

# Safety Data Sheet



Superior Solutions

Zep, Inc.  
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Atlanta, GA 30318  
1-877-I-BUY-ZEP (428-9937)  
www.zep.com

## Section 1. Chemical Product and Company Identification

**Product name** RING MASTER  
**Product use** All Purpose Bathroom Cleaner  
**Product code** 1846  
**Date of issue** 02/07/14 **Supersedes** 08/04/10

Not available.

## 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  
1259 Seaboard Industrial Blvd.  
Atlanta, GA 30318

## Section 2. Hazards Identification

### Emergency overview

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

**DANGER!**

CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION. MAY BE 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. Ingestion.

- Eyes** Causes severe burns. Inflammation of the eye is characterized by redness, watering and itching.
- Skin** Harmful in contact with skin. Skin inflammation is characterized by itching, scaling, reddening or, occasionally, blistering.
- Inhalation** Avoid breathing vapors, spray or mists. Liquid, spray or mist may produce tissue damage, particularly to mucous membranes of eyes, mouth and respiratory tract.
- 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, skin, eye, lens or cornea, teeth. Repeated skin exposure can produce local skin destruction or dermatitis.

**Carcinogenicity Classification** Not listed as a carcinogen by OSHA, NTP or IARC.

**Additional information:** See toxicological information (Section 11)

## Section 3. Composition/Information on Ingredients

Name	CAS number	%
Phosphoric acid	7664-38-2	20`-30
urea	57-13-6	1 - 10
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	68439-57-6	1 - 10
Hydrogen chloride	7647-01-0	<10
Alcohols, C10-14, ethoxylated	66455-15-0	<10
Dipropylene Glycol Butyl Ether; 1-(2-butoxy-1-methylethoxy)propan-2-ol	29911-28-2	<10

## 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. If affected person is conscious, give plenty of water to drink. 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** Closed cup: 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. Fire-fighters should wear appropriate protective equipment. Do not release runoff from fire to drains or watercourses.

### 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.

### Section 7. Handling and Storage

- Handling** Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Keep away from incompatibles as alkalis and oxidizers. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wash thoroughly after handling. Empty containers retain product residue and can be hazardous. Do not reuse container. Apply this product only as specified on the label.
- Storage** 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. Keep container tightly closed and sealed until ready for use. Keep out of the reach of children.

### Section 8. Exposure Controls/Personal Protection

Ingredient	Exposure limits
Phosphoric acid	<b>ACGIH TLV (United States, 3/2012).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. STEL: 3 mg/m <sup>3</sup> 15 minutes. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. STEL: 3 mg/m <sup>3</sup> 15 minutes. <b>NIOSH REL (United States, 1/2013).</b> TWA: 1 mg/m <sup>3</sup> 10 hours. STEL: 3 mg/m <sup>3</sup> 15 minutes. <b>OSHA PEL (United States, 6/2010).</b> TWA: 1 mg/m <sup>3</sup> 8 hours.
urea	<b>AIHA WEEL (United States, 10/2011).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.
Hydrogen chloride	<b>ACGIH TLV (United States, 3/2012).</b> C: 2 ppm <b>OSHA PEL 1989 (United States, 3/1989).</b> CEIL: 5 ppm CEIL: 7 mg/m <sup>3</sup> <b>NIOSH REL (United States, 1/2013).</b> CEIL: 5 ppm CEIL: 7 mg/m <sup>3</sup> <b>OSHA PEL (United States, 6/2010).</b> CEIL: 5 ppm CEIL: 7 mg/m <sup>3</sup>

### Personal Protective Equipment (PPE)

- Eyes** Splash goggles.
- Body** Recommended: Wear appropriate protective clothing to prevent skin contact. Neoprene, Nitrile or Rubber gloves.
- Respiratory** A respirator is not needed under normal and intended conditions of product use. Use with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.



**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid. [SlightlyViscous]	<b>Color</b>	Green. Opaque.
<b>pH</b>	<1	<b>Odor</b>	Wintergreen.
<b>Boiling Point</b>	100°C (212°F)	<b>Vapor Pressure</b>	Not available.
<b>Specific Gravity</b>	1.2	<b>Vapor Density</b>	Not available.
<b>Solubility</b>	Easily soluble in the following materials: cold water and hot water.	<b>Evaporation Rate</b>	1 (Water = 1)
		<b>VOC (Consumer)</b>	0.1 % (w/w) 0.01 lbs/gal (1.2 g/l)

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Reactive or incompatible with the following materials: oxidizing materials and alkalis.
<b>Hazardous Polymerization</b>	Under normal conditions of storage and use, hazardous polymerization will not occur.
<b>Hazardous Decomposition Products</b>	carbon oxides (CO, CO <sub>2</sub> ) and phosphorus oxides (P <sub>2</sub> O <sub>5</sub> , P <sub>2</sub> O <sub>3</sub> , etc)

**Section 11. Toxicological Information**

Product/ingredient name	Result	Species	Dose	Exposure
Phosphoric acid	LD50 Oral	Rat	1.25 g/kg	-
urea	LD50 Oral	Rat	8471 mg/kg	-
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	LD50 Dermal	Rabbit	400 to 2000 mg/kg	-
	LD50 Oral	Rat	500 to 5000 mg/kg	-
Dipropylene Glycol Butyl Ether; 1-(2-butoxy-1-methylethoxy)propan-2-ol	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat - Female	3700 mg/kg	-

**Section 12. Ecological Information**

**Environmental Effects** Not available.

**Aquatic ecotoxicity**



Product/ingredient name	Result	Species	Exposure
Phosphoric acid	Acute LC50 138 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
urea	Acute EC50 3910000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1000 mg/l Marine water	Crustaceans - Chaetogammarus marinus - Young	48 hours
	Acute LC50 5000 µg/l Fresh water	Fish - Colisa fasciata - Fingerling	96 hours
Hydrogen chloride	Acute LC50 240000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
	Acute LC50 282 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	Acute EC50 4.53 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
Dipropylene Glycol Butyl Ether; 1-(2-butoxy-1-methylethoxy)propan-2-ol	Acute EC50 >1000 mg/l	Daphnia	96 hours
	Acute LC50 841 mg/l	Fish	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
<b>DOT Classification</b>	UN3264	Corrosive liquid, acidic, inorganic, n.o.s. or Consumer commodity (Phosphoric acid, Hydrogen chloride) RQ (Phosphoric acid)	8	II	
<b>IMDG Class</b>	UN3264	Corrosive liquid, acidic, inorganic, n.o.s.(Phosphoric, Hydrochloric acid) or Limited quantity	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:** Phosphoric acid; 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.

KOD/LW