ZEP Inc.
11627 178th Street
Edmonton, Alberta T5S 1N6
1-877-I-BUY-ZEP (428-9937)
www.zep.com

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name **RING MASTER NPE FREE**

Product use All Purpose Bathroom Cleaner

Product code **M611**

Date of issue **09/14/10** **Supersedes 10/02/07**

Emergency Telephone Numbers

For MSDS Information:
Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

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

Printing date: 15/09/10

Prepared By
Technical Services Group
11627 178th Street
Edmonton, Alberta T5S 1N6

Section 2. Hazards Identification

Emergency overview

DANGER !

CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED.

COMBUSTIBLE.

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 burns. Eye exposure may cause severe and permanent eye injury (blindness).

Skin Causes skin burns. The amount of tissue damage depends on length of contact. 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 Repeated skin exposure can produce local skin destruction or dermatitis. 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.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients	CAS number	% by Weight
PHOSPHORIC ACID	7664-38-2	10 - 30
DODECYL BENZENE SULFONIC ACID; alkyl aryl sulfonic acid	27176-87-0	10 - 30
ETHANOL; ethyl alcohol; grain alcohol	64-17-5	7 - 13
HYDROCHLORIC ACID; muriatic acid; hydrogen chloride; HCl	7647-01-0	1 - 5
METHYL SALICYLATE; 2-carbomethoxyphenol; oil of wintergreen; sweet birch oil	119-36-8	0.1 - 1

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 affected 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.

Inhalation Move exposed person to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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

Flash Point Closed cup: 41.1°C (106°F) [Tagliabue.]

Flammable Limits Not determined.

Flammability COMBUSTIBLE.

Auto-ignition Temperature

Fire-Fighting Procedures Use dry chemical, CO_2, water spray (fog) or foam. Wear special protective clothing and positive pressure, self-contained breathing apparatus.

Fire hazard Combustible liquid. May emit toxic fumes under fire conditions.

Products of Combustion Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
phosphorus oxides

Explosion hazard Not available.

Section 6. Accidental Release Measures

Spill Clean up Put on appropriate personal protective equipment (see section 8). Eliminate all ignition sources. 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. 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 Put on appropriate personal protective equipment (see section 8). Store and use away from heat, sparks, open flame or any other ignition source. Do not get in eyes or on skin or clothing. 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. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep away from heat, sparks and flame. Keep container tightly closed and sealed until ready for use. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
Phosphoric acid	**ACGIH TLV (United States, 2/2010).** TWA: 1 mg/m³ 8 hour(s). STEL: 3 mg/m³ 15 minute(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 1 mg/m³ 8 hour(s). STEL: 3 mg/m³ 15 minute(s). **NIOSH REL (United States, 6/2009).** TWA: 1 mg/m³ 10 hour(s). STEL: 3 mg/m³ 15 minute(s). **OSHA PEL (United States, 11/2006).** TWA: 1 mg/m³ 8 hour(s).
Dodecylbenzene sulfonic acid	**ACGIH / OSHA (United States).** TWA: 1 mg/m³ 8 hour(s). **ACGIH TLV (United States).** STEL: 3 mg/m³ 15 minute(s).
Ethanol	**NIOSH REL (United States, 6/2009).** TWA: 1000 ppm 10 hour(s). TWA: 1900 mg/m³ 10 hour(s). **OSHA PEL (United States, 11/2006).** TWA: 1000 ppm 8 hour(s). TWA: 1900 mg/m³ 8 hour(s). **ACGIH TLV (United States, 1/2009).** STEL: 1000 ppm 15 minute(s). **OSHA PEL 1989 (United States, 3/1989).** TWA: 1000 ppm 8 hour(s). TWA: 1900 mg/m³ 8 hour(s).
Hydrochloric Acid	**ACGIH TLV/OSHA PEL (United States).** CEIL: 5 ppm 8 hour(s). **OSHA PEL (United States).** CEIL: 7 mg/m³ 8 hour(s).

Personal Protective Equipment (PPE)

Eyes Splash goggles.

Hands and Body Wear appropriate protective clothing to prevent skin contact.
Recommended: Rubber gloves. Neoprene gloves. Nitrile 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.
pH <1
Boiling Point 94.4°C (202°F)
Specific Gravity 1.14 (Water = 1)
Solubility Easily soluble in the following materials: cold water and hot water.
Freezing Point

Color Green.
Odor Wintergreen.
Vapor Pressure Not determined.
Vapor Density Not determined.
Evaporation Rate Not determined.
VOC (Consumer) 12.15% 1.15lb/gal 138.27g/l

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.
Incompatibility Reactive or incompatible with the following materials: oxidizing materials and alkalis.
Hazardous Polymerization Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

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

Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Phosphoric acid	LD50 Oral	Rat	1.25 g/kg	-
Dodecylbenzene sulfonic acid	LC50 Inhalation Vapor	Mouse	320 mg/m³	2 hours
	LC50 Inhalation Vapor	Rat	510 mg/m³	2 hours
	LD50 Oral	Rat	2140 mg/kg	-
Ethanol	LC50 Inhalation Vapor	Rat	20000 mg/m³	4 hours
	LD50 Oral	Rat	7 g/kg	-
Hydrochloric Acid	LC50 Inhalation Vapor	Rat	3124 ppm	1 hours
	LD50 Oral	Rabbit	900 mg/kg	-

Section 12. Ecological Information

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity

Not available.

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with applicable 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	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
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. Limited Quantity: Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information

Canada

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 material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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.