

MATERIAL SAFETY DATA SHEET

PLATING SOLUTION

SECTION A - IDENTITY

Manufacturer's Name: ESA, Inc.
Address: 22 Alpha Road, Chelmsford, MA 01824-4171
Telephone Number: (978) 250-7000
Trade Name and Synonyms: Plating Solution
Chemical Family: Buffered Acidic Solution
CAS #: N/A

SECTION B - HAZARDOUS INGREDIENTS

		%
Mercuric Nitrate	CAS # 10045-94-0	3%
Hydrochloric Acid	CAS # 7647-01-0	1.3%
Chromium Chloride	CAS # 10060-12-5	1%
Hydrazine	CAS # 302-01-2	0.20%

SECTION C - PHYSICAL DATA

Boiling Point:	N/D	Specific Gravity:	N/D
Vapor Pressure (mm Hg):	N/D	Percent Volatile by Volume (%):	N/D
Vapor Density (air=1):	N/D	Evaporation Rate:	N/D
Solubility in Water:	Complete	Reactivity in Water:	None pH = 1.2
Appearance and Odor:	Blue-green clear liquid		

SECTION D - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/D
Flammable Limits: N/D
Extinguishing Media: Suitable for surrounding fire.

Special Fire Fighting Procedures:

Use water to cool fire-exposed containers. Treat as an acid solution.

Unusual Fire and Explosion Hazards:

None.

SECTION E - HEALTH HAZARD DATA

OSHA Permissible Exposure Limit: 0.1 mg/m³ as Hg; 5 ppm ceiling as HCl; 0.1 ppm as hydrazine
ACGIH Threshold Limit Value: 0.1 mg/m³ as Hg; 5 ppm ceiling as HCl; 0.1 ppm as hydrazine

Effects of Overexposure:

Acute Effects: Irritation and burns of the skin, eyes, and respiratory tract, pulmonary edema can occur.

Chronic Effects: Chronic irritation of exposed tissues. Hydrazine is a suspected carcinogen in man and can be absorbed through the skin. Persons with chronic upper respiratory irritation should avoid exposure.

Emergency and First Aid Procedures:

Inhalation: If mist or fog causes discomfort, remove to fresh air and ventilate area. If irritation persists, see a physician.

Eyes: Flush eyes with water for 15 minutes. If irritation persists, see a physician.

Skin: Wash skin thoroughly. If irritation persists, see a physician.

Ingestion: If ingested, seek medical attention.

SECTION F - REACTIVITY DATA

Treat as an acid solution. Solutions of hydrazine can attack glass, rubber or cork.

SECTION G - SPILL OR LEAK PROCEDURES

Steps to be Taken in Case of Spill:

Collect and combine with Metexchange waste.

Waste Disposal Method:

This material is classified as corrosive with mercury and chromium toxicity. It is considered hazardous waste and should be disposed of according to federal and state regulations.

SECTION H - SPECIAL PROTECTION INFORMATION

Use product in well ventilated area. NIOSH approved respiratory protection suitable for acid mists should be worn when concentrations exceed the TLV. Rubber, PVC or impervious material gloves should be worn if contact is likely. Safety glasses or goggles should be worn when working with product. Emergency shower and eye wash stations should be located in the work area.

SECTION I - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing:

Store in a cool location, away from direct sunlight.

Other Precautions:

Corrosive to metals, with flammable hydrogen gas generated.

James Mayol, QA Manager

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, ESA, Inc. makes no warranty with respect thereto and disclaims all liability from reliance thereon.

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