

## MATERIAL SAFETY DATA SHEET

### SECTION 1            CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME OR NUMBER:    **DILUTE HYDROCHLORIC ACID**

MANUFACTURER: HITCO Carbon Composites, Inc.

ADDRESS: 1600 W. 135th Street, Gardena, CA 90249

GENERAL ASSISTANCE: (310) 527-0700

24-HOUR EMERGENCY ASSISTANCE: CHEMTREC Assist: (800) 424-9300

DATE OF PREPARATION OR LAST CHANGE: May 3, 2006

### SECTION 2            COMPOSITION/INFORMATION ON INGREDIENTS

<u>CHEMICAL/ COMMON NAME</u>	<u>C.A.S. NUMBER</u>	<u>% BY WEIGHT</u>	<u>EXPOSURE GUIDELINES</u>
Hydrochloric Acid	7647-01-0	12-20	PEL    5 ppm, 7 mg/m <sup>3</sup> , Ceiling limit TLV    5 ppm, 7 mg/m <sup>3</sup> , Ceiling limit IDLH   50 ppm
Water	7732-18-5	80-88	None Established

### SECTION 3            HEALTH HAZARD IDENTIFICATION

#### PRIMARY ROUTES OF ENTRY

**EYE:**                      Low concentrations of mists or vapors can be irritating and cause redness. Concentrated mist, vapor, or splashed liquid can cause severe irritation, burns, and possible permanent eye damage

**SKIN:**                     Contact with liquid is corrosive and may cause severe irritation, burns, redness, swelling, pain, and permanent scarring.

**INGESTION:**            Ingestion may cause severe acid burns to the mouth, throat, esophagus, and stomach. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. It may cause corrosion and permanent tissue destruction of the esophagus and digestive tract.

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**INHALATION:** Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. Inhalation of mist, vapors, or gas may cause irritation of the upper respiratory tract and discomfort. High or prolonged inhalation exposure may lead to corrosion of mucus membranes with temporary lung irritation and coughing, difficulty in breathing, shortness of breath, and/or pulmonary edema (fluid accumulation in the lungs). Fatality may occur from exposure to high concentrations.

### **CARCINOGEN**

**LISTINGS:** Hydrochloric acid and Amorphous Silica fiber fibers are not classified as carcinogens. (IARC Group – 3).

## **SECTION 4 FIRST AID MEASURES**

### EMERGENCY/FIRST AID PROCEDURES

**EYE:** Immediately flush eyes with large amounts of water for 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Immediately seek medical attention. Apply cool packs to eyes while transporting victim to medical facility.

**SKIN:** Immediately flush area with large amounts of water for 15 minutes while removing contaminated clothing. Immediately seek medical attention. Keep affected area cool.

**INGESTION:** Contact medical assistance immediately. Do not induce vomiting. Give large quantities of water only if victim is conscious. Keep the victim warm and at rest.

**INHALATION:** Move to fresh air. Contact medical assistance immediately. Administer artificial respiration if victim is not breathing.

## **SECTION 5 FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Use extinguishing agent suitable for type of surrounding fire.

### **SPECIAL FIRE FIGHTING INSTRUCTIONS:**

Keep personnel removed and upwind of fire. Use water spray to cool containers and control vapors. Runoff from fire control may cause pollution. Neutralize with sodium bicarbonate or soda ash to prevent corrosion of metals and formation of hydrogen. For potential exposure to acid or fumes, wear full protective clothing with hood and breathing air supply.

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FLASH POINT: NA

FLAMMABILITY LIMITS: NA

LOWER EXPLOSIVE LIMIT: ND

UPPER EXPLOSIVE LIMIT: ND

AUTO IGNITION TEMPERATURE: NA

### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

#### ACTION TO TAKE FOR SPILLS/LEAKS

Take immediate steps to stop and contain spill. Caution should be used regarding personnel safety and exposure to the spilled material. Small spills may be diluted with water or neutralized with an alkaline material (such as Sodium Bicarbonate) and mopped up or absorbed with noncombustible absorbent material or other absorbent known to be compatible. For large spills, dike area far ahead of spill for later cleanup and disposal.

#### NOTIFICATION INFORMATION

This material, as supplied, contains Acetic Hydrochloric Acid which is regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

The reportable quantity (RQ) of this material is  $\geq 2,780$  gal (25,000 pounds), calculated on the basis of the Hydrochloric Acid (Final RQ = 5,000 lb.) regulated constituent according to the following formula:

$$\text{CERCLA Constituent RQ} / \% \text{ in Material}$$

Under CERCLA, any release of this material to the air, water and/or land in an amount equal to or in excess of the RQ in any 24 hour period, must be reported immediately to the National Response Center (800-424-8802) (in Washington, D.C. 202-426-2675), the State Emergency Response Commission(s), and Local Emergency Planning Committee(s) likely to be affected by the release unless the release is federally permitted or the release results in exposure to persons solely within the boundaries of the facility.

There may be additional reporting requirements for the release of this material at the local, regional, or state level.

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### **SECTION 7            HANDLING AND STORAGE**

#### HANDLING AND STORAGE PROCEDURES

Handling: Avoid adding water. Slowly add acid to water to prevent spattering or boiling. Do not get in eyes, on skin, or on clothing. Avoid breathing vapors. Wear all recommended personal protective clothing when handling the material. Wash thoroughly with soap and water after handling.

Storage: Keep containers tightly closed. Store in a cool, dry well ventilated area. Keep away from heat, sparks, or flames. Protect containers from damage. Do not mix or store with cyanides, amines, sulfides, oxidizers, or formaldehydes.

### **SECTION 8            EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### ENGINEERING CONTROLS/WORK PRACTICES

##### VENTILATION:

Provide general and/or local exhaust ventilation to control airborne concentrations below the exposure guidelines specified by the Occupational Safety and Health Administration (OSHA) or other local, state, and federal regulations.

#### PERSONAL PROTECTIVE EQUIPMENT/PROTECTIVE MEASURES

##### RESPIRATORY PROTECTION:

When exposure levels could exceed 5 ppm, a NIOSH approved air-purifying respirator with acid gas cartridge(s) in combination with a high-efficiency particulate filter is recommended. When exposure levels could exceed 50 ppm, a self-contained breathing apparatus with a full facepiece is recommended.

##### PROTECTIVE CLOTHING:

Use protective clothing impervious to acid such as neoprene or polyvinyl chloride (PVC). Use precaution to ensure that all potentially affected body parts are covered by protective clothing.

##### EYE PROTECTION:

Contact lenses should not be worn. Wear close fitting chemical splash goggles at a minimum. Where there is potential for a splash hazard to the face, wear a face-shield.

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### SECTION 9            PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Light yellow liquid with pungent odor

SPECIFIC GRAVITY (water=1): 1.074

VAPOR PRESSURE: NA

VAPOR DENSITY (air=1): NA

MELTING POINT: N/A

BOILING POINT: ND

EVAPORATION RATE (water=1): ND

% VOLATILE BY VOLUME: ND

SOLUBILITY IN WATER: ND

pH: < 1

### SECTION 10           STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY:

Keep away from heat, sparks, or flames. Incompatible with most metals, hydroxides, cyanides, amines, sulfides, oxidizers, formaldehydes, alkalis, carbonates, or hypochlorites. May react violently with incompatible substances, releasing toxic and/or flammable gases. Considerable amounts of heat may be evolved.

HAZARDOUS DECOMPOSITION PRODUCTS:

Heat can cause evolution of gaseous hydrogen chloride.

HAZARDOUS POLYMERIZATION: NA

NA = Not Applicable

ND = Not Determined

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### **SECTION 11 DISPOSAL CONSIDERATION**

#### WASTE DISPOSAL METHOD

If this material as supplied becomes a waste, it meets the criteria of a hazardous waste (corrosivity. EPA hazardous waste number D002) as defined under the Resource Conservation and Recovery Act (RCRA), 40 CFR Part 261.

The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with all applicable Federal, state, and local regulations.

### **SECTION 12 TRANSPORTATION INFORMATION**

#### DOT INFORMATION

PROPER SHIPPING NAME: Hydrochloric Acid

HAZARD CLASS: 8 (corrosive)

IDENTIFICATION NUMBER: UN1789

PACKING GROUP: II

### **SECTION 13 REGULATORY INFORMATION**

All components of this product are listed on the Toxic Substances Control Act (TSCA) inventory. All components of this product are listed on the Canadian Domestic Substances List (DSL).

The Canadian Workplace Hazardous Materials Information System (WHMIS) Immediate & Serious Effects category applies to this product.

Hydrochloric Acid is a listed hazardous air pollutant under Section 112 of the Clean Air Act.

#### SARA TITLE III INFORMATION

This product is classified as an Acute Hazard and Chronic Hazard under the hazard categories of the Superfund Amendments and Reauthorization Act (SARA) Section 311/312 (40 CFR 370).

This product does not contain toxic chemicals (in excess of the applicable de minimis concentration) that are

NA = Not Applicable

ND = Not Determined

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subject to the annual toxic chemical release reporting requirements of SARA Section 313 (40 CFR 372). However, if you manufacture, process, or otherwise use hydrochloric acid aerosols, including mists, vapors, gas, fog, and other airborne forms of any particle size, in excess of regulatory thresholds, you may be subject to these reporting requirements.

### **CALIFORNIA PROPOSITION 65 INFORMATION**

This product may contain one or more chemicals in trace quantities known to the State of California to cause cancer or reproductive toxicity as listed under the Safe Drinking Water and Toxic Enforcement Act of 1986.

### **SECTION 14            OTHER APPLICABLE INFORMATION**

NA

REVISION DATE:    May 3, 2006

SUPERSEDES:        N/A

NOTICE TO USERS: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Data Safety Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vender for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.