Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Catalog Numbers: HA6310-A, HA6310-B, HA6310-C, HA6310-D, HA6310-P, HA6310-Q, HA6310-G,

HA6310-T

Product Identity: Hydrochloric Acid 10%v/v

Chemical Family: Acid

Synonyms: Hydrogen chloride solution **Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291

Emergency Contact Number (24hr): InfoTrac (800) 535-5053

Issue Date: 12/28/06

Revision Date: 07/03/08, 04/20/10, 09/07/10, 10/5/10

<u>Section 2 – Hazard Identification</u>

Emergency Overview

May cause eye, skin, and respiratory tract irritation. The toxicological properties have not been fully

investigated.

Appearance: Clear, colorless liquid Odor: Odorless to slightly pungent

Target Organs: Kidney.

Potential Health Effects/ Routes of Exposure:

Eyes: May cause irritation. **Skin:** May cause irritation.

Ingestion: May cause nausea, vomiting, cramps, and diarrhea.

Inhalation: May cause irritation.

Chronic Effect / Carcinogenicity May cause adverse kidney effects (IARC, NTP, OSHA)

Aggravated Medical Conditions No information available

These chemicals are considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 - Composition, Information on Ingredients

Hydrochloric Acid, CAS# 7647-01-0, 10% v/v Water, purified, CAS# 7732-18-5, 90% v/v

Section 4 - First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.

Ingestion: DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give

oxygen.

Notes to Physician Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable Autoignition Temperature No information available. Explosion Limits Upper No data available Lower No data available

Extinguishing Media: Use means suitable to extinguishing surrounding fire.

Unsuitable Extinguishing Media: No information available

Fire & Explosion Hazards: May react with metals to release hydrogen gas.

Fire Fighting Instructions / Equipment: Use normal procedures. Poisonous gas may be produced in

fire. Use protective clothing. Use NIOSH-approved breathing equipment.

Hazardous Combustion Products: No information Available Sensitivity to mechanical impact No information available. Sensitivity to static discharge No information available.

Specific Hazards Arising from the Chemical: Thermal decomposition can lead to release of irritating

gases and vapors

NFPA Rating: (estimated) Health: 2; Flammable: 0; Reactivity: 0

Section 6 - Accidental Release Measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up Soak up with inert absorbent material. Keep in suitable and closed containers for disposal

Section 7 - Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes.

Storage: Keep Protect from freezing and physical damage.

Section 8 – Exposure Controls, Personal Protection

Hydrochloric Acid, CAS# 7647-01-0, ACGIH TLV: 7.5mg/m3, OSHA PEL: 7mg/m3

Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

Engineering Measures/ General Hygiene: Ensure ventilation is adequate. Ensure eyewash and safety showers are available.

Personal Protection Equipment: Skin Protection: Chemical resistant gloves.

Eye/Face Protection: Safety Glasses or goggles. Respiratory Protection: If exposure limits are

reached use approved respirator

Section 9 - Physical and Chemical Properties

Appearance/Physical State: Clear, colorless liquid

Odor: Odorless to slightly pungent **% Volatility:** No Information Available

Boiling Point: No Information Available **Specific Gravity:** Approx 1

Melting Point: No Information Available Vapor Pressure: No Information Available

Vapor Density: No Information Available Flash Point: Not Applicable

Evaporation Rate: > 1 **Coefficient of water/oil distribution:** Not Available

pH: <1 Odor Threshold: Not Available

Flammability: No Information Available Decomposition Temperature: No Information Available

Solubility: Soluble in water Partition Coefficient n-octanol/water: No data

available

Relative Density: No Information Available Molecular Weight: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.

Incompatible Materials: Most metals, Alkalis, cyanides, sulfides, sulfites, metal oxides, formaldehydes.

Conditions to Avoid: Excess heat.

Hazardous Decomposition Products: Fumes of hydrogen chloride and hydrogen in contact with

metals. Chloride gas from oxidizers.

Hazardous Polymerization: Does not occur

Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2

LD50 orl-rat: 700mg/kg (Hydrochloric acid) LC50 inhalation-rat: NA

Irritation: No Information Available

Toxicologically Synergistic: No Information Available

Chronic Exposure

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No information available.

Mutagenic Effects Mutagenic effects have occurred in microorganisms.

Reproductive Effects Experiments have shown reproductive toxicity effects on laboratory animals.

Developmental Effects (Immediate/Delayed) No information available.

Teratogenicity No information available.

Other Adverse Effects No information available.

Endocrine Disruptor Information No information available

Section 12 – Ecological Information

Ecotoxicity: Hydrogen chloride has slight acute and chronic toxicity to aquatic life.

Persistence and Degradability: No Information Available Mobility: No Information Available

Bioaccumulation/ Accumulation: No Information Available

Section 13 – Disposal Considerations

Waste Disposal/Waste Disposal of Packaging: Cover spill with soda ash or calcium carbonate. Mix and add water to form slurry. Decant to drain. Treat the solid residue as normal refuse. All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

Section 14 – Transport Information

DOT - UN1789, Hydrochloric Acid Solution, 8, II

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are considered hazardous by OSHA. **Canada DSL:** These chemicals are listed on Canada's DSL list.

TSCA: The components of this solution are listed on the TSCA Inventory

SARA Title III Section 313: Not Applicable

RCRA Status: Not Applicable

CERCLA Reportable Quantity: Hydrogen Chloride – 5000 lbs

WHMIS: E: Corrosive Material

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained form the products use.