Safety Data Sheet

Hydrochloric Acid, Concentrated

Issue Date: 12/30/2015 V1.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Hydrochloric Acid, Concentrated, ACS
Product code: 33780-16

Supplier:
StatLab Medical Products
2090 Commerce Drive
McKinney, TX 75069
800-442-3573
972-436-1369 Fax
statlab.com

Synonym: None
Material uses: Laboratory Reagent.
In case of emergency: 800-424-9300 CHEMTREC (USA)
703-527-3887 (International)
24 Hours/Day: 7 Days/Week

2. HAZARDS IDENTIFICATION

GHS Classification

GHS Label Elements, Pictogram



Signal Word **Danger!**

Hazard Statement(s):

H302; Harmful if swallowed (Cat 4)
H314; Causes severe skin burns and eye damage (Cat1)
H315; Causes skin irritation (Cat 2)
H317; May cause an allergic skin reaction (Cat1)
H334; Respiratory sensitization (Cat1)
H373; Causes damage to organs (Cat 2)

Potential Acute Health Effects:

Very hazardous in case of contact with eye, skin, ingestion and inhalation. Liquid or spray mist may produce tissue damage especially mucous membranes of eyes, mouth and respiratory tract. Will burn eyes and skin on contact. Respiratory track characterized by coughing, choking and shortness of breath. Inflammation of eyes results in redness, watering and itching. Skin contact results in scaling, redness or blistering.

Potential Chronic Health Effects:

Carcinogenic Effects, NA; Mutagenic Effects, NA; Teratogenic, Effects, NA; Developmental Toxicity, NA. May be toxic to kidneys, liver, mucous membranes, respiratory tract, skin and teeth.

Precautionary Statement(s):

P302: If on skin: Rinse with water for several minutes.
P305: If in: Remove contact lenses, if present and rinse.
P260: Do not breathefume/gas.

NFPA Rating
Health hazard: 3
Fire: 0
Reactivity Hazard: 1

HMIS Classification
Health hazard: 3
Flammability: 0
Physical hazards: 1

Target Organs
Respiratory Tract

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	% by volume
Hydrochloric Acid	7647-01-0	20 - 38
Water	7732-21-5	Balance

4. FIRST AID MEASURES

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with water for 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact: Flush skin with water for 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion: Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flammability of the product: Non-**F**lammable

Extinguishing media: Use suitable media for surrounding materials. If water use fog spray, avoid direct stream.

Special exposure hazards: Avoid contact with metal, hydrogen chloride gas can react with aluminum, tin, lead, zinc

Decomposition products: Decomposition products: hydrogen gas, hydrogen chloride gas

Special protective equipment for fire-fighters: Use self-contained breathing apparatus with water spray.

Explosion hazards: hydrogen gas can form in fire situation which is flammable.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep unnecessary and unprotected personnel from entering area. Avoid breathing vapors. Provide adequate ventilation. Do not touch or walk through spilled material. Beware of vapors accumulating to form explosive hydrogen gas mixtures. Full personal safety equipment (suit gloves, respirator, face shield) required.

Environmental precautions: Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Contain spill area.

Spill: Corrosive liquid! Ventilate area. Prevent runoff. Contain and collect spillage with absorbent material e.g. sand, earth, vermiculite etc and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled

product. Dilute with water and mop-up or absorb with an inert dry material and place in an appropriate waste disposal container. Avoid contact with strong oxidizers.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapors or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store in ventilated areas.

Storage: Store in a well-ventilated, cool area for corrosive liquids. Keep container tightly closed and sealed until ready for use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

ACGIH TLV: TWA, 5 ppm, STEL1ppm
OSHA PEL: TWA: 5 ppm, STEL1ppm
NIOSH REL: TWA: 5 ppm ,STEL1ppm

Carcinogencity: NA

Engineering measures: Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne concentrations below any recommended threshold limits. Full safety shower should be in close proximity to working area.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating and using the lavatory. Wash contaminated clothing before reusing.

Personal protection
Respiratory: If used in poorly ventilated areas, use a properly fitted, air-purifying or air-fed respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels.
Hands: Chemical-resistant neoprene gloves
Eyes: Safety eyewear; splash goggles, face shield
Skin: Lab coats for personal protective equipment and should be approved by a specialist before handling this product. Depending on volume/conditions a full acid suit may be necessary.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid.	**Color:**	Clear, slight yellow tint
Flash Point:	NA	**Odor:**	Pungent, strong, chlorine
pH:	~1	**Boiling/condensation point:**	NA
Melting/freezing point:	NA	**Relative density:**	1.19
Vapor pressure:	160mm Hg@20°C	**Vapor density: Air=1**	1.267
Odor threshold:	NA	**Evaporation rate: BuAc=1**	2.0
VOC:	NA		
Solubility:	Soluble in the following materials: water		

10. STABILITY AND REACTIVITY

Chemical stability: The product is stable under normal conditions.
Possibility of hazardous reactions: Very Corrosive
Under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid: Reaction with water is exothermic
Materials to avoid: Reactive or incompatible with: oxidizing materials, metals and alkaline materials
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not occur. Explosive hydrogen chloride/gas may form if decomposition occurs.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50-Rabbit 900mg/kg

Inhalation LC50, Mouse 1hr - 1108ppm; Rat 1hr, 3124ppm

Other information on acute toxicity
no data available
Skin corrosion/irritation
Corrosive through skin absorption
Serious eye damage/eye irritation
Eyes: very corrosive
Respiratory or skin sensitization
Dryness, reddening, blistering
Germ cell mutagenicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
Liver, respiratory/gastro tract, eyes and skin
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
Liver, respiratory/gastro tract, eyes, skin and general overall organs
Aspiration hazard
Will burn mouth, throat and respiratory tract
Potential health effects
Inhalation May be toxic if inhaled. Causes respiratory tract inflammation/burns.
Ingestion May be toxic if swallowed and causes burns/tissue destruction.
Skin Toxic if absorbed through skin. Causes skin irritation/blisters.
Eyes Will burn eyes on contact.
Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity
LC50, fish 282mg/L 96 hr
Persistence and degradability
Expected to be biodegradable
Bioaccumulative potential
no data available
Mobility in soil
Product absorbs weakly to most soil types
PBT and vPvB assessment
no data available

Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT (US) UN 1789, Hydrochloric acid, 8, II

IMDG UN 2789, UN 1789, Hydrochloric acid, 8, II

IATA UN 2789, UN 1789, Hydrochloric acid, 8, II

15. REGULATORY INFORMATION

TSCA 8 (b): Listed on inventory
SARA 302/311/312/313/: Extremely hazardous material; RQ5000lbs, TPQ500lbs gas

OSHA Hazardous by definition (29CFR 1910.1200)

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances

WHMIS (Canada): Class D-2A Material causing other toxic effects; Class E: Corrosive liquid

DEA List I Chemicals
Precursor Chemicals): Not listed
DEA List II Chemicals
Essential Chemicals):

RTK: Hydrochloric Acid Concentrated, CAS 7647-01-0, MA, MN, NJ, PA

California Prop 65 Components: No components listed for causing cancer, birth defects or any reproductive harm.

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.)



Notice to reader
The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Statlab Medical Products shall not be liable for any damage resulting from handling of contact with this product.