



Comet Chemical Company Ltd.
3463 Thomas Street Innisfil ,ON L9S 3W4
Tel: (705) 436-5580 Fax: (705) 436-7194

Material Safety Data Sheet

HYDROCHLORIC ACID

Revision Date: 2008/06/19

Section 1 : PRODUCT AND COMPANY IDENTIFICATION

Chemical family: Mixture.

Product uses: Removal of lime and boiler scale, ore reduction, chemical intermediate, food industry.

Product name: Hydrochloric Acid

Supplier: Comet Chemical Ltd.
3463 Thomas Street
Innisfil, On.
L9S 3W4.

Supplier 24 hour phone number: (705)436-5580 – weekdays from 8:00-5:00.
(800)567-7455 all other times (Newalta Services).

Section 2 : INGREDIENT INFORMATION

C.A.S.	CONCENTRATION %	Ingrédient	V.L.E.	DL/50	CL/50
7647-01-0	31.5	HYDROCHLORIC ACID	2 PPM CL	900 MG/KG RABBIT ORAL	3124 PPM/IH RAT INHALATION 1108 PPM/IH MOUSE INHALATION 60938 MG/M3/5M RAT INHALATION 20487 MG/M3/5M MOUSE INHALATION

Section 2A: ADDITIONAL INGREDIENT INFORMATION

Note: (supplier).
CAS# 7647-01-0: LC50 1100 ppm rat inhalation.

Section 3 : HAZARD IDENTIFICATION

Route of entry: Eye contact, skin contact, skin absorption, inhalation and ingestion.

Effects of acute exposure

Eye contact: May cause permanent eye damage.
Liquids or vapours are corrosive to eyes.

Skin contact: Corrosive.
May cause permanent skin damage.
Causes burns.

Skin absorption: Not absorbed through the skin.

Inhalation: Severe irritant.
Coughing and choking.
May cause permanent damage.

Ingestion: May cause nausea and vomiting.
Severe irritation.
May cause permanent damage.

Effects of chronic exposure: See effects of acute exposure.

Sensitization to product: No

Carcinogenic effects: Not listed as a carcinogen.

Reproductive effects: Effects have been reported in animals.

Teratogenicity: Not available.

Mutagenicity: Not available.

Synergistic materials: None known.

Section 4 : FIRST AID MEASURES

Skin contact: Wash thoroughly with soap and water.
Remove contaminated clothing.
Consult a physician if irritation persists.

Eye contact: Flush eyes with clear, running water for 15 minutes while holding eyelids open. If irritation persists, consult a physician.

Inhalation: Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.

Ingestion: Obtain immediate medical attention.
Do not induce vomiting, keep person warm, quiet.
Guard against aspiration of liquids into lungs.
Give large volumes of water or milk.
If vomiting occurs, keep head below hips.
Never give anything by mouth to an unconscious person.
Keep at rest.

Additional information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

Section 5 : FIRE FIGHTING MEASURES

Flammability: Not flammable.

Conditions of flammability: Surrounding fire.

Extinguishing media: Use appropriate extinguishing media for surrounding fire.

Special procedures: Firefighters should wear adequate protective gear.
Self-contained breathing apparatus required.

Auto-ignition temperature (°C): Not flammable.
Lowest known value.

Flash point (°C), method: Non-flammable.

Lower flammability limit (% vol): Not flammable.

Upper flammability limit (% vol): Not flammable.

Explosion Data

Sensitivity to static discharge: Not sensitive.

Sensitivity to mechanical impact: Not sensitive.

Hazardous combustion products: Hydrogen gas (H₂).
Hydrogen chloride (HCl).

Rate of burning: Not available.

Explosive power: Not available.

Section 6 : ACCIDENTAL RELEASE MEASURES

Leak/Spill: Eliminate all sources of ignition.
Dike area to prevent spreading.
Ventilate area.
Wear appropriate protective equipment.
Do not flush to sewer.
Neutralise carefully with sodium carbonate or a mixture of slaked lime or soda ash and store in plastic containers for disposal.

Section 7 : HANDLING AND STORAGE

Handling procedures and equipment: Keep away from heat, sparks, and open flame.
Avoid breathing vapors/mists.
Use adequate ventilation.
Wear personal protective equipment appropriate to task.
Avoid contact with skin, eyes and clothing.
Launder contaminated clothing prior to reuse.
Always add acids to water, never the reverse.

Storage requirements: Store away from incompatible materials.
Store in a cool, dry and well ventilated area.
Store in rubber-lined steel, polypropylene, polyethylene, polyvinyl chloride, polyester or Teflon container.

Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

Precautionary Measures

Gloves/Type:



Rubber gloves.


Respiratory/Type: NIOSH/MSHA full-face respirator with acid gases and organic vapor cartridges when exposure levels are above TLV.

Eye/Type: 

Safety glasses with side-shields.



Chemical safety goggles.

Footwear/Type: 

Rubber boots.

Clothing/Type: Long sleeve shirt, long trousers.
When splashing is possible.
Rubber apron.

Other/Type: Eye wash facility should be in close proximity.
Emergency shower should be in close proximity.

Ventilation requirements: As needed to stay below TLV.
Mechanical ventilation is recommended.

Exposure limit of material: Not available for mixture, see the ingredients section.

Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.

Appearance & odor: Odourless.
Clear
Colourless to pale yellow.
Pungent choking odor.

Odor threshold (ppm): 1–5 ppm

Vapour pressure (mmHg): 100 mmhg / 13.3 kPa (20°C)

Vapour density (air=1): (Vapour will not sink to floor level rapidly – may remain aloft).
1.3

Volatiles (%)

By volume: Not available.

**Evaporation rate
(butyl acetate = 1):** Not available.

Boiling point (°C): (Corrosive HCL gas begins to evolve at far lower temperatures).
108°C

Freezing point (°C): –35°C

pH: Very strong, very aggressive acid.
< 1

Specific gravity @ 20 °C: 1.16

Solubility in water (%): Complete.

Coefficient of water\oil dist.: Not available.

VOC: Not available.

Section 10 : STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.

Conditions of instability: Contact with incompatible substances.

Hazardous polymerization: Rapidly polymerises some aldehydes and epoxies.

Incompatible substances: Oxidizing agents.
Reducing agents.
Cyanides.
Most common metals.
Alkalies.
Phosphides.
Sulphide.

Hazardous decomposition products: See hazardous combustion products.

Section 11 : TOXICOLOGICAL INFORMATION

LD50 of product, species & route: 900 mg/kg rabbit oral.

LC50 of product, species & route: 1100 ppm mouse inhalation.
3100 ppm rat inhalation.

Section 12 : ECOLOGICAL INFORMATION

Environmental toxicity: No data at this time.

Environmental fate: No data at this time.

Section 13 : DISPOSAL CONSIDERATIONS

Waste disposal: In accordance with municipal, provincial and federal regulations.

Section 14 : TRANSPORT INFORMATION

TDG classification: HYDROCHLORIC ACID SOLUTION
UN1789
Class 8
PG II.



Special shipping information: See transportation information.

Section 15 : REGULATORY INFORMATION

WHMIS classification:

E, D1A.



DSL status: The substance(s) listed in section 2 appear on the Domestic Substances List.

Section 16 : OTHER INFORMATION

Supplier MSDS date: 2008/06/19

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