

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Nypower Industries Ltd.
111 Fisher Street
Okotoks, AB. T1S 1A8

Phone: 403-995-2588
In Case of Emergency: 403-998-7297

Product name: Scale Away
Other Name:
Distributed by:
Product Use: Descaler
Date Completed: January, 2015

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS Number
Hydrochloric Acid	20-25	7647-01-0
Ethylene Glycol Monobutyl Ether	3-7	111-76-2
Phosphoric Acid	1-4	7664-38-2
Citric Acid	1-4	77-92-9

3. HAZARDS IDENTIFICATION

Eye, Skin, and Inhalation irritant. Harmful if swallowed

4. FIRST AID MEASURES

Ingestion: Do Not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. If conscious rinse mouth with water. Drink large quantities of water.

Eye contact: Flush with water for 15 minutes. Get medical attention.

Skin contact: Remove clothing and footwear and wash before reuse. Flush skin thoroughly with water for at least 15 minutes.

Inhalation: Move victim to fresh air.
In all cases: If symptoms persist seek medical attention

5. FIRE - FIGHTING MEASURES

Flash point (test method): Not applicable

Flammable limits: Non-flammable

Lower: Not applicable

Upper: Not applicable

Fire extinguishing substances: Use media appropriate for surrounding fire

Autoignition temperatures: Not available

Hazardous combustion products: Not available

Explosion data:

Sensitivity to mechanical impact: Not applicable

Sensitivity to static discharge: Not applicable

Special firefighting procedures: Fire fighters should wear full protective clothing, including self-contained breathing equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear appropriate protective equipment
Environmental precautions: Prevent from entering sewers, waterways or low areas
Methods for cleaning up: Dike and contain. Collect and reuse if possible. Absorb with Inert material and place in waste containers. Do not allow runoff into public waterways. Avoid direct contact with material

7. HANDLING AND STORAGE

Handling: Close container tightly when not in use. Wash thoroughly after handling. Avoid transfer of product.
Storage: Store in a cool dry area. Keep out of reach of children. Do not freeze

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use in ventilated area if possible
Respiratory protection: If exposure exceeds occupational limits, use appropriate NIOSH Approved respirator
Eye protection: Chemical goggles. Wear a face shield if splashing hazards exists
Gloves: Appropriate chemical resistant gloves should be worn.
Skin Protection: Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.
Other protection: Ensure that eyewash stations and safety showers are proximal to the work-station

Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
Hydrochloric Acid	5 ppm TWA	5 ppm CEIL	
Ethylene Glycol Monobutyl Ether	20 ppm TWA		
Phosphoric Acid	1 mg/m ³ TWA		
Citric Acid	Not available		

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid	Solubility in water:	Complete
Boiling point:	104°C	Vapour pressure:	Like water
Vapour density:	Not available	Evaporation rate:	Not available
Freezing point:	-4°C	Odour threshold:	1-105
Specific gravity:	1.0622	pH:	2.0
Appearance & odour:	Yellow/Mild odour		

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions of instability:	Product is stable
Incompatibility:	() Water () Oxidizers () Acid () Base (X) Other Alkalis, Cyanides, Formaldehyde, Amines, Vinyl Acetate, Propylene Oxide, Beta-propiolactone, Metal oxides
Conditions of reactivity:	Not available
Hazardous decomposition products:	May liberate hydrogen chloride

11. TOXICOLGICAL PROPERTIES

POTENTIAL ACUTE HEALTH EFFECTS

Ingestion:	Extremely corrosive to mouth and throat, may burn tissue. May cause abdominal pain, vomiting and collapse.
Eye contact:	Brief contact may cause severe irritation and damage, prolonged contact may cause blindness.
Skin Contact:	May cause irritation and burning with prolonged contact.

POTENTIAL CHRONIC HEALTH EFFECTS:

Inhalation:	Not available	
Ingestion:	Not available	
Eye contact:	Not available	
Skin contact:	Not available	
Skin absorption:	Not available	
Irritancy of product:	See WHMIS criteria	
Sensitization of product:	No evidence	
Carcinogenicity:	No evidence	Reproductive
toxicity:	Not available	
Mutagenicity:	No evidence	
Synergistic product:	None known	

HAZARDOUS INGREDIENTS	CAS NO.	TOXICITY DATA
Hydrochloric Acid	7647-01-0	LC ₅₀ Inhalation (Rat) 3124 ppm LD ₅₀ Oral (Rat) 700 mg/kg
Ethylene Glycol Monobutyl Ether	111-76-2	LD ₅₀ Oral (Mouse) 1230 mg/kg LD ₅₀ Oral (Rat) 917 mg/kg LD ₅₀ Oral (Guinea pig) 1200 mg/kg LD ₅₀ Oral (Rabbit) 320 mg/kg LD ₅₀ Dermal (Rabbit) 320 mg/kg LC ₅₀ Inhalation (Rat) 450 ppm/4H
Phosphoric Acid	7664-38-2	LD ₅₀ Dermal (Rabbit) 2730 mg/kg LD ₅₀ Inhalation (Rat) 850 mg/m ³
Citric Acid	77-92-9	LD ₅₀ Oral (Rat) 3000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicological information:	Not available
Other information:	No additional remark

13. DISPOSAL CONSIDERATIONS

Waste disposal: Dispose of in a manner approved by local, provincial and federal regulations

14. TRANSPORT INFORMATION

TDG classification: Any packages 4L or more must be labeled:
HYDROCHLORIC ACID SOLUTION Corrosive Liquid
UN 1789 CLASS 8
PG II
Packages 1L or less must be labeled "Limited Quantity"

15. REGULATORY INFORMATION

WHMIS: D1B, E

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

16. PREPARATION INFORMATION

Prepared by: Nypower Industries Ltd., Ph: (403) 995-2588

Disclaimer:

Notice to reader

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 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.