



Better Chemistry.

4011002

MURIATIC ACID 20 DEGREE

In the event of a fire, wear full protective clothing and NIOSH approved self contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Structural firefighter's protective clothing is ineffective for fires involving this material Stay away from ends of tanks. Cool tanks with water spray until well after fire is out.

Prevent spilled product from drains, sewers, waterways and soil.

Neutralize spill with soda ash or lime under good ventilation. For an interior (inside a closed space) spill be aware that the use of Soda Ash, Lime will evolve heat and carbon dioxide thus the need for ventilation.

If trained in accordance 29 CFR 1910.120, leaks should be stopped. Spills should be contained and cleaned immediately. Persons performing clean up work should wear adequate personal protective equipment and clothing. Spills and releases should be reported, if required, to the appropriate local, state and federal regulatory agencies.

Use in well ventilated area.

Avoid breathing dust, fumes, gas, mist, vapors and sprays.

Wear rubber protective gloves, chemical protective clothing, eye protective goggles and face shield for face protection.

Keep only in original container .

Wash hands thoroughly after handling.

Do not get in eyes, or on skin, or on clothing.

Keep container tightly closed.

Store locked up and away from incompatible chemicals.

Store in a well ventilated place. Keep cool .

Store in corrosive resistant container.

Hydrochloric Acid	ACGIH	2 pm	-

Use local exhaust to keep personal exposures below the OSHA Permissible Exposure Limit (s) (PEL) or the ACGIH threshold Limit Values (TLV)Time Weight Average (TWA).

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI 788.2 or applicable federal requirements must be followed whenever work place conditions warrant respirator use. NIOSH's Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Acid resistant rubber.

Wear chemical safety goggles with face shield.

Wear rubber gloves, goggles and chemical protective clothing.

Colorless to light yellow liquid

Pungent, strong

N/A

<1.5 Acidic, in solution

approx -45 °C (-49 °F)

81.11-85 °C (178 -185 °F)

N/A

N/A

N/A

N/A

1.13-1.19

Complete in water

N/A

N/A

N/A

N/A

Stable

Extremely reactive. Avoid contact with metal surfaces and oxidizing agents.

Chemically stable when properly contained and handled. It is a strong mineral acid and reacts with many metals and metal oxides and hydroxides to form equivalent metal chloride. It reacts with zeolites and other silicious compounds to form Hydrosilicic Acid; it reacts with carbonates to form Carbon Dioxide and water. It is oxidized by Oxygen or electrolysis to form Chlorine, a lethal poisonous gas. It reacts with alkaline compounds to form neutral salt. It is a hydrolyzing agent for carbohydrates, esters and other compounds. Its reaction with most metals will produce Hydrogen, an explosive gas. Violent reactions will result with acetic anhydride, 2-aminoethanol, ammonia hydroxide, calcium phosphide, chlorosulfonic acid, ethylene diamine, ethylene imine, oleum, perchloric acid, beta propiolactone, propylene oxide, sodium hydroxide, uranium phosphide and vinyl acetate. This listing is not all inclusive.

Extreme heat may cause the product to decompose, producing toxic fumes which may include chlorine compounds.

Hydrochloric Acid-LD50:700 mg/kg (31.5%) rat

Corrosive! Inhalation on vapors can cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract, and in severe cases, pulmonary edema, circulatory failure, and death.

Hydrochloric Acid-LD50:>5010 mg/kg (31%) Rabbit

Hydrogen Chloride, both as a gas and in a solution such as Hydrochloric Acid, is a corrosive substance and can cause painful burns on contact with any part of the body or if taken internally. The mucous membranes of the eyes and upper respiratory tract are especially susceptible to the irritating effects of high atmospheric concentrations of Hydrogen Chloride. The gas or vapor is so penetrating and pungent that when high concentrations do occur, those exposed should immediately leave the contaminated area.

Long term exposure to concentrated vapors may cause erosion of the teeth. Long term exposure seldom due to corrosive properties of the acid.

Hydrochloric Acid-Inhalation-LC50: 1.68mg/L, 1 h (rat) LC50: 4.72 mg/L, 1 h (rat)

Not listed by IARC, NTP, OSHA, ACGIH  
Eyes, Skin, Inhalation, Ingestion

Not Available

No data available

No data available

Pronounced solubility and mobility

***Dispose of in accordance with local, state and federal regulations.***

1789

HYDROCHLORIC ACID, SOLUTION,

8

rq 5000 LBS-Hydrochloric Acid

SARA 302 - Extremely Hazardous Substances; Hydrochloric Acid

\* THIS SUBSTANCE IS A CHEMICAL SUBJECT TO SARA TITLE III, SECTION 313 REPORTING REQUIREMENTS.

No Proposition 65 listed components in this formula

All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements .

No or are contained in this product.

The information is based on our knowledge to date but does not constitute an assurance of product properties and does not imply a legal contractual relationship.

9/18/14