

MATERIAL SAFETY DATA SHEET

Section I: IDENTIFICATION

Product Name: **Hydrochloric Acid, 10 to 20%**
Date Prepared: 04/16/09
Item Number(s): 400501, 400641
Emergency Phone, Infotrac: 800-535-5053

Section II: COMPOSITION

<i>Hazardous Component(s):</i>	<i>CAS Number</i>	<i>OHSA PEL, ACGIH TLV/STEL(PPM)</i>		<u>NFPA</u>
Hydrochloric Acid 10 to 20% (Corrosive Liquid)	7647-01-0	5	5/50	Health 3 Flammability 0 Reactivity 0

Section III: PHYSICAL DATA

Boiling Point: ~ 212°F *Specific Gravity (H₂O = 1):* ≥1
Vapor Pressure mm Hg/20 °C: 50-60 *Percent Volatile by Vol:* NA
Vapor Density (Air 1:1): NE *Evaporation Rate (ether = 1):* NA
Solubility in H₂O: Complete *Appearance & Odor:* Clear liquid, chlorine odor

Section IV: FIRE/EXPLOSION HAZARD

Flash Point: Non-Flammable *Flammable Limits:* LEL: NA UEL: NA
Extinguishing Media: Water spray, dry chemical, CO₂ and foam
Special Fire Fighting Procedures: Wear protective clothing with NIOSH approved breathing apparatus. Products of combustion may be harmful in a fire situation. Do not use direct water stream.
Unusual Fire & Explosion Hazards: Hydrogen and chloride gas

Section V: REACTIVITY

Stability: Stable *Material to Avoid:* Strong bases, slightly corrosive to metals
Hazardous Decomposition or Byproducts: Oxides of chlorine
Hazardous Polymerization: Does not occur *Conditions to Avoid:* Strong bases

Section VI: HEALTH HAZARDS

Routes of Entry: Inhalation, Skin and Ingestion *Target Organs:* Respiratory system
Acute/Chronic: Solution as offered will not cause a high level of health risk, however, it will burn eyes and result in skin irritation. Chlorine vapors are relatively low.
Carcinogenicity: Not classified as a human carcinogen.
Signs/Symptoms of Exposure: Skin, eyes and possible respiratory irritation.

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Section VI: HEALTH HAZARDS

Emergency First Aid:

Skin: Remove contaminated clothing. Wash affected area with soap and water.

Eyes: Thoroughly flush eyes with water. Contact a physician if irritation persist.

Ingestion: Rinse mouth with water, provided person is conscious and contact a physician.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration and contact physician.

Section VII: SAFE HANDLING

Chemical Release or Spill: Wear full protective clothing especially NIOSH approved respirator. Isolate the spill area with sand, or other absorbent material. Neutralize with sodium carbonate. Place all contaminated material in a closed container for proper disposal.

Waste Disposal Method: All liquid and or contaminated material should be disposed of in DOT approved waste containers. Comply with all Federal, State and Local regulations for disposal.

Precautions for Handling and Storing: Store in acid safety cabinet. Avoid excessive heat.

Section VIII: CONTROL MEASURES

Respiratory Protection: NIOSH approved respirator required.

Ventilation: Exhaust hood system for corrosives

Protective Gloves: Chemical resistant *Eye Protection:* Safety glasses

Other Protective Clothing or Equipment: Normal laboratory apparel suggested by Good Laboratory Practices

Work/Hygienic Practices: Wash thoroughly with soap and water after handling.

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. HealthLink shall not be held liable for any damage resulting from handling or contact with this product.
