



Safety Data Sheet

Hydrochloric Acid, 2N

1. Identification

Product Name: Hydrochloric Acid, 2N**Item #:** RW1480**Web SDS:****Synonyms:** N/A**Recommended Use:** N/A**Manufacturer:**BBC Biochemical
409 Eleanor Lane,
Mount Vernon, WA 98273
1-800-635-4477**Restrictions on Use:** N/A**In Case of Emergency:**Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887

2. Hazards Identification

OSHA Hazard Classification(s):

Acute Toxicity - Inhalation - Category 4

Skin Corrosion - Category 1B

Eye Damage - Category 1

Signal Word: Danger**Hazard Statement(s):** Harmful if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage.**Pictogram(s):****Precautionary Statement(s):** Prevention: Avoid breathing dust, vapors. Use only outdoors or in a well-ventilated area. Do not breathe dusts or mists. Wash body thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection, face protection.**Response:** If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off all contaminated clothing and wash it before reuse. Immediately call a doctor. Specific treatment (see first aid section on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing**Storage:** Store locked up.**Disposal:** Dispose of contents/container in accordance with local regulations.**Descriptions of Hazards not otherwise classified:** N/A**Percent of mixture with unknown acute toxicity:** N/A

3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Hydrochloric Acid	Muriatic Acid	7647-01-0	2N
Water		7732-18-5	Balance

4. First Aid Measures

Eye Contact: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.**Skin Contact:** If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.**Inhalation:** Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.**Ingestion:** Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.



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Symptoms: Irritation eyes, nose, throat; headache, dizziness

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell.

5. Fire- Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water.

Fire Hazards (Chemical): Not flammable.

Special Protective Equipment: Fire fighters should use self-contained breathing apparatus and protective clothing.

Precautions for Firefighters: Carbon monoxide and unidentified organic compounds may be formed during combustion.

6. Accidental Release Measures

Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

Protective Equipment: See section 8

Environmental Precautions: Prevent release to the environment by using barriers.

Containment and Clean-Up Procedures: Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

7. Handling and Storage

Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store away from direct sunlight. Do not store in a metal container.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Hydrochloric Acid	7647-01-0	5 ppm (7 mg/m3) Ceiling

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Hydrochloric Acid	7647-01-0	2 ppm (3 mg/m3) Ceiling	

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section

Appearance: Colorless, Liquid

Molecular Weight: N/A

Molecular Formula: N/A

pH: Less than 2

Boiling Point and Boiling Range: N/A

Melting Point/Freezing Point: N/A

Flash Point: N/A

Specific Gravity/Relative Density: N/A

Odor: N/A

Odor Threshold: N/A

Color: Colorless

Flammability (solid/gas): N/A



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Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: Miscible in water
Decomposition Temperature: N/A

10. Stability and Reactivity

Reactivity:
Chemical Stability: Stable
Conditions of Stability/Instability: N/A
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: N/A
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information

Likely Routes of Exposure

Eyes: Corrosive to eyes. May cause irritation, redness, pain and/or permanent corneal damage.
Skin: Corrosive to skin. May cause irritation, redness, pain and/or permanent scarring.
Inhalation: Toxic by inhalation. Coughin, shortness of breath, dizziness, headache. May irritate asthma conditions. May cause lung damage.
Ingestion: Nausea. Corrosive to tissue. May cause corrosive burns to mouth, throat, stomach and gastrointestinal tract.

Signs or Symptoms of Exposure: Nausea.

Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.

Acute Toxicity (Numerical Measures): Hydrochloric Acid: LD50(oral, rat)=900 mg/kg; LC50(inhalation, mouse)=1108 ppm/1H; LC50(inhalation, mouse)=3940 mg/m3/30M

Carcinogenicity (NTP, IARC, OSHA): Not listed as a carcinogen.

12. Ecological Information

Ecotoxicity: Ecotoxicity: CAS 7647-01-0 Hydrochloric Acid Fish: LC50 (96 Hr) Mosquito Fish: 282 mg/L LC100(24Hr) Trout: 10 mg/L Invertebrates: LC50(48Hr) Starfish: 100-330 mg/L LC50 (48Hr) Shrimp: 100-330 mg/L

Persistence and degradability: N/A

Bioaccumulation Potential (octanol-water partition coefficient, BCF): N/A

Mobility in the soil: N/A

Adverse Environmental Effects: Expected to have adverse effects on environment.

13. Disposal Considerations

Recommended Disposal Containers: Check with your local waste authorities*

Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*



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Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*

Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*

Waste Stream: Consult your local or regional authorities.*

14. Transport Information

UN Number: UN1789

UN Proper Shipping Name: Hydrochloric Acid Solution

Transport Hazard Class(es): 8

Packing Group Number: III

Environmental Hazards (IMDG code):

Marine Pollutant: No

Transport in Bulk (IBC Code): N/A

Special Transport Precautions: N/A

15. Regulatory Information

OSHA:

DOT:

EPA:

CPSC:



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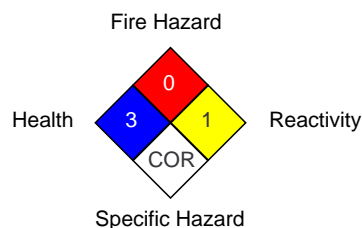
16. Other Information

Revision Date: 11/03/2014

NFPA

Health	3
Fire Hazard	0
Reactivity	1
Specific Hazard	COR

National Fire Protection Association (USA) NFPA



HMIS

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	

Hazardous Material Information System HMIS

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	

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