

MATERIAL SAFETY DATA SHEET

Part # CU0AS01

Section I: General Information

Product Name: 0.1M Copper Standard
Manufacturer's Name: Van London pHoenix Company
Distributed By: Van London pHoenix Company
Address: 6103 Glenmont Dr. Houston, Texas 77081
Phone: 713/772-6641 Fax: 713/772-4671

Chemical Name: Copper nitrate in Water
Chemical Family: Salt solution
DOT Shipping Info: N/A
IATA Shipping Info: N/A

Section II: Ingredients

CAS No.	%	Chemical Name	LD50 (mg/kg) oral-rat	OSHA/PEL ACGIH TLV
3251-23-8	1.88%	Copper nitrate	940	None
7732-18-5	98.12%	Water	---	None

Section III: Physical Data

Boiling Point: 100°C
Specific Gravity: 1.01
Vapor Pressure: N/A
Freezing Point: 0°C
Vapor Density: N/A
pH: 3.5 - 7.5
Water Solubility: Soluble
Appearance & Odor: Colorless, odorless liquid

Section IV: Fire & Explosion Hazard Data

Flashpoint: Not Flammable
Auto ignition Temperature: N/A
Extinguishing Media: Any
Special Fire Fighting Procedures: N/A
Unusual Fire & Explosion Hazards: Nitrate may render other materials more combustible if allowed to dry out upon them.

Section V: Health Hazard Data

Effects of Overexposure: Dizziness, nausea, weakness.

Emergency & First Aid:	Wash off contact area with water.
Eyes & Skin:	Wash off skin with plenty of water. Irrigate eyes for at least 15 minutes.
Ingestion/Inhalation:	Induce vomiting and consult a physician.

Section VI: Reactivity Data

Stable:	Yes
Conditions to Avoid:	Storing near heat or incompatible chemicals.
Incompatibility:	Reducing agents, B, BaS, Na acetate, Ti, Charcoal, S, trichloroethylene.
Hazardous Decomposition Products:	Oxides of nitrogen upon heating to decomposition.
Hazardous Polymerization:	Will not occur.

Section VII: Spill or Leak Procedures

Steps to be Taken:	Dilute with water, and cover with soda ash, mix and scoop into a beaker of water. Neutralize with HCl and store for waste disposal.
Waste Disposal Method:	Contract with licensed waste transporter for disposal. Observe all federal, state, and local laws.

Section VIII: Special Protection Information

Respiratory Protection:	N/A
Ventilation:	N/A
Protective Gloves:	N/A
Eye Protection:	Safety goggles
Other Protective Equipment:	N/A

Section IX: Special Precautions

Precautions to be taken in Handling & Storage:	Store at room temperature and keep cap tightly sealed. SARA Title III: $\text{Cu}(\text{NO}_3)_2$ is a CERCLA hazard and is subject to Section 304 of Title III.
Other Precautions:	NFPA rating: (0-4) : Fire-1, Health-2, Reactivity-0, Specific-0.

Issue Date: May 1, 2007

Name: Peter F. Boyle, Quality Control Manager

Signature:

A handwritten signature in cursive script that reads "Peter Boyle". The signature is written in black ink and is positioned below the printed name.