

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME OR NUMBER: **RNTAOP18**

A Proprietary Inorganic Phosphate Solution (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: December 15, 2003

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>
A proprietary inorganic phosphate	Mixture	21-25	PEL 1 mg/m ³ (Mist if formed) STEL 3 mg/m ³ (Mist, if formed)
Acetic Acid	64-19-7	22-36	PEL 10 ppm; STEL 15 ppm Ceiling 40 ppm
Aluminum Nitrate	7784-27-2	3-6	PEL 1 mg/m ³ (Aluminum soluble salts) TWA 2 mg/m ³ (Aluminum soluble salts)
Phosphoric Acid	7664-38-2	10-13	PEL 1 mg/m ³ (Mist if formed) STEL 3 mg/m ³ (Mist, if formed)
Water	7732-18-5	38-42	None Established

EMERGENCY OVERVIEW

Translucent liquid. POISON. May be fatal if swallowed. Very hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant), or inhalation (irritant).

SECTION 3 HEALTH HAZARD IDENTIFICATION

PRIMARY ROUTES OF ENTRY

EYE: Vapor may cause water and irritation to eyes. Severely irritating. Direct contact or mist may cause burning, corneal damage, and blindness.

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- SKIN:** Liquid or mist (if generated) may cause severe burns. High vapor concentrations may cause skin sensitization.
- INGESTION:** POISON. May be fatal if swallowed. May damage mouth, throat, and stomach.
- INHALATION:** Inhalation of concentrated vapor may cause irritation and damage mucous membranes of respiratory tract. Inhalation of mist (if formed) may cause severe irritation and damage mucous membranes of the respiratory tract.
- CARCINOGEN LISTINGS:** None known. Not a known carcinogen by NTP or IARC.

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. Get medical attention immediately.
- SKIN:** Quickly remove contaminated clothing. Thoroughly wash exposed area of skin with soap and water. Neutralize exposed skin with a dilute solution of sodium carbonate. Rinse with flooding amounts of water. For reddened or blistered skin seek medical attention.
- INGESTION:** DO NOT INDUCE VOMITING. Contact a poison control center. Have conscious person drink several glasses of water or milk. Get medical attention immediately. Keep affected person warm and at rest.
- INHALATION:** In case of overexposure, immediately move person from contaminated area to fresh air at once and support breathing as needed. Get medical attention immediately. Keep affected person warm and at rest.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Non-flammable. Use extinguishing agent suitable for type of surrounding fire.

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SPECIAL FIRE FIGHTING INSTRUCTIONS:

Product is dangerous when exposed to heat or flame. Fire may produce poisonous or irritating gas, fumes, or vapors. Exposed firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus with full-face mask and full protective equipment.

FLASH POINT: NA

FLAMMABILITY LIMITS: NA

LOWER EXPLOSIVE LIMIT: NA UPPER EXPLOSIVE LIMIT: NA

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 Acid and Phosphoric Acid which are 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 1,645 gal (19,230 pounds), calculated on the basis of the Acetic Acid (Final RQ = 5,000 lb.) regulated constituent according to the following formula:

CERCLA Constituent RQ / % 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.

NA = Not Applicable

ND = Not Determined

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SECTION 7 HANDLING AND STORAGE

HANDLING AND STORAGE PROCEDURES

Store at room temperature. Store upright in original container. Keep container tightly closed when not in use. Material may corrode metallic surfaces. Containers should be stored in a separate storage cabinet or room from other corrosive materials. Keep away from sources of ignition. Keep away from incompatibles such as reducing agents, combustible materials, organic materials, metals, and alkalis. Do not freeze. Avoid breathing vapors and contact with skin and eyes. Wear suitable protective clothing. Contaminated work clothes should not be brought home.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS/WORK PRACTICES

VENTILATION:

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:

Use in well ventilated areas. Respiratory protection is not normally necessary. If exposure limits may possibly exceed the PEL or respiratory irritation is experienced, approved respiratory protection should be worn.

PROTECTIVE CLOTHING:

Avoid skin contact. Wear rubber gloves made of neoprene or nitrile when handling this product. Wash after use. Contaminated clothing should be removed as soon as practical and thoroughly cleaned before reuse.

EYE PROTECTION:

Avoid eye contact with this material. Wear chemical goggles. Do not wear contact lenses when working with this substance. Do not touch the eyes with contaminated skin or materials. Provide an eye wash station in the work area.

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OTHER PROTECTIVE EQUIPMENT:

Wear protective clothing to prevent contamination of skin and clothes.

If the material is to be sprayed, use in an approved spray booth.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Translucent white

SPECIFIC GRAVITY (water=1): 1.4

VAPOR PRESSURE: 16 mm Hg

VAPOR DENSITY (air=1): ND

MELTING POINT: NA

BOILING POINT: ~100°C

EVAPORATION RATE (water=1): ND

% VOLATILE BY VOLUME: 75-85%

SOLUBILITY IN WATER: Soluble

pH: 0-1.0

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY:

Reactive or incompatible with organic materials, alkalis, metals, reducing agents, and combustible materials. Avoid contact with metals and materials sensitive to acid solutions.

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CORROSIVITY:

Corrosive in the presence of magnesium, steel, aluminum, zinc, and copper. Slightly corrosive in the presence of stainless steel. May produce hydrogen gas in reaction with metals.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon dioxide, carbon monoxide, phosphorous oxides, and nitrogen oxides may be formed when heated to decomposition. May also release toxic and irritating vapors.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD

This substance, when discarded or disposed of, is a hazardous waste according to Federal regulations (40 CFR 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

HAZARD CLASS: 8

PROPER SHIPPING NAME: Corrosive Liquids n.o.s. (Contains Acetic Acid)

LABELS REQUIRED: Corrosive Liquid

PLACARDS REQUIRED: Corrosive Liquid

BILL OF LADING DESCRIPTION: Corrosive Liquids n.o.s. (Contains Acetic Acid), 8, UN1760, III

UN/NA CODE: UN1760

PACKING GROUP: II

IATA: Corrosive Liquid n.o.s., (Contains Acetic Acid), 8, UN1760, II

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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) Inventory.

The Canadian Workplace Hazardous Materials Information System (WHMIS) Acutely Toxic, and Other Toxic Effects category applies to this product.

SARA TITLE III INFORMATION:

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

This product does not contain a toxic chemical (in excess of the applicable de minimis concentration) that is subject to the annual toxic chemical release reporting requirements of SARA Section 313 (40 CFR 372).

SECTION 14 OTHER APPLICABLE INFORMATION

ND

PREPARATION DATE: December 15, 2003
COMPLETED BY: CLAYTON GROUP SERVICES, INC.

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.