



Material Safety Data Sheet (MSDS-HCL)

PRODUCT IDENTIFICATION	
Product Name	Hydrochloric Acid Solution 20 Deg. Be - 31.5% 22 Deg. Be - 35.2%
Trade Names and Synonyms	Hydrogen Chloride (Aqueous) Muriatic Acid
Manufacturer/Distributor	Trans Chem, Inc. 1415 Mengel Road Baton Rouge, Louisiana 70807 (504) 355-9977 Various others
Transportation Emergency	800-255-3924 (24 hrs -- CHEM • TEL)

HAZARDOUS COMPONENTS			
Material or Component	CAS No.	TLV	PEL
Hydrochloric Acid	7647-01-0	7mg/m ³	5PPM
N/A = Not assigned NE = Not established			

PHYSICAL DATA	
Boiling Point	127° F
Vapor Pressure	24mm Hg - 20 Deg. Be 100mm Hg - 22 Deg. Be
Solubility in Water	Complete
Specific Gravity	1.16 @ 15.5° C 20 Deg. Be - 1.1789 @ 15.5° C 22 Deg. Be
Melting Point	N/A
Vapor Density	Similar to Water
Evaporation Rate	Not Applicable
Appearance and Odor	Clear Colorless to Yellowish Fuming Liquid, Pungent and Irritating

HAZARDOUS REACTIVITY
Stable under ordinary conditions of use and storage. Does not polymerize. Incompatible with aluminum and aluminum alloys, carbon steel, copper and copper alloys, and nylon. Hydrogen gas will be formed if acid contacts metal.

FIRE AND EXPLOSION DATA	
Flashpoint	Not Flammable
Extinguishing Media	Use any means suitable for extinguishing surrounding fire.
Decomposition Products	Contact with most metals may produce Hydrogen gas to potentially explosive limits.
Unusual Explosion	Containers may explode when heated. Consult the 2000 Emergency Response Guidebook, Guide 157 for further details.

HEALTH HAZARDS / FIRST AID	
Inhalation	Inhalation causes severe irritation of upper respiratory tract. FA: Remove person to fresh air. If not breathing, give artificial respiration. Call physician.
Ingestion	CORROSIVE ! Ingestion of Hydrochloric Acid can cause burns of the mouth, throat, esophagus and gastrointestinal tract. FA: DO NOT INDUCE VOMITING. Give large quantities of water or milk of magnesia. Never give anything by mouth to an unconscious person. Get immediate medical attention.
Skin Contact	CORROSIVE ! Can cause redness, pain and skin burns. Can cause some tissue destruction. FA: Immediately flush with water.
Eye Contact	CORROSIVE ! FA: Continuously flush eyes with large amounts of water for at least 20 minutes. If irritation continues, seek medical attention.

SPILL OR LEAK PROCEDURES	
Spill/leak	In the event of a spill or leak, keep upwind. Ventilate enclosed areas until spill or leak is contained, neutralized and prepared for removal.
Waste disposal	Disposal of waste material or residue may be subject to federal, state, or local regulation. Before transporting waste material see 49 CFR 172.

SPECIAL PROTECTION INFORMATION	
Ventilation	Use only in areas with adequate ventilation.
Eye Protection	Use chemical safety goggles, plus a safety shield is recommended. Contact lenses should not be worn when working with this material.
Skin Protection	Wear impervious protective clothing; i.e., Boots, Gloves, Lab Coat, Apron or Coveralls to prevent skin contact.
Other	If working in an area of potential exposure, use an NIOSH approved respirator when material is fuming and exceeds the TLV.

STORAGE CONDITIONS	
Store and handle only in containers suitably lined with or constructed of materials specified, by the manufacturer, for the product. Protect against physical damage. Keep separated from incompatible materials.	

REGULATORY INFORMATION	
Proper shipping name	Hydrochloric acid
Hazard class	8
UN Number	UN1789
DOT Label & Placard	Corrosive
NFPA / HMIS Ratings	Health - 3; Flammability - 0; Reactivity - 0
SARA Title III	Reporting Sections 302, 311 & 313

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