



Materials Safety Data Sheet
SILVER PLATING SOLUTION

I PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): **JAX SILVER 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
Ammonia	7664-41-7	1.0-3.0	25 ppm	50 ppm
Silver Chloride	7783-90-6	1.0-3.0	0.01 mg(Ag)/m ³	0.01 mg(Ag)/m ³
Sodium Thiosulfate	7772-98-7	10-12	none	none

THE REMAINING 82 to 88 % INGREDIENTS ARE NON-HAZARDOUS

III PHYSICAL PROPERTIES

VAPOR DENSITY: NO DATA

EVAPORATION RATE (WATER = 1): SIMILAR TO WATER

SPECIFIC GRAVITY: 1.4

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: CLEAR EMULSION

pH: 10.7

HOW TO DETECT THIS SUBSTANCE (warning properties): At room temperature this product is a clear liquid with an ammonia like odor. 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: NONE

V HEALTH HAZARD INFORMATION

SYMPTOMS OF OVER EXPOSURE by route of exposure:

INHALATION: Upper respiratory irritation.

CONTACT WITH SKIN or EYES: Irritation and/or reddening and to skin and eyes. Change in skin pigmentation.

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.

CHRONIC: Long term exposure to this product to may cause severe and/or persistent irritation and/or sensitizing to the eyes and skin. Irritation to the nose or throat. A generalized grayish pigmentation of the skin and mucous membranes (argyria) may occur, developing slowly over a period of 2 to 25 years of regular exposure.

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, dilute by drinking several glasses of water. Never give diluents (milk or water) to or induce vomiting in 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: Never mix ammonia containing products with products containing hypochlorite bleach. Toxic chloramines may be generated.

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 exposure to this product 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): CAUTION! Keep out of reach of children. 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 =====

CHEMICAL SAFETY ASSOCIATES, Inc. 8388 Vickers St. San Diego, CA 92111
619/565-0302

DATE OF PREPARATION: February 18, 1988

MASTER
METAL
FINISHING
SOLUTION

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SOLUTION

JAX™

Silver Plating Solution

Plates pure silver onto copper, brass, bronze and silver.

lamps • lighting fixtures • hardware • antiques
plaques • jewelry • silverware • architectural metalwork

DIRECTIONS

READ CAUTIONS AND DIRECTIONS ON LABEL BEFORE USING.
Metal must be clean, free of lacquer, oil, grease and wax.

Apply with a soft cloth or bristle brush.

Polish dry. If finish is initially dull, re-apply solution.

After cleaning and polishing, silverware should always be thoroughly washed with warm water.

SAFETY INFORMATION

CAUTION: Keep out of reach of children.

Use only in a well-ventilated area. May irritate eyes and skin.
Keep away from eyes, skin, food, cooking utensils, and clothing.

Wear goggles and rubber gloves when using.

INGESTION: Drink large quantities of milk or water.

EYES: Flush thoroughly with water.

SKIN: Wash with soap and water.

- **JAX Silver Plating Solution** is non-flammable.
- Do not mix **JAX Silver Plating Solution** with other **JAX** products or other chemicals.
- Store and use **JAX Silver Plating Solution** only in sealed amber containers.

SPILLAGE AND DISPOSAL

Dilute and flush with water.

Dispose of waste by methods consistent with federal, state and local regulations.

NOTES

JAX Silver Plating Solution:

- Before using, it is advisable to test the solution on a small inconspicuous area.
- Requires not heat or electricity.
- Should not be diluted.
- Contains no cyanide.
- Produces the same color every time.
- Not for use on thinly plated metals.
- The solution will initially plate the metal pewter in color; additional coats produce a brighter finish.
- We can not overemphasize the importance of a clean metal surface before applying **JAX Silver Plating Solution**.
- Fingerprints contain grease which will inhibit the adherence of the solution to the metal.
- Finish may be lacquered to prevent tarnish.

Available in half-pints and pints.

Manufactured in the USA by:

JAX Chemical Company™, Inc.

78-11 267th Street

Floral Park, New York 11004

(718) 347-0057

Distributed by: