



ODYSSEY MANUFACTURING CO

SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: **Muriatic Acid, Hydrochloric Acid 22 Degree Baume**
 Chemical Name/Synonyms: Muriatic Acid, Hydrochloric Acid, Hydrogen Chloride
 Manufacturer: Odyssey Manufacturing Co 1484 Massaro Blvd Tampa FL 33619
 Telephone: (813) 635-0339, Fax (813)-630-2589, (800) ODYSSEY
 24 Hr. Emergency Response#: (813)-635-0339, Chem-Tel (800)-255-3924

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals (Category 1)

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

Pictogram

Signal word: **Danger**



Hazard statement(s)

May be corrosive to metals.

Causes skin burns and eye damage. May cause respiratory irritation.

Precautionary statement(s)

Keep only in original container.

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

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

Specific treatment (see supplemental first aid instructions on this label).

Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Store in a well ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant stainless steel container with a resistant inner liner. Dispose of contents/ container to an approved waste disposal plant.

SECTION 3 COMPOSITION/INGREDIENTS

<u>Ingredient (s):</u>	<u>Percent</u>	<u>CAS NO.</u>
Hydrogen Chloride (HCL)	35.2% (22 ^o Baume')	7647-01-0

Water

Balance

7732-18-5

Toxic fumes can be generated by contact with Alkalis, oxidants and many metals which cause spontaneous temperature rise which may result in severe burns upon contact.

SECTION 4 FIRST AID PROCEDURES

Emergency and First Aid Procedures:

Eye Contact:	Immediately flush eyes with water for at least 15 minutes, including under eyelids. Get medical attention.
Skin Contact:	Remove contaminated clothing. Flush affected area with large amounts of water preferably using a safety shower. Get medical attention.
Inhalation:	Remove to fresh air, keep in upright position, provide oxygen if breathing is difficult. Give artificial respiration if not breathing, Get medical attention.
Ingestion:	Rinse mouth with water. Do not induce vomiting. Drink large quantities of water or milk of magnesia or limewater. Do not give anything by mouth to an unconscious person. Get medical attention.

Additional Information: Concentrations above 1300 ppm are believed to be immediately dangerous to life and health.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point:	Non- flammable
Flammable Limits:	Non-flammable
Extinguishing Media:	Use spray, fog, and foam, dry chemical or CO2 agents suitable for surrounding fire.
Special Fire Fighting Procedures:	Wear self-contained breathing apparatus and full protective clothing. Avoid inhalation of fumes and body contact.
Unusual fire & Explosion Hazards:	Flammable Hydrogen gas can be generated by reaction with many metals.
Neutralization Information:	This material can be neutralized with an alkali such as soda ash or sodium bicarbonate.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is Released or Spilled:

Contain spills or leaks in plastic containers, dikes, ponds, or retention areas where spillage can be recovered or neutralized with soda ash or an alkaline solution. Do not allow material to enter sewers, streams, ponds or storm conduits. Consider recovery if the proper equipment is available. Personnel involved in the cleaning must be equipped with NIOSH approved respirator protection, rubber boots, gloves, and clothing to avoid body contact.

Additional Information: Reportable quantity = 5000 lbs. (1,445 gallons of 35.2% HCl)

Do not absorb spills with flammable materials such as sawdust or combustible absorbents. Contact your supplier for assistance. Plan in advance for such an incident and have necessary equipment available.

SECTION 7 HANDLING AND STORAGE

Handling and storing:	Store in compatible equipment (acid proof). Provide ventilation. Store away from alkaline materials, oxidizing agents and base metals. Store in diked areas that meet Federal, State, and local regulations. If splashed with this material, remove contaminated clothing and thoroughly wash with water. Drench contaminated material with plenty of water.
Other Precautions:	Keep metals away from storage areas as contact may cause hydrogen generation.
Additional Information:	Only trained personnel should handle this material and someone should be in attendance throughout any loading, unloading or transfer operation.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respirator Protection: Use NIOSH approved respirator protection suitable for acid gases in confined spaces.
 Ventilation: Local exhaust ventilation - personnel should not be exposed to irritating effects of the fumes. Provide exhaust ventilation to meet TLV requirement. Due to the low freeze point this material is normally stored outside of buildings.

Protective Gloves: Rubber Latex Plastic.
 Eye/Face Protection: Chemical splash proof goggles and face shields.
 Other Protective Equipment: Rubber boots and clothing to avoid body contact such as rubber apron or rain suit. Eye wash and safety showers should be available in handling areas.
 Additional Information: Avoid body contact and inhalation of fumes.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Baume'	22.0 ⁰	Weight Percent HCl:	35.2%
Boiling Point °F:	185	Freezing Point °F:	-55.0
Vapor Pressure(mm Hg) @ 20°C:	20	Vapor Density (Air = 1):	1.2
Specific Gravity 60/60°F:	1.1789	Percent Volatile By Volume (%):	100
Solubility In Water:	Complete	Evaporation Rate:	< 1

Appearance and Odor: Colorless to light yellow, fuming liquid pungent and suffocating odor.

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable when properly stored and handled.
 Incompatibility (Materials to Avoid): Base metals, metaloxides, alkaline materials, carbonates, amines, and hydroxides.
 Hazardous Decomposition Products: Hydrogen chloride gas, hydrogen, chlorine gas.
 Hazardous Polymerization: Will not occur
 Conditions to Avoid: Heat sources - contact with metals or alkalis- body contact.

SECTION 11 TOXICOLOGICAL INFORMATION

Permissible Exposure Limit (PEL), Threshold Limit Value (TLV): TWA - 5 ppm and 5 ppm ceiling or 7mg/CU.M. Maximum acceptable concentration 5 ppm or 7 mg/CU.M. ceiling.
 LC50 INHL (rat) =3124 ppm
 LD50 ORAL (rabbit) = 900mg/kg
 Local effects: Corrosive: inhalation, skin contact, eye and ingestion hazards.
 Carcinogen Status: None of the components present in concentration greater than or equal to 0.1% are list by IARC, NTP, OSHA, or ACGIH as a carcinogen.

SECTION 12 ECOLOGICAL INFORMATION

No information available

SECTION 13 DISPOSAL CONSIDERTIONS

Waste Disposal Methods: Disposal is contingent upon allowable salt concentrations and the pH in the effluent stream.
 Dispose of waste materials according to Federal State and Local regulations.
 Additional Information: Reportable quantity = 5000 lbs. (1,445 gallons of 35.2% HCl)

SECTION 14 TRANSPORTATION INFORMATION

DOT Proper Shipping Name: Hydrochloric Acid Solution
 DOT Identification #: UN1789
 DOT Hazard Class: Class 8 (Corrosive)

Packaging Group: PG II
 Placards Required: Corrosive, Bulk - UN 1789
 RQ: 5000 pounds
 Packaging: R-34-37, S 2-26
 DOT Emergency Guide No: 157
 Odyssey 24 hr Emergency #: 813-635-0339
 Emergency Phone: Chem-Tel 800-255-3924

SECTION 15 REGULATORY INFORMATION

CERCLA Hazardous Substance: Yes

RQ: 5000 lbs.

SARA Toxic Chemical: No

SARA Extremely Hazardous Substance: No (Hydrogen Gas only)

EPA Registration Number: N/A

NSF Maximum Use Level for Potable Water (Standard 60): N/A

TSCA (Toxic Substance Control Act), 40 DFR 710: Sources of all raw materials used in this mixture assure that all chemical ingredients present are in compliance with Section 8(b) Chemical Substance Inventory, or are otherwise in compliance to TSCA.

National Fire Rating System (NFPA):	Health (Blue) - 2	Fire (Red) - 0	Reactivity (Yellow) - 1
Hazard Material Identification System (HMIS):	Health (Blue) - 2	Fire (Red) - 0	Reactivity (Yellow) - 1

SECTION 16 OTHER INFORMATION

The data in this Safety Data Sheet relates only to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control, it should not be taken as a warranty or representation for which Odyssey Manufacturing Co assume legal responsibility. This information is provided solely for your consideration, investigation, and verification. For additional information, contact our technical service department at 800-ODYSSEY.