective clothing. Rubber apron. PVC, Neoprene, or Nitrile gloves are recommended.
Respiratory Protection	Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2).
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Wash at the end of each work shift and before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Discard contaminated leather articles. Launder or discard contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid		
Appearance	Clear yellow liquid	**Odor**	Chlorine
Color	Clear yellow	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	>12	
Melting Point/Freezing Point	-23 °C / -10 °F	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-not applicable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	12.1 @ 68°F	
Vapor Density	>1	(Air=1)
Specific Gravity	Not determined	
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
See Sec. 7 Handling & Storage.

Incompatible Materials
NEVER mix Ammonia with Sodium Hypochlorite (bleach or bleach-containing products). Organic materials. Acids. Amines, Ammonium salts. Aziridine. Methanol. Reducing agents. Oxidizing agents. Iron. Copper. Bisulfates, Phenyl acetonitrile. Cellulose. Ethyleneimine. Oxidizable metals. Soaps.

Hazardous Decomposition Products
Chlorine gas. Reacts with acids to release poisonous chlorine gas. Sodium oxides.

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)	-

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 Not classifiable as a human carcinogen.

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 flowthrough 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/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. Since emptied containers retain product residues, all hazard precautions given in the data sheet must be observed before disposal of empty containers can occur.

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

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Sodium hypochlorite	Present	X		Present		Present	X	Present	X	X

Legend:

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* ***AICS*** *- Australian Inventory of Chemical Substances*

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

SARA 313

Not determined

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite	100 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

16. OTHER INFORMATION

NFPA	**Health Hazards** Not determined	**Flammability** Not determined	**Instability** Not determined	**Special Hazards** Not determined
HMIS	**Health Hazards** Not determined	**Flammability** Not determined	**Physical Hazards** Not determined	**Personal Protection** Not determined

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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