

1- IDENTIFICATION

Product name: **VORTEX**
Description: Bowl and urinal cleaner
Restrictions on use: For industrial use only.
Supplier/Manufacturer: MAUNCO CLEANING AND SUPPLIES WAREHOUSE
270 Adams street, Belleville, Ontario, K8N 5S4
613 962-0437 www.maunco.com

2- HAZARDS IDENTIFICATION

Product classification:

Acute Inhalation/oral Toxicity
Skin corrosion
Serious eye damage
Corrosive to metals

Pictogram GHS:**Signal word:**

WARNING!

Toxic by ingestion/ inhalation
Causes severe skin burns and severe eye injury.
Provoque des lésions graves des voies respiratoires.

Individual protection:

Neoprene / nitrile rubber gloves
Face shield/safety glasses
Apron Suggested

3- COMPOSITION/INFORMATION ON INGREDIENTS

Product family: Aqueous mixture

<u>Name</u>	<u>CAS Number</u>	<u>% weight</u>
Hydrochloric acid	7647-01-0	10-30

4- FIRST AID MEASURES

Eye contact:	Quickly rinse the eyes using a large amount of water for several minutes, spreading the eyelid if possible. See a doctor immediately.
Skin contact:	Remove contaminated clothing quickly using gloves. Rinse skin with water and soap for several minutes or until the chemical is removed. Seek medical attention if redness or itch persists.
Inhalation:	In case of inhalation of vapor or mist, bring the person to a cool, ventilated place and place in a semi-seated position. If breathing difficulties persist, consult the emergency medical service.
Ingestion:	If swallowed, rinse mouth. Drink a glass of water. Do not induce vomiting and consult a doctor immediately.

5- FIRE-FIGHTING MEASURES

Flamability of the product:	Not flammable
Extinguishing media:	Use any extinguishing media appropriate to surrounding. Do not use water jet not to spread the product and expand the danger zone

6- ACCIDENTAL RELEASE MEASURES

Personal protection:	Respiratory protection with full face mask. Rubber gloves with long sleeve. Rubber boots. Tight tracksuits.
Environmental precautions:	Avoid dispersal from entering sewers, waterways or low areas.
Methods for cleaning:	Small spill: Neutralize before rinsing. Wearing gloves. Neutralize with sodium bicarbonate, or dilute sodium bicarbonate solution. Handle solid waste with care. Complete the cleaning, rinsing with water. Large spill: Evacuate the area and establish a safety perimeter. Contain leak as much as possible. Consult an expert. Cleaning should be carried out by qualified personnel. Wear full protective equipment.

7- HANDLING AND STORAGE

- Handling:** Avoid those that produce a dust cloud. Never add water to this product, for dilution slowly add the product to water, stirring constantly. Handle away from incompatible materials. Avoid contact with skin. Wear eye protection and equipment in case of insufficient ventilation, suitable respiratory protective device. Workers handling transvasent or corrosive substances must wear appropriate personal protective equipment. This product is corrosive: if handled or transferred regularly or frequently, eyewash or true emergency showers must be made available to workers and be located near the work station. Avoid wearing contact lenses when handling the product.
- Incompatibility with:** Bases, alkali metals, halogenated compounds. With water, a release of toxic vapor of hydrogen chloride. When diluting always add SLOW acid to water and not the other way around. Do not mix with other cleaning products.
- Storage:** Store in a cool, dry and well-ventilated place, between 5 and 30 ° C. On a corrosion-resistant floor, eg cement. Keep away from incompatible materials, and away from heat sources.

8- EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering measures:** Eyewash and emergency showers near the working place.
General ventilation for use at room temperature of 20 ° C. Ventilation at the source for temperatures exceeding 20 ° C.

<u>Name</u>	<u>TLV*</u>
Hydrochloric acid	7.5mg/m ³

**Consult local officials to know the exposure values considered acceptables.*

Personal protection

- Respiratory:** If the ventilation system is inadequate, wear an approved respirator / respirator.
- Eye:** Visor or safety goggles. Do not wear contact lenses when handling the product.

Hands:	Rubber or neoprene/nitrile gloves
Chlothing:	Use rubber apron or other protection depending on the nature of the job.
General:	Do not wear contact lenses when handling the product.

9- PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White liquid
Odour:	pungent
Odor threshold:	not available
pH:	<1.0
Freezing point / melting point:	not available
Boiling point:	105°C
Flash point:	not applicable
Evaporating rate:	1 (butyl acetate=1)
Flammability:	not flammable
Flammable limits	not available
Vapor pressure:	3040mmHg based on hydrochloric aci (mm Hg)
Vapor density:	1 (air=1)
Specific gravity:	1.100 (water=1)
Solubility in water:	Miscible
N-octanol / water partition coefficient:	not available
Auto ignition temperature:	not available
Decomposition temperature:	not available
Viscosity:	Similar to water.

10- STABILITY AND REACTIVITY

Chemical stability:	The product is stable under normal condition. The container will tend to deform slightly.
Hazardous reactions:	Refer to Section 7 incompatible materials
Decomposition products:	No data
Incompatibility with:	Refer to Section 7 incompatible materials

11- TOXICOLOGICAL INFORMATION

Datas: There are no data for the product, only for the ingredients

<u>Name</u>	<u>DL</u> ₅₀ (rat, oral)	<u>CL</u> ₅₀ (rat, 4h)
Hydrochloric acid	not available	1038mg/m ³

Chronic health effects

Carcinogenic effects:	No data
Teratogenic effects:	No data
Reproductive effects:	No data
Synergistic product:	No data

12- ECOLOGICAL INFORMATION

Ecotoxicity: (fish, aquatic invertebrates, aquatic plants, microorganisms): no data

Biodegradability: No data

Other adverse effects: No data

13- DISPOSAL CONSIDERATIONS

Waste disposal: Recycle in the process if possible. Disposal of all waste must be done according to local, provincial and federal regulations. Do not reuse empty packaging. Empty packaging is considered a dangerous household residue.(hydrochloric acid)

14- TRANSPORT INFORMATION

TGD classification: UN1760, CORROSIVE LIQUID, N.S.A.,(Hydrochloric acid solution), Class 8, PG II

Additional information: Limited quantity 1L

15- REGULATORY INFORMATION

WHMIS 1988 (Canada): E Corrosive substances (metal corrosion / irritation, eye injury)

D1A Materials causing immediate and serious toxic effects.



16-OTHER INFORMATION

Date of issue: 2018-01-31

References:

1. Manufacturer Datasheet
2. CNESST, Toxicological Directory, Products
3. RPD-SOR-2015-17
4. Technical Guidance on the Requirements of the Hazardous Products Act and the Hazardous Products Regulations - WHMIS 2015 Supplier Requirements

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