

MATERIAL SAFETY DATA SHEET

Trade Name: Liquid Toilet Bowl Cleaner #8762

Prepared: August 25, 2000

Revised: May 8, 2006

Section I - Source Information

Manufacturer's Name: Michigan State Industries, Inc.
Address: Ryan Correctional Facility
Emergency Phone: (313) 368-3200 x51412
(800) 222-1222 Poison Control
Technical Information: (313) 368-3200 x51412
Chemical Name: Acidic Cleaner

Section II - Hazardous Ingredients/Identify Information

Hazardous Components	CAS No.	OSHA PEL*	ACGIH TLV*
Hydrochloric Acid		7647-01-0	5 ppm (7mg/m ³)
Ethyl Alcohol		64-17-5	1000 ppm
Styrene		100-42-6-5	100 ppm
Ammonia		7664-41-7	50 ppm

*Exposure limits expressed as eight-hour time-weighted average concentrations in parts of contaminant per million parts of air by volume(ppm)."Other Limits" are recommended by the National Institute for Occupational Safety and Health (NIOSH) and are time-weighted over ten hours unless otherwise specified.

Section III - Physical/Chemical Characteristics

<u>Boiling Point:</u>	212 °F	<u>Specific Gravity:</u>	1.07
<u>Vapor Pressure:</u>	N/A	<u>Vapor Density:</u>	>1.0
<u>Evaporation Rate: (Ethyl Ether =1):</u>	>1	<u>Solubility in Water:</u>	100 %
<u>Appearance and Color:</u> Milky white liquid, with slight odor		<u>pH:</u>	1.0

Section IV- Fire and Explosion Hazard Data:

Flash Point: >200 °F Flammable Limits: LEL: N/A UEL: N/A

Extinguishing Media: Alcohol foam, carbon dioxide, dry chemical, water spray

Special Fire Fighting Procedures: Fire fighters should wear self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion Hazards: Hydrochloric acid reacts with most metals to generate explosive hydrogen gas. May emit carbon monoxide, chlorine and other toxic vapors.

NFPA 704

Health -	2	HAZARDS 4 - Extreme 3 - Severe 2 - Moderate 1 - Slight 0 - None
Fire -	1	
Reactivity-	1	

Section V - Reactivity Data:

Stability: STABLE

Incompatibility (Conditions to avoid): Hydroxides, amines, alkalies. Highly corrosive to most metals.

Hazardous Polymerization: None known

Hazardous Decomposition Products: When heated to decomposition may emit fumes of hydrogen chloride and chlorine.

Section VI - Health Hazard Data:

Routes of Entry: Inhalation, Ingestion, Contact

Health Hazards: *Acute:* Irritation of throat

Chronic: None documented

Target Organs: Eyes, skin, respiratory system

Carcinogenicity: *NTP:* No *IARC:* No *OSHA:* No

Signs and Symptoms of Exposure: Irritation of eye, skin burns

Medical Conditions Generally Aggravated by Exposure:

Emergency and First Aid Procedures:

Eye: If this product contacts the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.

Swallow: If this product has been swallowed, get medical attention immediately.

Skin: If this product contacts the skin, immediately flush the contaminated skin with water. If this product penetrates the clothing, immediately remove the clothing and flush the skin with water. Get medical attention promptly.

Breathing: If a person breathes large amounts of this product, move the exposed person to fresh air at once. If breathing has stopped, perform mouth-to-mouth resuscitation. Keep the affected person warm and at rest. Get medical attention as soon as possible.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case of Material Release or Spill: CAUTION Material is highly corrosive to skin and metal. Contain, neutralize, and absorb spilled material, dispose of properly. Large spill may be collected using suitable vacuum equipment, dispose of unuseable material properly.

Waste Disposal Method: This product does exhibit the hazardous characteristic of Corrosivity as listed in 40CFR 261, Subpart C. It is not listed in the federal hazardous waste regulations 40CFR 261.33, paragraphs (e) or (f), i.e. chemical products that are considered hazardous if they become wastes. State or local hazardous waste regulations may apply if different from federal.

Precautions to be Taken in Handling and Storing:

Other Precautions:

Section VIII - Control Measures:

Respiratory Protection: Respiratory Protection is not typically required in the use of this product in well ventilated areas. 5 ppm to 50 ppm chemical cartridge respirators are suitable. Above 50 ppm self contained or supplied air respirators are required.

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Ventilation: Mechanical ventilation.

Protective Gloves: Wear chemically resistant gloves to prevent skin contact.

Eye Protection: Wear appropriate glasses, goggles or face shield to prevent product from contacting eyes.

Protective Clothing or Equipment: Wear appropriate personal protective clothing to prevent skin contact. Protective or work clothing that becomes wet should immediately be removed.

Work/Hygienic Practices: Eyewash fountains and drench showers should be provided in areas where there is any possibility that workers could be exposed to the substance; this is irrespective of the recommendation involving the wearing of eye or other personal protection.

Section IX-Additional Information:

DOT Shipping Name: Hydrochloric Acid Mixture, 8, UN 1789, PGIII
Hazard Class: Corrosive Material

This product contains the following compounds which are subject to the reporting requirements of Section 313 of Title III of SARA and 40 CFR 372:

<u>Constituent</u>	<u>CAS #</u>	<u>Concentration</u>
Hydrochloric Acid	7647-01-0	9.0%
Ammonia	7664-41-7	<0.0066%
Styrene	100-42-5	<0.132%

This notification of reporting requirements, cannot be removed from this MSDS and the copying and redistribution of this document must include this notice.

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originated with Michigan State Industries, Inc. or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.