

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard.
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form approved
OMB No. 1218-0072



IDENTITY (As Used on Label and List)

Silver Cyanide Plating Solution

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

| | |
|--|--|
| Manufacturer's Name Krohn Technical Products | Emergency Telephone Number 1-800-255-3924 |
| Address (Number, Street, City, State, and ZIP Code) 303 Veterans Blvd., Carlstadt, NJ 07072 | Telephone Number for Information (201) 933-9696 |
| | Date Prepared 05/31/13 - (Reviewed) |
| | Signature of Preparer (optional) |

Section II — Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % (optional) |
|---|----------|-----------------------------|--------------------------|--------------|
| Silver Cyanide Cas# 506-64-9 | | 10 mg/m ³ as HCN | | |
| Potassium Cyanide Cas# 151-50-8 | | 10 mg/m ³ as HCN | | |
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Section III — Physical/Chemical Characteristics

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|-------------------------|--------------------------------------|---|------|
| Boiling Point | N.A. | Specific Gravity (H ₂ O = 1) | N.A. |
| Vapor Pressure (mm Hg.) | N.A. | Melting Point | N.A. |
| Vapor Density (AIR = 1) | N.A. | Evaporation Rate (Butyl Acetate = 1) | N.A. |
| Solubility in Water | Very soluble | | |
| Appearance and Odor | Clear solution, strong cyanide odor. | | |

Section IV — Fire and Explosion Hazard Data

| | | | | | | | |
|------------------------------------|--|------------------|------|-----|------|-----|------|
| Flash Point (Method Used) | None | Flammable Limits | N.A. | LEL | N.A. | UEL | N.A. |
| Extinguishing Media | Product does not burn. Use media suitable for surrounding fire. | | | | | | |
| Special Fire Fighting Procedures | Wear self-contained breathing apparatus and full protective clothing. | | | | | | |
| Unusual Fire and Explosion Hazards | Contact with acids will liberate toxic and flammable hydrogen cyanide gas. | | | | | | |

Section V — Reactivity Data

| | | | |
|-----------|----------|---|---------------------|
| Stability | Unstable | | Conditions to Avoid |
| | Stable | X | |

Incompatibility (Materials to Avoid) Acids and strong oxidizing agents.

Hazardous Decomposition or Byproducts Hydrogen cyanide gas and ammonia gas.

| | | | |
|--------------------------|----------------|---|---------------------|
| Hazardous Polymerization | May Occur | | Conditions to Avoid |
| | Will Not Occur | X | |

Section VI — Health Hazard Data

| | | | | | | |
|--------------------|-------------|-----|-------|-----|------------|-----|
| Route(s) of Entry: | Inhalation? | Yes | Skin? | Yes | Ingestion? | Yes |
|--------------------|-------------|-----|-------|-----|------------|-----|

Health Hazards (Acute and Chronic) Acute: May be fatal through cyanide poisoning via cyanide ingestion or inhalation of hydrogen cyanide gas.

Chronic: Potential irritant to skin and eyes.

Signs and Symptoms of Exposure: Weakness, dizziness, headache, vomiting to finally unconsciousness.

Emergency and First Aid Procedures EYE: Wash with a directed stream of water for 15 minutes. Get medical attention. SKIN: Immediately wash with soap and water. Remove contaminated clothing. INHALATION: Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, give oxygen. Seek medical attention. SWALLOWING: Break an amyl nitrite pearl in a clean cloth and hold under nose for 15 seconds. If victim is conscious, induce vomiting by administering syrup of ipecac. Get medical attention immediately.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled Work up wind. Absorb with inert absorbent, sweep up and place into a lined container properly labeled for disposal.

Waste Disposal Method Send to refinery to recover precious metal.

Precautions to Be Taken in Handling and Storing Store away from foods, acids or acid salts, or oxidizing agents.

Other Precautions None

Section VIII — Control Measures

| | | | |
|---|---------------------------------|-----|---|
| Respiratory Protection (Specify, Type) <u>None</u> | | | |
| Ventilation | Local Exhaust | Yes | Special <u>None</u> |
| | Mechanical (General) | Yes | Other <u>None</u> |
| Protective Gloves | <u>Butyl rubber or neoprene</u> | | Eye Protection <u>chemical safety goggles</u> |
| Other Protective Clothing or Equipment <u>chemical apron</u> | | | |
| Work/Hygenic Practices <u>Eye fountain & safety shower should be available.</u> | | | |