

MATERIAL SAFETY DATA SHEET

REAGENT MB MICROBICIDE

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: MB Reagent
Chemical Family: Microbicide
CAS #: N/A

SECTION B - HAZARDOUS INGREDIENTS

Distilled Water	CAS #7732-18-5	75.75%
Magnesium Nitrate	CAS #10377-60-3	22.00%
5-chloro-2-methyl-4-isothiazolin-3-one	CAS #26172-55-4	1.15%
2-methyl-4-isothiazolin-3-one	CAS #2682-20-4	0.35%
Magnesium Chloride	CAS #7786-30-3	0.75%

SECTION C - PHYSICAL DATA

Boiling Point:	100°C	Specific Gravity:	1.2 G/ml
Vapor Pressure (mm Hg):	21 mm	Percent Volatile by Volume:	75%
Vapor Density (air = 1):	0.65	Evaporation Rate:	<1.0
Solubility in Water:	Complete	Melting Point:	-21°C
Appearance and Odor:	Amber liquid, pungent odor		

SECTION D - FIRE AND EXPLOSION DATA

Flash Point (Method Used): N/A
Flammable Limits: Lel: N/A, Uel: N/A
Extinguishing Media: This material is not flammable.

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus when fighting a chemical fire.

Unusual Fire and Explosion Hazards:

The following toxic vapors are found when this material is heated to decomposition: oxides of nitrogen and sulfur, hydrogen chloride.

SECTION E - HEALTH HAZARD DATA

OSHA Permissible Exposure Limit: 0.3 mg/m³ as total isothiazolones
ACGIH Threshold Limit Value: 0.1 mg/m³ as total isothiazolones

Effects of Overexposure:

Burns eyes severely, dermatitis, burns skin, system allergic reactions.

Emergency and First Aid Procedures:

Inhalation: Immediately move to fresh air.
Eyes: Flush eyes with water for 15 minutes.
Skin: Promptly wash skin with mild soap and large volumes of water.
Ingestion: Never give anything by mouth to an unconscious person. Never try to make the unconscious person vomit. Give large amounts of water. Contact a physician.

SECTION F - REACTIVITY DATA

Stability Stable. Hazardous decomposition products: oxides of nitrogen and sulfur, hydrogen chloride. Hazardous polymerization will not occur.

SECTION G - SPILL OR LEAK PROCEDURES

Steps to be taken in case of spill:

Clean up with absorbent material.

Waste disposal method:

Dispose of according to federal and state regulations.

SECTION H - SPECIAL PROTECTION INFORMATION

NIOSH/OSHA respiratory protection should be used. Impervious material gloves should be worn. Safety glasses with side shields or goggles should be worn. Use only in well ventilated area.

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 sealed container in a cool, dry location.

Other Precautions:

Avoid eye or skin contact. Avoid breathing vapors.

James Mayol, QA Manager

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