

Material Safety Data Sheet
(INHIBITED HYDROCHLORIC ACID 15% ACTIVE)

J4 Fluid Services, Inc.

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HMIS HEALTH:.....3
HMIS FLAMMABILITY:0
HMIS REACTIVITY:.....2
PERSONAL PROTECTION:X

EMERGENCY NUMBER:800-255-3924

SECTION 1 – IDENTIFICATION OF CHEMICAL PRODUCT

PRODUCT NAME:..... INHIBITED HYDROCHLORIC ACID 15% ACTIVE
EFFECTIVE DATE:..... September 7, 2007
CHEMICAL FAMILY:..... Mineral Acid
FORMULA: HCL
CAS NUMBER:..... 7647-01-0

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER	PEL
Hydrochloric Acid (HCL)	15% Active	7647-01-0	OSHA 5 ppm
Inhibitor Package	< 2	Conf.	OSHA 5 ppm

The criteria for listing components in the composition section are as follows: Carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater. Non-hazardous components may be listed at 3.0% or greater if not proprietary in nature. This is not intended to be complete compositional disclosure. Refer to section 14 for applicable states right to know and other regulatory information.

SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE / ODOR: Clear to Yellowish Liquid / Sharp, Pungent Odor

SHORT TERM EXPOSURE: **GENERAL:** Hydrogen Chloride, both as a gas and in a solution as Hydrochloric Acid, is a corrosive substance and can cause severe and painful burns on contact with any part of the body or if taken internally. The mucous membranes of the eyes and the 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. **INHALATION:** Inhalation of excessive concentrations of Hydrogen Chloride vapors immediately produces severe irritation of the upper respiratory tract, resulting in coughing, burning of the throat, and a choking sensation. If inhaled deeply, edema of the lungs may occur. **EYES:** Contact with Hydrogen Chloride, either in gas or in solution, causes severe irritation and painful burns of the eyes and eyelids. The acid MUST be removed quickly with thorough irrigation with water or there may be prolonged or permanent visual impairment or total loss of sight. **SKIN:** Concentrated solutions are destructive to clothing and on contact with skin, causes severe burns unless promptly washed off. **INGESTION:** Hydrochloric Acid, when swallowed, causes severe burns of the mucous membranes of the mouth, esophagus and stomach.

OSHA REGULATED: No

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LISTED CARCINOGEN: NTP: No IARC MONOGRAPHS: No

POTENTIAL HEALTH EFFECTS

INHALATION: Corrosive

INGESTION: Corrosive

SKIN (DERMAL): Corrosive

OVER EXPOSURE EFFECTS: **Inhalation:** Respiratory tract irritant, may cause burns on acute contact. **Ingestion:** Severe irritant to mucous membranes and may cause perforation of the esophagus and stomach. Abdominal pain, nausea, vomiting, general gastro-intestinal upset can be expected. **Skin Contact:** Irritant, possibly corrosive if contact is prolonged. **Eye Contact:** Irritant, possibly corrosive to eye tissues. Tearing, redness, pain, impaired vision are symptoms. **Chronic Exposure:** Development of a defatting dermatitis or destruction of skin on prolonged contact with acids have been reported. Continued irritation may lead to increased susceptibility to respiratory illness. **Aggravation of Pre-existing Conditions:** Persons with pre-existing skin disorders or eye problems, or impaired kidney or respiratory function may be more susceptible to the effects of the substance.

SECTION 4 – FIRST AID MEASURES

FIRST AID: SKIN

CONTACT: Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately. **EYE CONTACT:** Flush eyes immediately with large amounts of water or normal saline solution, occasionally lifting upper and lower lids until no evidence of chemical remains (at least 15-20 minutes). Get medical attention immediately. **INGESTION:** Give large amounts of fresh water or milk immediately. Do not give anything by mouth if person is unconscious or otherwise unable to swallow. If vomiting occurs, keep head below hips to prevent aspiration. Treat symptomatically and supportively. Seek medical attention immediately. **INHALATION:** Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial resuscitation. Keep person warm and at rest. Treat symptomatically and supportively. Seek medical attention immediately. Qualified medical personnel should consider administering oxygen.

SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT:..... NA

EXTINGUISHING MEDIA: Water fog or spray, Foam, Dry Powder, Carbon Dioxide (CO₂).

DECOMPOSITION

PRODUCTS:..... Hydrochloric Acid (HCL) is a stable compound and forms an azeotrope that boils at 227°F at one atmosphere and contains 20.22% Hydrogen Chloride. Hydrogen Chloride gas forms at temperatures above 2732°F. When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas.

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LOWER FLAME LIMIT:..... NA

HIGHER FLAME LIMIT:..... NA

UNUSUAL FIRE AND

EXPLOSION HAZARDS:..... VAPOR MAY CONTAIN EXPLOSIVE HYDROGEN. TO PREVENT IGNITION OF VAPOR; SMOKING, FLAMES, AND SPARKS SHOULD NOT BE PERMITTED IN STORAGE AREAS. CAUSES SEVERE BURNS.

FIRE FIGHTING

EQUIPMENT:..... Fire fighters and others exposed to products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

CHEMTEL EMERGENCY

NUMBER (24 Hour): 1-800-255-3924

SPILL: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Neutralize with alkaline material (soda ash, lime), then absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

RCRA STATUS: 9,976 #

SECTION 7 – HANDLING AND STORAGE

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND PROMPT REMOVAL OF MATERIAL FROM EYES, SKIN, AND CLOTHING.

HANDLING AND STORAGE: .. Store in a cool place away from ignition sources.

PRECAUTIONARY

MEASURES: Use chemical safety goggles and full face shield, full face vapor respirator or Scott Air-Pak, impervious gloves and protective clothing. Avoid contact with skin, eyes, and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take firstaid action shown in Section 4. Do not breathe vapors.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment.

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EYE PROTECTION:..... Chemical safety goggles meeting the specifications of OSHA 29CFR 1910.133 / ANSI Standard Z87.1 should be worn whenever there is the possibility of splashing or other contact with the eyes. Wear safety glasses meeting the specifications of OSHA 29CFR 1910.133 / ANSI Standard Z87.1 where no contact with the eye is anticipated.

RESPIRATORY

PROTECTION:..... The use of a NIOSH approved full face piece cartridge respirator or Scott Air-Pak should be used by all personnel exposed to or handling Hydrochloric Acid.

Use NIOSH / MSHA approved respiratory protection equipment when airborne exposure limits are exceeded (see below). Consult the respirator manufacturer to determine appropriate type of equipment for a given application. Observe respirator use limitations specified by NIOSH / MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

PROTECTIVE GLOVES:..... Wear impervious gloves

VENTILATION: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

MECHANICAL EXHAUST: Desired in closed places

LOCAL EXHAUST: Recommended

VENTILATION NOTES: Provide natural or mechanical ventilation to control exposure levels below Airborne exposure limits (see below). The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment. Consult NFPA Standard 91 for design of exhaust systems.

THRESHOLD LIMIT VALUE: . OSHA 5 ppm

PROTECTIVE EQUIPMENT:... HMIS PERSONAL PROTECTION: X - Consult your supervisor for specific personal protection.

The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE / ODOR: Clear to Yellowish Liquid / Sharp, Pungent Odor

BOILING POINT: ~ 212°F

FREEZING POINT: -63°F

VAPOR PRESSURE:..... ND

VAPOR DENSITY (AIR=1): > 1

SPECIFIC GRAVITY: 1.01 - 1.05

pH: 1% Solution pH = 0.9

SOLUBILITY IN WATER: Complete

SECTION 10 – STABILITY AND REACTIVITY

STABILITY:..... Stable

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HAZARDOUS

POLYMERIZATION:..... Will not occur

POLYMERIZATION AVOID:... NA

INCOMPATIBILITY:..... The reaction of Hydrochloric Acid with most metals will produce Hydrogen, an explosive, flammable gas. Violent reactions result with mixed with alkaline materials. Concentrated hydrochloric acid is incompatible with many substances and highly reactive with strong bases, metals, metal oxides, hydroxides, amines, carbonates and other alkaline materials. Incompatible with materials such as cyanides, sulfides, sulfites, and formaldehyde.

CONDITIONS TO AVOID:..... Temperatures above 227°F

SECTION 11 – TOXICOLOGICAL INFORMATION

EYE EFFECTS:

The eye irritation hazard is based on data from information supplied by raw material(s) supplier(s).

SKIN EFFECTS:

The skin irritation hazard is based on data from information supplied by raw material(s) supplier(s).

ACUTE ORAL EFFECTS:

The acute oral toxicity is based on data from information supplied by raw material(s) supplier(s).

ACUTE INHALATION EFFECTS:

The acute respiratory toxicity is based on data from information supplied by raw material(s) supplier(s).

Inhalation rat LC50: 3124 ppm/1H; oral rabbit LD50: 900 mg/kg (Hydrochloric acid concentrated); investigated as a tumorigen, mutagen, reproductive effector.

SECTION 12 – ECOLOGICAL INFORMATION

Data from laboratory studies and from scientific literature is noted below if available.

Environmental Fate: When released into the soil, this material is not expected to biodegrade. When released into the soil, this material may leach into groundwater. Environmental Toxicity: This material is expected to be toxic to aquatic life.

SECTION 13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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SECTION 14- TRANSPORTATION INFORMATION

The data provided in this section is for information only. The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate regulations to properly classify your shipment for transportation.

PROPER SHIPPING NAME:..... Hydrochloric Acid Mixture, 8, UN1789, PG II. Guide #157
REPORTABLE QUANTITY:..... 9,976 #
HAZARD CLASS AND LABEL: 8, Corrosive Liquid
UN NUMBER: 1789
NA NUMBER: None
PACKAGING SIZE:..... One gallon, 5 gallon, 55 gallon

SECTION 15 - REGULATORY INFORMATION

SARA 311 CATEGORIES:

EPA ACUTE:..... Yes
EPA CHRONIC: Yes
EPA IGNITABILITY: No
EPA REACTIVITY: Yes
**EPA SUDDEN RELEASE
OF PRESSURE:** No

CERCLA RQ VALUE:..... 9,976 #
SARA TPQ: None
SARA RQ:..... 9,976 #
EPA HAZARD WASTE #: D002 - Corrosive
CLEAN AIR: NA
CLEAN WATER:..... SECTION 311
SARA SECTION 313:..... Yes - Hydrochloric Acid
NFPA HEALTH: 3
NFPA FLAMMABILITY:..... 0
NFPA REACTIVITY: 2
DEA Chemical Trafficking Act:.. No
TSCA STATUS: All ingredients in this product are on the TSCA Inventory List.

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SECTION 16 - ADDITIONAL INFORMATION

FOOT NOTES: ND - No Data Available NA - Not Applicable < = Less Than > = Greater Than

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Company Health and Risk Assessment Unit, PO Box 1519, Gretna, LA 70054-1519.

REVISION STATEMENT: Changes have been made throughout this Material Safety Data Sheet. Please read the entire document.

DISCLAIMER:

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving this MSDS will make their own determination as to its suitability for their intended purposes prior to use. Since the product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal Regulations concerning the Product. It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. **NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.**

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