MEMCO a middleton company SAFETY SUPPLY
296 Carlton Rd, Hollister, MO 65672

Safety Data Sheet
Clinging Bowl 101015

1. IDENTIFICATION

Synonyms **none**
CAS# ***listed below in Part 3***
Material Use **hard surface cleaner & lime scale remover**

IN AN EMERGENCY CALL: INFOTRAC 1-800-535-5053

2. HAZARD IDENTIFICATION

GHS Class (Category)	***metal corrosion (1)***	***skin irritation (2)***	***eye corrosion (1)***
Signal Words	***WARNING***	***WARNING***	***DANGER***
Hazard Statements	*may be corrosive to metals (H290)*	*causes skin irritation (H315)*	*causes serious eye damage (H318)*

GHS Precautionary Statements for Labelling

P262 **Do not get in eyes, on skin or on clothing.**
P264 **Wash thoroughly after handling.**
P270 **Do not eat, drink or smoke when using this product.**
P280 **Wear protective gloves and clothing of neoprene.**
P313 & P333 **If skin irritation or rash occurs, get medical advice/attention.**

3. COMPOSITION

	CAS NUMBER	%	TLV ppm / mg/m^3	LD_{50} (*mg/kg*) ORAL	LD_{50} (mg/kg) SKIN	LC_{50} mg/m^3 INHALATION
Hydrochloric Acid (*Hydrogen Chloride*)	7647-01-0	5-10%	2 / 3	240	>5000	1108
Anionic Surfactant	on request	1-5%	not listed	620	not known	not known
Water	7732-18-5	balance	not toxic	90,000	not toxic	not toxic

NOTE: All colour & scent substances are present at below 0.1%, at which level they are entirely harmless.

cont'd next page

4. FIRST AID

SKIN: Wash with plenty of water. Remove contaminated clothing and do not reuse until laundered. Seek medical help promptly if there is persistent itching or redness in the affected area.

EYES: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance promptly irritation occurs.

INHALATION: Remove from contaminated area promptly. **CAUTION: Rescuer must not endanger himself!** If victim's breathing stops, administer artificial respiration and seek medical aid promptly.

INGESTION: Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

5. FLAMMABILITY & FIRE-FIGHTING

Flash Point	cannot burn
Autoignition Temperature	cannot burn
Flammable Limits	cannot burn
Combustion Products	smoke, part oxidized hydrocarbon fragments; oxides of nitrogen, ammonia, hydrogen chloride
Firefighting Precautions	as for materials sustaining fire; firefighters must wear SCBA
Static Discharge	cannot accumulate a static charge

6. ACCIDENTAL RELEASE MEASURES

Leak Precaution	dike to control spillage and prevent environmental contamination
Handling Spill	recover free liquid with corrosion-resistant pumps; absorb residue on an inert sorbent, sweep, shovel & store in closed containers for disposal

7. HANDLING & STORAGE

Store and use away from strong alkalis. Never cut, drill, weld or grind on or near this container, whether empty or full. Always replace drum, pail or IBC cap prior to moving the container!

Avoid generating or breathing product vapour or mist. If mist or vapour form in use, install adequate ventilation to clear workplace air. Avoid prolonged contact with skin and wash work clothes frequently. An eye bath and safety shower should be available near the workplace.

***Warning:* This product is corrosive to skin, eyes & metals. Avoid spillage & handle with care.**

8. EXPOSURE CONTROL & PERSONAL PROTECTION

Hydrogen Chloride:

ACGIH TLV	2ppm / 3mg/m^3	ACGIH STEL	not listed
OSHA PEL	5ppm / 7mg/m^3	OSHA STEL	not listed

Ventilation	mechanical ventilation may be required if product mist is created in processing
Hands	neoprene gauntlet-style gloves – *other types also protect; confirm suitability with supplier*
Eyes	safety glasses with side shields plus face shield – *always protect the eyes*
Clothing	wear neoprene apron, boots, hat, & long sleeves if there is any danger of splashing,

cont'd next page

9. PHYSICAL AND CHEMICAL PROPERTIES

Odor & Appearance	clear, red liquid with a slight mint odor
Odor Threshold	not known
Vapor Pressure	as for water
Evaporation Rate (*Butyl Acetate = 1*)	as for water
Vapor Density (air = 1)	0.6 (*water vapor*); 36.5 (*hydrogen chloride*) – *surfactant is not volatile*
Boiling Point	slightly above 100°C / 212°F – *hydrogen chloride gas bubbles off as product is heated*
Freezing Point	slightly below 0°C / 32°F
Specific Gravity	1.024-1.036 (20/20°C)
Water Solubility	complete
Log $P_{o/w}$ (*Octanol/H_2O Partition Coefficient*)	not known
Viscosity	not known – *thin, mobile liquid*
pH	below 1 – *strongly acidic*

10. REACTIVITY

Dangerously Reactive With	strong alkalis
Also Reactive With	corrodes steel, iron, zinc (galvanized surfaces) aluminum, copper, brass, etc
Chemical Stability	stable; will not polymerize
Decomposes in Presence of	not known
Decomposition Products	none apart from Hazardous Combustion Products
Mechanical Impact	not sensitive

11. TOXICITY INFORMATION

i. *ACUTE EXPOSURE*

Skin Contact	severely irritating to skin if contact is prolonged
Skin Absorption	yes, slowly; toxic effects unlikely by this route
Eye Contact	may be corrosive to eyes, causing permanent damage, if not removed promptly
Inhalation	vapor or mist irritate the nose, throat and lungs
Ingestion	ingestion corrosive to mouth, throat and stomach – *not a route of industrial exposure*

ii. *CHRONIC EXPOSURE*

General	prolonged or repeated exposure to dilute product may cause dermatitis
Sensitizing	not a sensitizer
Carcinogen/Tumorigen	not known to be a tumorigen or a carcinogen in humans or animals
Reproductive Effect	no known effect on humans or animals
Mutagen	not known to be a mutagen or teratogen in humans or animals
Synergistic With	not known
Calculated LD_{50} (oral)	4330mg/kg (rat)
Calculated LD_{50} (skin)	10,000mg/kg (rabbit)
LC_{50} (inhalation)	not known

12. ECOLOGICAL INFORMATION

Bioaccumulation	all components are water soluble & will not bioaccumulate
Biodegradation	anionic surfactant biodegrades readily; degradation rate is unknown hydrochloric acid cannot biodegrade
Abiotic Degradation	not known
Mobility in soil, water	water soluble; moves readily through soil & the water column

cont'd next page

12. ECOLOGICAL INFORMATION, cont'd

Aquatic Toxicity	***hydrochloric acid***
LC_{50} (Fish, 96hr)	pH 3.25-3.5 & pH3.5-3.6 (Lepomis macrochirus)[1], pH 4.0 (Oncorhynchus mykiss)[1]
LC_{50} (Crustacea, 72hr)	pH 4.92 (Daphnia magna)[1]
EC_{50} (Algae, 72hr)	4.7mg/litre (Chlorella vulgaris)[1]
EC_{50} (Bacteria)	pH 5.0-5.5 (*domestic sewage sludge*)[1]

Aquatic Toxicity ***anionic surfactant – no aquatic toxicity data is available for this substance***

13. DISPOSAL CONSIDERATIONS

Waste Disposal **do not flush to sewer**; biological degradation is probably the best means of disposal

Containers **Drums** should be reused. Recondition and pressure test by a licensed reconditioner prior to re-use.
Pails must be vented and thoroughly dried prior to crushing and recycling.
IBCs (intermediate bulk containers): polyethylene bottle must be pressure tested & recertified at 30 months. Replace at 60 months (5 years). Steel containers must be inspected, pressure tested & recertified every 5 years.
Warning: never cut, drill, weld or grind on or near this container, even if empty.

14. TRANSPORT INFORMATION

USA 49 CFR & Canada/International TDG

Product Identification Number	**UN – 3264**
Shipping Name	**corrosive liquid, acidic, inorganic, N.O.S. (hydrochloric acid)**
Classification	**Class 8; Packing Group III**
Marine Pollution	***not a marine pollutant***
ERAP Required	***No***

15. REGULATIONS

Canada DSL	**all components on inventory**
U.S.A. TSCA	**all components on inventory**
Europe EINECS	**all components on inventory or exempt as polymers (*surfactant*)**

16. OTHER INFORMATION

Date of Preparation	**August 2014**
Date of Revision	**-**

Prepared for Memco, by **Peter Bursztyn**

With data from the Registry of Toxic Effects of Chemical Substances (RTECS), Hazardous Substance Data Base (HSDB), Cheminfo (CCOHS), OSHA, IUCLID Datasheets (European Chemical Substance Information System - ESIS), & others sources (below if used), as required/available

(1) European Chemicals Agency (EChA), dossier on hydrogen chloride:
http://apps.echa.europa.eu/registered/data/dossiers/DISS-a210a35e-757f-6b38-e044-00144f67d031/DISS-a210a35e-757f-6b38-e044-00144f67d031_DISS-a210a35e-757f-6b38-e044-00144f67d031.html

last page of SDS

PLEASE ENSURE THAT THIS SDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.

EMERGENCY INFORMATION: INFOTRAC 1-800-535-5053