



AquaPhoenix Scientific  
9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291  
Emergency Telephone No.: 800-535-5053

APT SST 33001

## **Material Safety Data Sheet**

### **Section 1 – Chemical Product and Company Identification**

Catalog Numbers: ND2270-A, ND2270-B, ND2270-C, ND2270-D, ND2270-P, ND2270-Q, ND2270-G, ND2270-T

Product Identity: CAN Solution, Nitrite Titrant

**Chemical Family:** Not Available

**Synonyms:** Not Available

**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331  
Emergency Contact Number (24hr): Chemtel (800) 255-3924

Issue Date: 12/29/06

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### **Section 2 – Hazard Identification**

Emergency Overview: Corrosive liquid. May cause irritation to the skin, and eyes. Avoid contact with skin, eyes, and clothing. Wash areas of contact with water. If ingested, dilute with water and get medical attention. DO NOT induce vomiting.

**Appearance:** Clear, orange colored liquid      **Odor:** Odorless

**Target Organs:** Eyes, skin, respiratory system, and teeth.

**Potential Health Effects/ Routes of Exposure:**

**Eyes:** May cause irritation, redness, pain, and tearing.

**Skin:** May cause irritation, redness, and pain.

**Ingestion:** May cause throat irritation, vomiting, and diarrhea

**Inhalation:** May cause irritation.

**Chronic Effect / Carcinogenicity:** No Information available

**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**

Sulfuric Acid, CAS# 7664-93-9, <10% v/v

Ceric Ammonium Sulfate, CAS# 16774-21-3, <12%w/v

Water, purified, CAS# 7732-18-5, >78% w/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 dry chemical, alcohol foam, or carbon dioxide for extinguishing surrounding fire.  
**Unsuitable Extinguishing Media:** No information available  
**Fire & Explosion Hazards:** Contact with most metals causes formation of flammable and explosive hydrogen gas.  
**Fire Fighting Instructions / Equipment:** Use normal procedures. Poisonous gases 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: 1

## **Section 6 – Accidental Release Measures**

**Personal Precautions** Use proper personal protective equipment as indicated in Section 8.  
**Environmental Precautions** No Information Available.  
**Methods for Containment and Clean Up** Cover spill with soda ash-slicked lime mixture or calcium carbonate. Mix with water to form slurry. Decant liquid to drain. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always obey local regulations.

## **Section 7 – Handling and Storage**

**Handling:** Wash hands after handling. Avoid contact with skin and eyes.  
**Storage:** Protect from freezing and physical damage. Do not mix with bases. Contact with water will generate heat.

## **Section 8 – Exposure Controls, Personal Protection**

Sulfuric Acid, CAS# 7664-93-9, ACGIH TLV: 1 mg/m<sup>3</sup>, OSHA PEL: 1 mg/m<sup>3</sup>  
Ceric Ammonium Sulfate, CAS# 16774-21-3, ACGIH TLV: NA, OSHA PEL: NA  
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA  
**Engineering Measures/ General Hygiene:** Use under a chemical fume hood. Ensure eyewash and safety showers are available.  
**Personal Protection Equipment:** **Skin Protection:** Chemical resistant gloves.  
**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Chemical fume hood

## **Section 9 – Physical and Chemical Properties**

<b>Appearance/Physical State:</b> Clear, orange colored liquid	
<b>Odor:</b> Odorless	<b>% Volatility:</b> No Information Available
<b>Boiling Point:</b> Approx 100C	<b>Specific Gravity:</b> Approx 1.05
<b>Melting Point:</b> Approx 0C	<b>Vapor Pressure:</b> Not available
<b>Vapor Density:</b> >1	<b>Flash Point:</b> Not Applicable
<b>Evaporation Rate:</b> Not available	<b>Coefficient of water/oil distribution:</b> Not Available
<b>pH:</b> < 3	<b>Odor Threshold:</b> Not Available
<b>Flammability:</b> No Information Available	<b>Decomposition Temperature:</b> No Information Available
<b>Solubility:</b> Infinite	<b>Partition Coefficient n-octanol/water:</b> No data
available	
<b>Relative Density:</b> No Information Available	<b>Molecular Weight:</b> Not available

## **Section 10 – Stability and Reactivity**

**Chemical Stability:** Stable under normal conditions of use and storage.  
**Incompatible Materials:** Organics, chlorates, carbides, fulminates, picrates, alkalines, reducing agents, nitrates, acetic acids, oxidizing agents, metals.  
**Conditions to Avoid:** Incompatible materials, excess heat  
**Hazardous Decomposition Products:** Oxides of sulfur  
**Hazardous Polymerization:** Does not occur

**Hazardous Reactions:** Not Available

#### **Section 11 – Toxicological Information**

**Routes of Exposure/Symptoms/Corrosiveness** – See Section 2

LD50 orl-rat: 2140 mg/kg (Sulfuric Acid)

LC50 inhalation-rat: 510 mg/kg//2H (Sulfuric Acid)

**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** No information available.

**Reproductive Effects** No Information available.

**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:** No information Available

**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:** Dilute solution with water. Neutralize with calcium carbonate or soda ash. Wash solution down drain. Treat solid residue as normal refuse. Comply with all local, state, and federal regulations.

#### **Section 14 – Transport Information**

DOT – UN1760, Corrosive Liquids, N.O.S., (Sulfuric 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 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:** Sulfuric Acid – 1000 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 from the products use.