



Materials Safety Data Sheet  
COPPER PLATING SOLUTION

I PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): JAX COPPER PLATING SOLUTION  
CHEMICAL NAMES, COMMON NAMES: NONE  
SYNONYMS: NONE  
MANUFACTURER'S NAME: JAX Chemical Company, Inc.  
ADDRESS: 78-11 267<sup>th</sup> Street, Floral Park, New York 11004  
BUSINESS PHONE: 718-347-0057

II HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS #	% w/w	EXPOSURE LIMITS IN AIR	
			TLV ACGIH	PEL OSHA
Sulfuric Acid	7664-93-9	2.5-3.5	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
Copper Sulfate	7758-98-7	10-14	1 mg(Cu)/m <sup>3</sup>	1 mg(Cu)/m <sup>3</sup>

THE REMAINING 82.5 TO 87.5 INGREDIENTS ARE NON-HAZARDOUS

III PHYSICAL PROPERTIES

VAPOR DENSITY: NO DATA EVAPORATION RATE (WATER = 1): SIMILAR TO WATER  
SPECIFIC GRAVITY: 1.17 MELTING POINT or RANGE: LESS THAN 32° F  
SOLUBILITY IN WATER: SOLUBLE BOILING POINT: GREATER THAN 212° F  
VAPOR PRESSURE, mm Hg @ 20 C: NO DATA  
APPEARANCE & COLOR: BLUE LIQUID pH: 1.4

HOW TO DETECT THIS SUBSTANCE (warning properties): At room temperature this product is a blue odorless liquid. No unusual warning properties.

IV FIRE and EXPLOSION

THIS PRODUCT IS NON-FLAMMABLE AND NON-COMBUSTIBLE

FLASH POINT, F (method): N/A  
AUTOIGNITION TEMPERATURE, F: N/A  
FLAMMABLE LIMITS in air by volume, %: lower N/A upper N/A  
FIRE EXTINGUISHING MATERIALS:  
water spray: OK carbon dioxide: OK foam: OK  
dry chemical: OK halon: OK other:

SPECIAL FIRE FIGHTING PROCEDURES: If involved in fire, use water spray. Fire Fighters must use Self Contained Breathing Apparatus.

UNUSUAL FIRE & EXPLOSION HAZARDS: Product may decompose at high temperatures to form toxic gases.

V HEALTH HAZARD INFORMATION

SYMPTOMS OF OVER EXPOSURE by route of exposure:

INHALATION: Upper respiratory irritation. Metallic taste. Headache.  
CONTACT WITH SKIN or EYES: Irritation and/or reddening and to skin and eyes.  
SKIN ABSORPTION: This product does not skin absorb to any appreciable degree.

INGESTION: Irritation to the GI tract, nausea, vomiting.

INJECTION: Local irritation at the site of injection, possible systemic injury depending on dose.

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HEALTH EFFECTS OR RISKS FROM EXPOSURE An explanation in lay terms.

ACUTE: This product cause may reddening, irritation, or burns to the eyes or skin. Irritation to the nose or throat may occur if you breath the product vapors. Ingestion will cause various levels of GI distress from upset stomach to severe vomiting.

CHRONIC: Long term exposure to this product to may cause severe and/or persistent irritation or burns to the eyes, skin, nose or throat. Copper has been shown to cause genetic damage (mutations) to some test animals.

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FIRST AID EMERGENCY PROCEDURES:

If spilled on skin or eyes, immediately begin decontamination with running water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victim & rescuers must seek immediate medical attention. If chemical is in eyes, open victim's eyes while under gentle running water. Use sufficient force to open eye lids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. If chemical is inhaled, remove victim to fresh air and use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers. If chemical is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or can not swallow.

Victim of chemical exposure and all rescuers must be taken for medical attention. Take copy of label and MSDS to physician or health professional with victim.

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SUSPECTED CANCER AGENT?

This product's ingredient's are / are not found on the following lists:

<u>OSHA Z-2 LIST</u>	<u>NTP</u>	<u>IARC</u>
NO	NO	NO

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Any preexisting skin irritation or dermatitis can be aggravated by exposure to this product. Upper respiratory disfunction may also be aggravated by inhalation of the vapors of this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms of exposure.

===== VI REACTIVITY DATA =====  
STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: NONE

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Hydroxylamine, strong caustics.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: N/A

===== VII SPILL, LEAK, and DISPOSAL INFORMATION =====

SPILL & LEAK RESPONSE: Uncontrolled releases should be responded to using training people and pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. Minimum PPE should be hard hat with face shield, splash goggles, respiratory protection (SCBA, unless conditions warrant lower protection), hand and body protection, and chemical protective boots.

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate federal, state, and local regulations. This chemical, if unaltered by the handling, may be disposed of by standard industrial waste water treatment process.

===== VIII SPECIAL HANDLING INFORMATION =====

VENTILATION & ENGINEERING CONTROLS: Use ventilation adequate to keep the airborne concentration below the TLV or the PEL (which ever is less) of the hazardous constituents.

RESPIRATORY PROTECTION: If ventilation is not adequate to reduce expose to this produce to a safe level, supplied air or respirator with approved NIOSH cartridge must be used.

EYE PROTECTION: Chemical splash goggles. HAND PROTECTION: Chemical resistant gloves.

BODY PROTECTION: Chemical resistant apron or full body protective clothing if the potential for whole body contamination exists.

WORK PRACTICES & HYGIENE PRACTICES: Observe all applicable and reasonable work practices consistent with the use of this product. Wash thoroughly with soap and water after each use.

STORAGE & HANDLING PRACTICES: Store in tightly closed container in cool dry location, protected from environmental extremes.

===== IX LABELING =====

LABELING (Precautionary Statements): WARNING! Keep out of reach of children. May be harmful if ingested. Contact with eyes or skin may cause irritation. Avoid contact with eyes, skin, food, cooking and eating utensils, clothing. Do not inhale fumes or vapors.

DOT LABEL(S): POISON B

===== PREPARED BY =====

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619/565-0302

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