Zep Manufacturing Co. of Canada
11627 178th Street
Edmonton, Alberta T5S 1N6
1-800-I-BUY-ZEP

Material Safety Data Sheet

and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name **RING MASTER**
Product Use General Purpose Cleaner For Bathroom
Product Code **1846**
Date of issue **05/18/07** **Supersedes** **12/28/04**

Emergency Telephone Numbers

For MSDS Information:
Technical Services Group
Zep Manufacturing of Canada
Telephone: (780) 453-8100 (Business Hours 8:00-5:00)

For a Medical or Transportation Emergency:
CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

Prepared by Technical Services Group
Zep Manufacturing Co. of Canada
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Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Toxicity Data			
DODECYL BENZENE SULFONIC ACID; alkyl aryl sulfonic acid	27176-87-0	10 - 30	LD50	Rat	Oral	2140 mg/kg
			LC50	Rat	Inhalation	510 mg/m³ (2 hour(s))
			LC50	Mouse	Inhalation	320 mg/m³ (2 hour(s))
PHOSPHORIC ACID	7664-38-2	10 - 30	LD50	Rat.	Oral	4400 mg/kg
			LD50	Rabbit.	Dermal	>3160 mg/kg
ISOPROPYL ALCOHOL; ipa; dimethylcarbinol; 2-propanol	67-63-0	7 - 13	LD50	Rat	Oral	4700 mg/kg
			LD50	Rabbit	Dermal	13000 mg/kg
			LC50	Rat (Male)	Inhalation	22500 ppm (8 hour(s))
			LC50	Rat (Female)	Inhalation	19000 ppm (8 hour(s))
NONYLPHENOXY POLY(ETHYLENEOXY) ETHANOL - npe poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy	9016-45-9	5 - 10	LD50	Rat	Oral	3310 mg/kg
			LD50	Rabbit	Dermal	2000 mg/kg
HYDROCHLORIC ACID; muriatic acid; hydrogen chlorid	7647-01-0	5 - 10	LD50	Rabbit	Oral	900 mg/kg
			LC50	Rat	Inhalation	3124 ppm (1 hour(s))

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Inhalation Skin contact Eye contact.

Skin Hazardous in case of skin contact (corrosive). Skin contact may produce burns. Medical Conditions Aggravated by Overexposure: Skin

Eyes Hazardous in case of eye contact (corrosive). Eye exposure may cause severe and permanent eye injury (blindness). Medical Conditions Aggravated by Overexposure: Eye

Inhalation Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Medical Conditions Aggravated by Overexposure: Respiratory

Ingestion Ingestion may cause severe gastric disturbances. May cause burns to mouth, throat and stomach. May be fatal if swallowed.

Chronic Effects Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

Additional information : See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Flush 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. Get medical attention immediately.

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

Flash Point Closed cup: 41°C (105.8°F).(Tagliabue.) **Flammable Limits** Not determined.
Flammability Avoid contact with strong oxidizers, excessive heat, sparks or open flame.
Auto-ignition Temperature Not available.
Fire-Fighting Procedures Wear special protective clothing and positive pressure, self-contained breathing apparatus.
Fire Hazard Cool closed containers exposed to fire with water.
Products of Combustion May emit toxic fumes under fire conditions.
Explosion hazard Not available.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see Section 8). Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. To clean the floor and all objects contaminated by this material, use detergent. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Section 7. Handling and Storage

Handling Avoid contact with eyes, skin and clothing. Avoid breathing vapors or spray mists. Wash contaminated clothing before reusing.
Storage Keep container tightly closed and sealed until ready for use. Keep container in a cool, well-ventilated area. Keep away from incompatibles. Store between 4 - 49 C. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Protective Clothing (Pictograms)

Eyes Splash goggles.
Hands and Body Neoprene gloves. Nitrile gloves. Rubber glove
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.

Exposure Limits

Name of Hazardous Ingredients	CAS #	Exposure Limits
Dodecylbenzene sulfonic acid	27176-87-0	**ACGIH / OSHA (United States).** TWA: 1 mg/m³ 8 hour(s). **ACGIH TLV (United States).** STEL: 3 mg/m³ 15 minute(s).
Phosphoric Acid	7664-38-2	**ACGIH / OSHA (United States).** TWA: 1 mg/m³ 8 hour(s). **ACGIH TLV (United States).** STEL: 3 mg/m³ 15 minute(s).
Isopropyl Alcohol	67-63-0	**ACGIH TLV (United States).** TWA: 200 ppm 8 hour(s). **OSHA PEL (United States).** TWA: 400 ppm 8 hour(s). **ACGIH/OSHA (United States).** STEL: 400 ppm 15 minute(s).
Hydrochloric Acic	7647-01-0	**ACGIH TLV/OSHA PEL (United States).** CEIL: 5 ppm 8 hour(s). **OSHA PEL (United States).** CEIL: 7 mg/m³ 8 hour(s).

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State Liquid. (Thin liquid)
pH <1
Boiling Point 94.444°C (202°F)
Freezing Point
Specific Gravity 1.16 (Water = 1)
Solubility Easily soluble in cold water, hot water.

Color Green.
Odor Wintergreen.
Vapor Pressure Not determined.
Vapor Density Not determined.
Evaporation Rate Not determined.
VOC (Consumer) 12.2%

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.
Incompatibility Reactive with oxidizing agents, alkalis.
Reactivity Will not occur.
Hazardous Decomposition Products May emit toxic fumes under fire conditions.

Section 11. Toxicological Information

Carcinogenic Effects Classified 1 (Proven for human.) by IARC, + (Proven.) by OSHA [Dodecyl Benzene Sulfonic Acid]. Classified A2 (Suspected for human.) by ACGIH [Dodecyl Benzene Sulfonic Acid].

Reproductive Effects NO known EFFECT according to our databas

Mutagenic Effects NO known EFFECT according to our databas

Teratogenic Effects NO known EFFECT according to our databas

Section 12. Ecological Information

Ecotoxicity Not available.

Biodegradable/OECD Not available.

Section 13. Disposal Considerations

Waste Information Waste must be disposed according to applicable regulations. Consult your local or regional authorities.

Waste Stream No additional information

Section 14. Transport Information

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
TDG Classification	3264	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric Acid, Hydrochloric Acid)	8	II		**Explosive Limit and Limited Quantity Index** 1

Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to the TDG regulations.

Section 15. Regulatory Information

WHMIS (Canada) Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
Class E: Corrosive liquid.

Other Regulations Not applicable

This product has been classifed according to the hazard criteria of the CPR and the MSDS contains all of the available information required by the CPR.

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 cauti
Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exis