

# Material Safety Data Sheet

## SECTION I PRODUCT/SUPPLIER INFORMATION

**Material/Trade Name:** Midas Rhodium Plating Solution

**Synonyms:** Mixture

**DATE PREPARED:** 06/28/96

**Based on Manufacturer's MSDS:** 05/11/92

**FLAMMABILITY:** 0      **HEALTH:** 2      **REACTIVITY:** 1

## SECTION II INGREDIENT/EXPOSURE LIMIT INFORMATION

Chemical Component	%	CAS No.	TLV	PEL	REL
Rhodium Sulfate*		10489-46-0	0.01 mg/m <sup>3</sup>	0.001 mg/m <sup>3</sup>	0.001mg/m <sup>3</sup> (hr)
Sulfuric Acid		7664-93-9	1 mg/m <sup>3</sup> 3 mg/m <sup>3</sup> (a)	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> (hr)

\*Exposure limits are for soluble compounds of Rhodium

hr=10hr TWA, a=Short Term Exposure Limit (STEL)

## SECTION III PHYSICAL PROPERTIES

<b>Vapor Pressure (mm Hg):</b>	Not Available	<b>Specific Gravity:</b>	1.1
<b>Vapor Density (Air = 1):</b>	Not Available	<b>Boiling Point:</b>	212°F (100°C)
<b>Solubility in Water:</b>	Completely	<b>Evaporation Rate:</b>	Not Available
<b>Appearance:</b>	CLear yellow liquid	<b>Volatility (%):</b>	Not Available
<b>Odor:</b>	None Known	<b>pH:</b>	Not Available
<b>Melting Point:</b>	Not Available		

## SECTION IV FIRE AND EXPLOSION DATA

<b>Flash Point:</b>	Not Available	<b>Flammable Limits:</b>	<b>LEL:</b>	Unknown
<b>Auto Ignition Temperature:</b>	Not Available		<b>UEL:</b>	Unknown

**EXTINGUISHING MEDIA:** Use extinguishing media appropriate for surrounding fire. Not flammable.

**Special Fire Fighting Procedures:** Fire fighters should wear full turnout gear and SCBA.

**Unusual Fire and Explosion Hazards:** Can cause combustibles to burn. Vapors are flammable and may form explosive mixtures with air.

## SECTION V REACTIVITY DATA

**Stable?** Yes      **Conditions to Avoid:** Excessive heat

**Incompatibility (Materials to Avoid):** Strong caustics, most metals, combustible material, organic solvents, cyanides

**Hazardous Decomposition Products:** Oxides of sulfur

**Hazardous polymerization may occur?** No      **Conditions to Avoid:** None Known

## SECTION VI HEALTH HAZARD DATA

**Primary Routes of Exposure:** Skin and eye contact, inhalation

**Acute signs and Symptoms of Overexposure:** This product contains sulfuric acid which is a corrosive irritant to the eyes, skin and respiratory tract, and a systemic irritant by inhalation. Ingestion may result in nausea, vomiting, gastric hemorrhage and possible death. The rhodium component of this product may be a skin sensitizer.

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## SECTION VI HEALTH HAZARD DATA (continued)

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**Chronic Signs and Symptoms of Overexposure:** Prolonged and/or repeated contact with the skin may cause dermatitis which is characterized by dry, red, cracked patches of skin.

**Carcinogenicity?** No                      **NTP**                      **IARC**                      **ACGIH**                      **OSHA**                      **PROP65**

\*No ingredients listed in this section\*

**Conditions That May Increase Overexposure Potential:** The extent of exposure to this product will depend largely on the intensity and duration of product use. Employers who supply this product for use by their employees must determine the conditions under which overexposure can result.

**Medical Conditions Generally Aggravated by Exposure:** Damaged skin, respiratory disease, hepatic or renal lesions

### FIRST AID PROCEDURES:

<b>Eye Contact:</b>	Flush contaminated eye(s) with plenty of water for at least 15 minutes while holding eyelids open. SEEK MEDICAL ATTENTION IMMEDIATELY.
<b>Skin Contact:</b>	Wash area with soap and water. Remove contaminated clothing. Seek medical attention if exposure is severe.
<b>Inhalation:</b>	Remove victim to fresh air. Restore breathing if necessary. Seek medical attention immediately.
<b>Ingestion:</b>	DO NOT INDUCE VOMITING. Have victim drink 8 to 10 ounces of water to dilute the material in the stomach. Obtain medical attention immediately.

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## SECTION VII PRECAUTIONS FOR SAFE HANDLING AND USE

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**Actions to Take for Spills:** Provide adequate ventilation. Contain spill, neutralize with lime or soda ash, and clean up with absorbent. Do not flush into sewer. Wash residue with water and collect run-off. Protect against overexposure.

**Waste Disposal:** Hazardous waste - Corrosive. Dispose of via a licensed disposal firm. See EPA 40 CFR 261.

**Precautions to be Taken in Handling and Storage:** Store in a closed container in a cool, dry, well ventilated area away from organics, cyanides, or metal powders.

**Community Right-to-Know Requirements:** SARA 302: Sulfuric Acid, RQ=1000 lbs, TPQ=1000 lbs (EPA Extremely Hazardous Substance)(see 40 CFR 355). SARA 313: Annual release reporting requirements for Sulfuric Acid (see 40 CFR 372.65).

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## SECTION VIII EMPLOYEE PROTECTION MEASURES

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**Ventilation:** Local ventilation is preferred to meet TLV requirements. General ventilation is acceptable, if exposure is maintained below TLV.

**Respiratory Protection:** Respirators should not be required during normal use of this product, however, in situations when airborne concentrations exceed TLV for sulfuric acid or are unknown, an SCBA is advised. All respirator use should be in accordance with the OSHA respiratory protection requirements (29 CFR 1910.134).

**Eye Protection:** Full face shield, splash/chemical resistant goggles.

**Protective Gloves:** Rubber gloves are recommended.

**Other Protective Equipment:** Protective apron and boots

**Work/Hygiene Practices:** Eyewash station and safety shower should be available in areas of use. Wash thoroughly after handling product.

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