

MATERIAL SAFETY DATA SHEET

METEXCHANGE® M

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: Metexchange® M
Chemical Family: Buffered acidic solution
CAS #: N/A

SECTION B - HAZARDOUS INGREDIENTS

		%
Chromium Chloride	CAS # 10060-12-5	1%
Hydrochloric Acid	CAS # 7647-01-0	1.4%
Hydrazine	CAS # 302-01-2	0.06%
Mercuric Nitrate	CAS # 10045-94-0	< 0.1%

SECTION C - PHYSICAL DATA

Boiling Point:	100°C	Specific Gravity:	1.1
Vapor Pressure (mm Hg):	N/D	Percent Volatile by Volume (%):	0.1
Vapor Density (air=1):	N/D	Evaporation Rate:	N/D
Solubility in Water:	Complete	Reactivity in Water:	None pH = 1.1
Appearance and Odor:	Blue solution		

SECTION D - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/D
Flammable Limits: N/D
Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, alcohol or polymer foam.

Special Fire Fighting Procedures:

Use water to cool fire exposed containers.

Unusual Fire and Explosion Hazards:

None.

SECTION E - HEALTH HAZARD DATA

OSHA Permissible Exposure Limit: 5 ppm ceiling as HCl; 0.1 ppm for hydrazine
ACGIH Threshold Limit Value: 5 ppm ceiling as HCl; 0.1 ppm for hydrazine

Effects of Overexposure:

Acute Effects: Irritant to skin, eyes and respiratory tract. Pulmonary edema can occur.

Chronic Effects: Chronic irritation of exposed tissues. Hydrazine is suspected of carcinogenic potential in humans and can be absorbed through the skin.

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air and ventilate area. Support breathing if necessary. Seek medical attention if irritation persists.
Eyes: Flush eyes with water for 15 minutes, especially under eyelids. If irritation persists, see a physician.
Skin: Wash with plenty of water. Remove saturated clothing. Seek medical attention if irritation persists.
Ingestion: If ingested, see a physician immediately.

SECTION F - REACTIVITY DATA

Treat as an acid solution. Contact with organics can give violent reactions. Perchloric acid is incompatible with cellulose, glycol ethers, ketones, alcohols, and when heated, with combustibles.

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 as hazardous waste and should be disposed according to federal and state regulations.

SECTION H - SPECIAL PROTECTION INFORMATION

Use in well ventilated area. NIOSH approved respiratory protection should be worn for acid mists when concentrations exceed the TLV. Rubber, PVC or impervious material gloves should be worn. Safety glasses with side shields or goggles should be worn.

Emergency shower and eye wash stations should be within work area. Avoid contact with product and wash thoroughly after handling.

SECTION I - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing:

Store in cool location out of direct sunlight.

Other Precautions:

Corrosive to metals with flammable hydrogen gas generated.

James Mayol, QA Manager

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