

## Safety Data Sheet Material Identity: HYDROCHLORIC ACID 20 Be<sup>o</sup> - 22 Be<sup>o</sup>

Corrosive to metals Category 1

#### SECTION 1 · PRODUCT IDENTIFICATION

Manufacturer:

Chemicals Incorporated 270 Osborne Drive Fairfield, Ohio 45014 **Emergency Phone CHEMTREC:** (800) 424-9300

**General Information:** (937) 898-5566 **FAX Information:** (937) 898-7602

#### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification:** 

[ Health ] [ Environmental ] [ Physical ]

Skin corrosion Category 1B Serious eye damage Category 1

Specific target organ toxicity - single exposure (Category 3), Respiratory system

GHS Label elements, including precautionary statements

**Pictograms** 



Signal Word: Danger

#### **Hazard statement(s)**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

## Precautionary statement(s)

P234 Keep only in original container.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated

clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P406 Store in corrosive resistant stainless steel container with a resistant inner liner.

P501 Dispose of contents/ container to an approved waste disposal facility.

## SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME CAS Number %WT

Hydrogen Chloride 7647-01-0 26-37

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### **SECTION 4 · FIRST AID MEASURES**

#### FIRST AID PROCEDURES:

Eyes: Flush with large amounts of cool running water for at least 15 minutes. Seek immediate medical attention.

Skin: Wash skin with soap and water. If irritation develops and persists seek medical attention.

**Inhalation:** For excessive inhalation remove to fresh air. If breathing is difficult seek immediate medical attention. **Ingestion:** DO NOT INDUCE VOMITTING. Drink 2 glasses of water to dilute. Seek immediate medical attention.

## **SECTION 5 · FIRE FIGHTING MEASURES**

**Extinguishing Media:** Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. **Special Fire Fighting Procedures:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Not flammable, but reacts with most metals to form flammable hydrogen gas. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Fire and Explosion Hazards: Not considered a flammable or an explosion hazard.

#### SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Small Spill: Stop source of spill. Absorb on inert media and collect into suitable container.

**Large Spill:** Shut off or plug source of spill. Dike area to contain spill. Neutralize spill with an alkali material. Absorb residual on inert media and collect into suitable container. Avoid contaminating ground and surface water.

**Waste Disposal Method:** Do not flush to sewer. Follow local, state and federal regulations for disposal.

#### **SECTION 7 · STORAGE AND HANDLING**

**Handling:** Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Keep container closed and tightly sealed when not in use. Use good hygiene practices.

**Storage:** Store in a segregated and approved area. Store in a cool, dry, ventilated area, away from incompatible substances.

## **SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Engineering Controls:** Provide adequate ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. The level of protection and types of controls will vary depending upon potential exposure conditions.

**Exposure Limits:** Hydrochloric Acid 2 ppm ACGIH 5 ppm OSHA

## Personal Protective Equipment (PPE):

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

**Skin:** If skin contact is likely, wear appropriate protective gloves.

**Clothing:** Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

**Respirators:** Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

Other Equipment: Eye wash station and shower in close proximity to use is strongly recommended.



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## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Not Flammable

Autoignition Temperature: Decomposes

**Boiling Point:** 181 °F (20Be) 123 °F (22Be)

Melting Point/Freezing Point: -49 °F (20Be) -24 °F (22Be)

Vapor Density (Air-1): 1.2-1.3 Vapor Pressure: 128 mmHg

Odor/Appearance: Clear to light yellow liquid, pungent odor.

Flammability Limits: Not Applicable

Specific Gravity: 1.14-1.18

Volatile %: 100

pH: < 1

Evaporation Rate (BuAc=1): 1 Solubility in Water: Soluble

### **SECTION 10 - STABILITY AND REACTIVITY**

Stability: Stable.

Conditions to Avoid: Incompatibles.

**Incompatibility:** Strong oxidizers, alkalis, and contact with galvanized steel.

Hazardous Decomposition Products: Oxides of carbon, phosphorus and various hydrocarbons.

Hazardous Polymerization: Will not occur.

#### **SECTION 11 · TOXILOGICAL INFORMATION**

## Signs and Symptoms of Overexposure:

Eve: May cause irreversible eve injury. Vapor or mist may cause irritation and severe burns. Contact with liquid is corrosive to the eyes and causes severe burns.

Skin: Contact with liquid is corrosive and causes severe burns and ulceration. The severity of injury depends on the concentration of the solution and the duration of exposure.

Ingestion: Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. May cause corrosion and permanent tissue destruction of the esophagus and digestive tract.

**Inhalation:** May be fatal if inhaled. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract. Causes corrosive action on the mucous membranes.

Acute oral toxicity:

Hvdrochloric Acid: LD50 rat: 700 mg/kg

Acute inhalation toxicity:

Hydrochloric Acid: LC50 rat: 3124 ppm

Acute dermal toxicity:

Hydrochloric Acid: LD50 Rabbit: >5010 mg/kg

Serious eye damage/eye irritation Eyes - rabbit: Corrosive to eyes

#### **SECTION 12 · ECOLOGICAL INFORMATION**

Aquatic Toxicity: Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid) Environmental: Will exhibit extensive evaporation from soil surfaces. Upon transport through the soil, hydrochloric acid will dissolve some of the soil materials (especially those with carbonate bases) and the acid will neutralize to some degree.

#### **SECTION 13 · DISPOSAL CONSIDERATIONS**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.



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#### **SECTION 14 · TRANSPORTATION**

## U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

**Proper Shipping Name:** Hydrochloric Acid Solution

Hazard Class: 8
UN/NA: 1789
Packaging Group: 2
ERG Number: 154

## **SECTION 15 · REGULATORY INFORMATION**

#### US FEDERAL REGULATIONS

## Comprehensive Environmental Response and Liability Act (CERCLA)

This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material is 13,500 pounds. If appropriate, immediately report to the National Response Center (800/424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

## SARA Section 311/312 (40 CFR 370) Hazard Categories:

Acute Health Hazard

**SARA Section 313 (40 CFR 372) Hazard Categories:** This product contains the following toxic chemical subject to reporting requirements: Hydrochloric Acid

Clean Water Act: Hydrochloric Acid in this product is listed as Hazardous Substances under the CWA

Clean Air Act: Hydrochloric Acid in this product are listed is Hazardous Substances under the CAA.

**California Prop 65:** This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

### **SECTION 16 · OTHER INFORMATION**

SDS Creation Date: May 2015

**National Fire Protection Association (NFPA) Ratings:** This information is intended solely for the use of individuals trained in the NFPA system.

Health: 3

Flammability: 0 Reactivity: 0

The information contained on this Safety Data Sheet is considered accurate as of the date of publication. It is not necessarily all inclusive or fully adequate in every circumstance. The suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements. No warranty, express or implied, of merchantability, fitness, accuracy of data, or the results to be obtained from the use thereof is made. The vendor assumes no responsibility for injury or damages resulting from the inappropriate use of this product.