

Safety Data Sheet



Superior Solutions

Zep, Inc.
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1-877-I-BUY-ZEP (428-9937)
www.zep.com

Section 1. Chemical Product and Company Identification

Product name Zep-O-Clean
Product use Toilet Cleaner.
Product code 1389
Date of issue 11/27/12 **Supersedes** None.

Emergency Telephone Numbers

For MSDS Information:
Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency
(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

Prepared By
Compliance Services
1420 Seaboard Industrial Blvd.
Atlanta, GA 30318

Section 2. Hazards Identification

Emergency overview

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

DANGER!

POISON. CAUSES EYE AND SKIN BURNS.
HARMFUL IF SWALLOWED.



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** Corrosive to eyes. Causes burns. Direct contact with the eyes can cause irreversible damage, including blindness. Inflammation of the eye is characterized by redness, watering and itching.
- Skin** Corrosive to the skin. Causes skin burns. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.
- Inhalation** May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure can cause coughing, chest pains and difficulty in breathing.
- Ingestion** Harmful if swallowed. May cause burns to mouth, throat and stomach.

Chronic effects Contains material which may cause damage to the following organs: upper respiratory tract, teeth. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. Repeated eye exposure may produce chronic inflammation of the eye or corneal damage.

Carcinogenicity

No known significant effects or critical hazards.

Product/ingredient name

Not available.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

<u>Name of Hazardous Ingredients</u>	<u>CAS number</u>	<u>% by Weight</u>
hydrochloric acid; hydrogen chloride	7647-01-0	20 - 30

Section 4. First Aid Measures

- Eye Contact** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin Contact** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Fire Fighting Measures

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

- Flash Point** Not applicable.
- Flammable Limits** Not available.
- Flammability** Non-combustible.
- Fire hazard** In a fire or if heated, a pressure increase will occur and the container may burst.
- Fire-Fighting Procedures** Use an extinguishing agent suitable for the surrounding fire.

**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. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and Storage

- Handling** Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Wash thoroughly after handling.
- Storage** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Keep out of the reach of children.

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

hydrochloric acid; hydrogen chloride

Exposure limits

ACGIH TLV (United States, 2/2010).

C: 2 ppm

OSHA PEL 1989 (United States, 3/1989).

CEIL: 5 ppm

CEIL: 7 mg/m³

NIOSH REL (United States, 6/2009).

CEIL: 5 ppm

CEIL: 7 mg/m³

OSHA PEL (United States, 6/2010).

CEIL: 5 ppm

CEIL: 7 mg/m³**Personal Protective Equipment (PPE)**

- Eyes** Chemical splash goggles or face shield.
- Body** Neoprene, Nitrile or Rubber gloves. Wear apron or coverall if there is a risk of exposure to splashes.
- Respiratory** Use with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.



Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Off-white. Opaque.
pH	<2	Odor	Acidic. Pungent.
Boiling Point	107.2°C (225°F)	Vapor Pressure	Not available.
Specific Gravity	1.115	Vapor Density	Not available.
Solubility	Easily soluble in the following materials: cold water and hot water.	Evaporation Rate	Not available.
		VOC (Consumer)	0.01 % (w/w) 0.001 lbs/gal (0.067 g/l)

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: oxidizing materials, metals and alkalis.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂). Hydrogen chloride (HCl). Phosgene gas.

Section 11. Toxicological Information**Acute Toxicity**

hydrochloric acid	LC50 Inhalation Gas.	Rat	1562 ppm	4 hours
	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Oral	Rat	700 mg/kg	-

Section 12. Ecological Information

Environmental Effects Not available.

Aquatic Ecotoxicity




Hydrogen chloride	-	Acute LC50 240000 ug/L Marine water	Crustaceans - Green or European shore crab - Carcinus maenas - Adult	48 hours
	-	Acute LC50 282000 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	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	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (hydrochloric acid)	8	II	
IMDG Class	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. (hydrochloric acid). Marine pollutant (Nonylphenol, ethoxylated)	8	II	 

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:

Product name

Hydrogen chloride

Clean Water Act (CWA) 311: Hydrogen chloride

Clean Air Act (CAA) 112 regulated toxic substances: Hydrogen chloride

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.