



Safety Data Sheet

Revision Date Jan-04-2016

Item # Multi

Safety Data Sheet 1910

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Hydrochloric Acid [HCl] (8%-37%)
UN/ID No. UN1789
Synonyms Hydrochloric Acid 5.5° - 23° Baume, Muriatic acid, Hydrogen chloride
Recommended Use pH adjustment, Chemical intermediate
Uses advised against Consumer uses: Private households (= general public = consumers).

Company Name
PVS-Nolwood Chemicals, Inc
10900 Harper Ave.
Detroit, MI 48213
(800) 284-9735

**CONTROLLED DOCUMENT
IF STAMPED IN RED**

24 Hour Emergency Phone Number CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
OSHA Regulatory Status This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Gases)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

Emergency Overview

DANGER

Hazard statements

Causes serious eye damage
Causes severe skin burns and eye damage
Harmful if inhaled
May cause respiratory irritation. May cause drowsiness or dizziness

Physical hazards

Corrosive
May be corrosive to metals
Generation/formation of fumes



Precautionary statements

Prevention

- Wear eye/face protection
- Wear protective gloves/protective clothing/eye protection/face protection
- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling

Item # Multi Hydrochloric Acid [HCl] (8%-37%)

Response

- Immediately call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- 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 SWALLOWED: Rinse mouth. DO NOT induce vomiting
- Wash contaminated clothing before reuse
- Store locked up
- Store in a well-ventilated place. Keep container tightly closed
- Dispose of contents/container to an approved waste disposal plant

Storage

Disposal

Hazards not otherwise classified (HNOC)

None known.

Other Information

Other hazards

- May be harmful if swallowed

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	EC No.	Weight-% *
Water	7732-18-5	231-791-2	68.714
Hydrogen chloride	7647-01-0	231-595-7	31.286

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

General advice

Immediate medical attention is required

Eye contact

- Immediate medical attention is required
- Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes
- Do not rub affected area

Skin Contact

- Immediate medical attention is required
- Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes

-Inhalation

- Remove to fresh air
- Call a physician or poison control center immediately
- If not breathing, give artificial respiration
- If breathing is difficult, give oxygen

Ingestion

- Call a physician or poison control center immediately
- Do NOT induce vomiting
- Rinse mouth
- Drink 4 to 8 ounces (120-240 ml) of water or milk as soon as possible after ingestion.
- Never give anything by mouth to an unconscious person

Note to physician

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

Self-protection for first aid personnel

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

5. FIRE-FIGHTING MEASURES

- | | |
|--|--|
| Suitable extinguishing media | <ul style="list-style-type: none"> • CO2 (except for Cyanides), dry chemical, dry sand, alcohol-resistant foam • Water spray, fog or alcohol-resistant foam • Move containers from fire area if you can do it without risk • Use water spray or fog; do not use straight streams |
| Unsuitable extinguishing media | <ul style="list-style-type: none"> • Dike fire control water for later disposal; do not scatter the material • Note: Most foams will react with the material and release corrosive/toxic gases |
| Specific hazards arising from the chemical | <ul style="list-style-type: none"> • The product causes burns of eyes, skin and mucous membranes • Thermal decomposition can lead to release of irritating and toxic gases and vapors • In the event of fire and/or explosion, do not breathe fumes |
| Protective equipment and precautions for firefighters | <ul style="list-style-type: none"> • Wear a self-contained breathing apparatus and chemical protective clothing |
| Flammable properties | <ul style="list-style-type: none"> • Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes • Contact with metals may evolve flammable hydrogen gas |
| Explosive properties | <ul style="list-style-type: none"> • No information available |

6. ACCIDENTAL RELEASE MEASURES

- | | |
|----------------------------------|---|
| Personal precautions | <ul style="list-style-type: none"> • Use personal protective equipment as required • Evacuate personnel to safe areas • Avoid contact with skin, eyes or clothing |
| Environmental precautions | <ul style="list-style-type: none"> • Keep people away from and upwind of spill/leak • For small spills, absorb material with clay absorbent or other compatible material. Dispose of the waste material according to local, state and governmental requirements. • For large spills, contain the material using barriers of absorbent pigs, clay absorbent or earth dams. |
| Methods for cleaning up | <ul style="list-style-type: none"> • Dike far ahead of liquid spill for later disposal • Soak up with inert absorbent material • Take up mechanically, placing in appropriate containers for disposal • Clean contaminated surface thoroughly • Prevent product from entering drains • Dam up • After cleaning, flush away traces with water |
| Other Information | <ul style="list-style-type: none"> • Do not get water inside containers or in contact with substance |

7. HANDLING AND STORAGE

- | | |
|--------------------------------|---|
| Advice on safe handling | <ul style="list-style-type: none"> • Avoid contact with skin, eyes or clothing • Use personal protective equipment as required • Ensure adequate ventilation, especially in confined areas • In case of insufficient ventilation, wear suitable respiratory equipment • Use only with adequate ventilation and in closed systems |
| Storage Conditions | <ul style="list-style-type: none"> • Keep container tightly closed in a dry and well-ventilated place • Keep out of the reach of children • Keep containers tightly closed in a dry, cool and well-ventilated place • Keep in properly labeled containers |
| Incompatible materials | <p>Amines, Alkali, Copper, Zinc, Contact with metals may evolve flammable hydrogen gas, Incompatible with strong acids and bases, Incompatible with oxidizing agents</p> |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Item # Multi Hydrochloric Acid [HCl] (8%-37%)

Hydrogen chloride 7647-01-0	Ceiling: 2 ppm	Ceiling: 5 ppm Ceiling: 7 mg/m ³	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m ³
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Exposure Guidelines

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

- Respiratory protection** • A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.
- Eye/Face protection** • Tight sealing safety goggles
• Face protection shield
- Skin and body protection** • Wear protective gloves and protective clothing
- General Hygiene Considerations** • When using do not eat, drink or smoke
• Wash contaminated clothing before reuse
• Keep away from food, drink and animal feeding stuffs
• Contaminated work clothing should not be allowed out of the workplace
• Regular cleaning of equipment, work area and clothing is recommended
• Avoid contact with skin, eyes or clothing
• Take off all contaminated clothing and wash it before reuse
• Wear suitable gloves and eye/face protection

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance clear
Color colorless
Odor Pungent
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	<1	
Melting point/Freezing Point	-11 to -26 °C / 12 to -15 °F	
Boiling point / boiling range	103-53 °C / 217-127 °F	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit (%)	No information available	
Lower flammability limit (%):	No information available	
Vapor pressure	16-63 mm Hg	@20 °C
Vapor density	No information available	
Specific Gravity	1.04-1.19	
Water solubility	Miscible in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	1.15-1.77 cps @ 20°C	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Item # Multi Hydrochloric Acid [HCl] (8%-37%)

Softening point °C No information available
 Molecular weight 36.46
 VOC Content (%) No information available
 Density No information available
 Bulk density 8.76-9.91 Pounds per gallon (lb/gal)

10. STABILITY AND REACTIVITY

Stability • Stable under recommended storage conditions

Conditions to avoid • Exposure to air or moisture over prolonged periods

Incompatible materials Amines, Alkali, Copper, Zinc, • Contact with metals may evolve flammable hydrogen gas
 • Incompatible with strong acids and bases
 • Incompatible with oxidizing agents

Hazardous Decomposition Products • Thermal decomposition can lead to release of irritating and toxic gases and vapors

Possibility of Hazardous Reactions • Reacts with many compounds

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principle Routes of Exposure -Inhalation, Skin Contact, Eye contact

-Inhalation Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate.

Ingestion Ingestion causes burns of the upper digestive and respiratory tracts.

Skin Contact Corrosive, Causes burns.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Hydrogen chloride 7647-01-0	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h

Information on toxicological effects

Symptoms Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Chemical Name	ACGIH	IARC	NTP	OSHA
Hydrogen chloride 7647-01-0	-	Group 3	-	X

*IARC (International Agency for Research on Cancer)
 Not classifiable as a human carcinogen*

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.

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Chronic toxicity	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risk of irreversible effects.
Target Organ Effects	Eyes, Respiratory system, Skin.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document . mg/kg mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

31.286% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability No information available.
Bioaccumulation No information available

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Disposal of wastes • Dispose of in accordance with federal, state and local regulations
• Dispose of hazardous waste in a RCRA licensed facility

Contaminated packaging • Do not reuse container
US EPA Waste Number • D002

14. TRANSPORT INFORMATION

DOT

Proper shipping name HYDROCHLORIC ACID
Hazard Class 8
UN/ID No. UN1789
Packing Group II
RQ (lbs)(dry) 5000
Description UN1789, Hydrochloric acid, 8, II
Special Provisions A3, A6, B3, B15, IB2, N41, T8, TP2
Emergency Response Guide Number 157

Transport Canada

IATA

UN/ID No. UN1789
Proper shipping name HYDROCHLORIC ACID
Hazard Class 8
Packing Group II
ERG Code 8L
Special Provisions A3

IMDG

UN/ID No. UN1789
Proper shipping name HYDROCHLORIC ACID
Hazard Class 8
Packing Group II
EmS-No. F-A, S-B

15. REGULATORY INFORMATION

US Federal Regulations

Item # Multi Hydrochloric Acid [HCl] (8%-37%)

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Hydrogen chloride - 7647-01-0	1.0

U.S. - TSCA (Toxic Substances Control Act) - Section 5(a)(2) - Chemicals with Significant New Use Rules (SNURs)

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrogen chloride 7647-01-0	5000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ (lbs)(dry)
Hydrogen chloride 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

Canada

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Classification

E - Corrosive material
D1A - Very toxic materials

WHMIS



US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Hydrogen chloride 7647-01-0	X	X	X

DEA List I, List II

Chemical Name	U.S. - DEA - List I or Precursor Chemicals	U.S.- DEA - List II or Essential Chemicals

Item # Multi Hydrochloric Acid [HCl] (8%-37%)

Hydrogen chloride 7647-01-0	-	50 gallon, Export Volume 27 kg, Export Weight 0.0 kg, Domestic Sales Weight
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International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

16. OTHER INFORMATION

NFPA	Health hazards 3	Flammability 0	Instability 1	Physical and Chemical Properties - Personal protection D
HMIS	Health hazards 3	Flammability 0	Physical hazards 1	

Item #	Multi
Safety Data Sheet	1910
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Issue Date	Jan-04-2016
Version	1.01
Revision Note	*** Updated value on SDS.

Disclaimer

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