



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 267th 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 ³ | 1 mg/m ³ |
| Copper Sulfate | 7758-98-7 | 10-14 | 1 mg(Cu)/m ³ | 1 mg(Cu)/m ³ |

THE REMAINING 82.5 TO 87.5 INGREDIENTS ARE NON-HAZARDOUS

III PHYSICAL PROPERTIES

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

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.

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.

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.

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

