

Material Safety Data Sheet



Zep Inc.
1310 Seaboard Industrial Blvd.
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1-877-I-BUY-ZEP (428-9937)
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Section 1. Chemical Product and Company Identification

Product name ZEP CHLORI CLING 'N CLEAN
Product use Chlorinated Cleaner
Product code 0681
Date of issue 07/30/08 **Supersedes** 06/10/05

Emergency Telephone Numbers

For MSDS Information:

Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency

INFOTRAC: (877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency

CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

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Prepared By

Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

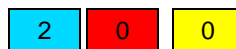
Emergency overview

WARNING

CAUSES EYE IRRITATION.

HARMFUL IF SWALLOWED.

*Hazard Determination System (HDS): Health, Flammability, Reactivity



NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Dermal contact. Eye contact. Inhalation.

Eyes

Causes eye irritation. Liquid in eye may cause irritation with possible damage if not rinsed immediately. Inflammation of the eye is characterized by redness, watering and itching.

Skin

May cause skin irritation. Skin inflammation is characterized by itching, scaling, or reddening.

Inhalation

Avoid inhalation of vapor, spray or mist. Over-exposure by inhalation may cause respiratory irritation.

Ingestion

Harmful if swallowed. May cause burns to mouth, throat, and stomach. Can cause gastrointestinal disturbances.

Chronic effects

Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated or prolonged exposure to the substance can produce mucous membranes damage.

Carcinogenicity Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

SODIUM HYPOCHLORITE; hypochlorous acid, sodium salt; bleach

CAS number

7681-52-9

% by Weight

1 - 10

Section 4. First Aid Measures

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

Skin Contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Wash clothing before reuse. Get medical attention if irritation develops.

Inhalation

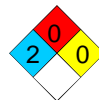
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

National Fire Protection Association (U.S.A.)



Flash Point	None.
Flammable Limits	Not applicable
Flammability	Non-combustible.
Fire hazard	Incompatible with aluminum and magnesium. May release dangerous gases (chlorine). May emit toxic fumes under fire conditions.
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire. Fire-fighters should wear appropriate protective equipment. Do not release runoff from fire to sewers or waterways.

Section 6. Accidental Release Measures

Spill Clean up	Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
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Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. DO NOT breathe vapors or spray mist. Use only with adequate ventilation. Do not ingest. Do not reuse container. Do not use with other products. Observe label precautions. Wash thoroughly after handling.
Storage	Store away from incompatible materials. Keep container tightly closed and sealed until ready for use. Keep container in a cool, well-ventilated area. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection**Product name**

SODIUM HYPOCHLORITE; hypochlorous acid, sodium salt; bleach

Exposure limits**ACGIH TLV (United States).**TWA: 0.5 ppm 8 hour(s). Form: As Cl₂
STEL: 1 ppm 15 minute(s). Form: As Cl₂**OSHA PEL 1989 (United States).**TWA: 1 ppm 8 hour(s). Form: As Cl₂
STEL: 3 ppm 15 minute(s). Form: As Cl₂**Personal Protective Equipment (PPE)**

Eyes	Safety glasses.	
Body	Wear appropriate protective clothing to prevent skin contact. Recommended: Rubber gloves. Neoprene gloves.	
Respiratory	Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.	

Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Blue. Green.
pH	12.5-13.5	Odor	Chlorine. [Slight]
Boiling Point	100°C (212°F)	Vapor Pressure	Not determined.
Specific Gravity	1.08	Vapor Density	Not determined.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	1 (Water = 1)
		VOC (Consumer)	0.54 (g/l). (0.05%)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Do not use with other products. Incompatible with aluminum and magnesium. Slightly reactive or incompatible with the following materials: oxidizing materials, reducing materials, metals and acids.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	May release dangerous gases (chlorine). carbon oxides (CO, CO ₂)

Section 11. Toxicological Information**Acute Toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Hypochlorite	LD50 Dermal	Rabbit	>10000 mg/kg	-
	LD50 Oral	Rat	8910 mg/kg	-
	LC50 Inhalation Vapor	Rat	>10.5 mg/L	0.25 hours

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
Sodium Hypochlorite	-	Acute LC50 5.9 mg/L	Fish - Minnows	96 hours

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: D002
 Classification: - [Hazardous waste]
 Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
DOT Classification	Not regulated.	Not a DOT controlled material (United States).			
IMDG Class	Not determined.				

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

PG* : Packing group

Section 15. Regulatory Information**U.S. Federal Regulations**

SARA 313 toxic chemical notification and release reporting:
 No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Sodium Hypochlorite (RQ 100 lbs)

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations

California Prop 65 No products were found.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

*NOTE: Hazard Determination System (HDS) ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HDS ratings are to be used with a fully implemented program to relay the meanings of this scale.