



# MATERIAL SAFETY DATA SHEET

Product: 70-1025

## Reagent MB Microbiocide

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The following information is believed to be accurate and is currently the best information available to us. However, we make no warranties, express or implied, with respect to the information supplied and we assume no liability resulting from its use.

### 2. HAZARDOUS IDENTIFICATION

HAZARD CLASS	Corrosive, Toxic		NFPA	HMIS
<b>Eyes:</b>	Corrosive	<b>HEALTH</b>	3	3
<b>Skin:</b>	Toxic	<b>FLAMMABILITY</b>	0	0
<b>Ingestion:</b>	Toxic	<b>REACTIVITY</b>	0	0
<b>Inhalation:</b>	Toxic	<b>NFPA SPECIAL</b>	-	-
		<b>HMIS PPE</b>		

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	Magnesium Nitrate	Water	Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one	Magnesium Chloride
<b>PERCENT (%)</b>	≥ 21.0 - ≤ 23.5	≥ 74.0 - ≤ 77.0	≥ 1.35 - ≤ 1.65	≥ 0.5 - ≤ 1.0
<b>CAS NO.</b>	CAS # 10377-60-3	CAS # 7732-18-5	CAS # 55965-84-9	CAS # 7786-30-3
<b>EINECS NO.</b>	233-826-7	231-791-2	No information found	232-094-6
<b>RISKS</b>	R8, R36, R37, R38	No information found	No information found	R36, R37, R39
<b>SAFETY</b>	S17, S26, S36	No information found	No information found	S26, S37, S39



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## 4. FIRST AID MEASURES

- GENERAL:** Remove contaminated clothing, wash thoroughly before reuse.
- EYES:** Flush with water for at least 15 minutes occasionally raising upper and lower eyelids. Consult a physician.
- SKIN:** Remove contaminated clothing and wash with soap and water thoroughly.
- INHALATION:** If inhaled, move person into fresh air. If not breathing, perform CPR consult a physician immediately.
- INGESTION:** If large amounts are swallowed, do not induce vomiting, get medical help immediately.

## 5. FIRE FIGHTING MEASURES

- UNUSUAL FIRE AND EXPLOSION:** Upon decomposition oxides of nitrogen, sulfur and hydrogen chloride are produced.
- HAZARDS:** Not Applicable
- EXTINGUISHING MEDIA:** Not combustible
- SPECIAL FIRE FIGHTING PROCEDURES:** Although the product is not combustible, firefighters subject to products of combustion should wear full-protective clothing including self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

- Ventilate area.  
Wear appropriate protective clothing and eye protection.  
Contain spill, scoop up and store in a suitable waste container.  
Wash contaminated areas with soap and water.

## 7. HANDLING AND STORAGE

Keep containers tightly closed in a dry, cool and well-ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### Precautions for safe handling

Avoid inhalation of vapour or mist.  
Normal measures for preventive fire protection.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage



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## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### ROUTES OF ENTRY

**INHALATION:** Yes

**SKIN:** Yes

**INGESTION:** Yes

### HEALTH HAZARDS

**ACUTE:** May cause irritation to eyes, skin, and respiratory tract.

**CHRONIC:** Repeated small oral doses of nitrates may cause weakness, depression, headache, and mental impairment. Chronic exposures may affect ability of blood to carry oxygen, causing the lips and skin to turn blue.

### VENTILATION

**LOCAL EXHAUST:** Good laboratory ventilation is acceptable.

**MECHANICAL (GENERAL):** Use in hoods if possible

**SPECIAL:** None

**OTHER:** None

### PROTECTIVE CLOTHING OR EQUIPMENT

**GLOVES:** Disposable laboratory gloves are adequate

**EYE PROTECTION:** Glasses or goggles.

**RESPIRATORY:** Use appropriate air purifying respirator.

**OTHER:** Lab coats

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Amber liquid

**ODOR:** Pungent odor

**pH:** 1.7 – 3.7

**MOLECULAR WEIGHT:** Not Determined (mixture)

**MELTING POINT:** -21 °C

**BOILING POINT:** 100 °C

**AUTOIGNITION TEMPERATURE:** Not Determined

**FLASH POINT:** Not Determined

**LOWER EXPLOSION LIMIT:** Not Determined

**UPPER EXPLOSION LIMIT:** Not Determined

**SPECIFIC GRAVITY:** 1.2



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## 10. STABILITY & REACTIVITY

<b>STABILITY/CONDITIONS TO AVOID:</b>	Stable under recommended storage conditions.
<b>INCOMPATIBILITY (MATERIALS TO AVOID):</b>	Reducing agents and combustible materials
<b>HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:</b>	No information found
<b>HAZARDOUS POLYMERIZATION:</b>	Not Applicable

## 11. TOXICOLOGY INFORMATION

### PRODUCT TOXICOLOGY INFORMATION:

<b>SYMPTOMS AND SIGNS OF EXPOSURE:</b>	No information found
<b>MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:</b>	No information found
<b>EMERGENCY AND FIRST AID PROCEDURES:</b>	In case of contact, wash skin with copious amounts of soap and water. Flush eyes with copious amounts of water for at least 15 minutes. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Submit to medical examination.
<b>CARCINOGENICITY:</b>	No information found
<b>RTECS #:</b>	No information found
<b>ACGIH TLV TWA:</b>	No information found
<b>OSHA PEL:</b>	No information found
<b>NTP:</b>	No information found
<b>IARC Monographs:</b>	No information found

LD50 Oral - rat - female - 2,630 mg/kg

LD50 Oral - rat - male - 3,350 mg/kg

#### **Skin corrosion/irritation**

Skin - rabbit - Corrosive

#### **Serious eye damage/eye irritation**

Eyes - rabbit - Corrosive to eyes

#### **Respiratory or skin sensitization**

- guinea pig - May cause sensitization by skin contact.

#### **Germ cell mutagenicity**

no data available

#### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Reproductive toxicity**

no data available

#### **Specific target organ toxicity - single exposure (GHS)**

Inhalation - May cause respiratory irritation.

#### **Specific target organ toxicity - repeated exposure (GHS)**



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no data available

**Aspiration hazard**

no data available

**Potential health effects**

**Inhalation** Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Ingestion** May be harmful if swallowed. Causes burns.

**Skin** Toxic if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

**HAZARDOUS COMPONENT TOXICOLOGY INFORMATION:**

<b>Hazardous Components:</b>	<b>No information found</b>
<b>RTECS #</b>	No information found
<b>OSHA PEL</b>	No information found
<b>ACGIH TLV</b>	No information found
<b>TOXICITY DATA</b>	No information found



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## 12. ECOLOGICAL INFORMATION

This product is slightly toxic to crustaceans, highly toxic to fish and zooplankton.

## 13. DISPOSAL CONSIDERATIONS

Contact local hazardous materials or chemical waste disposal agency for regulations.

## 14. TRANSPORT INFORMATION

### IATA CLASSIFICATION:

<b>UN ID NUMBER:</b>	UN 3265
<b>PROPER SHIPPING NAME:</b>	Corrosive liquid, acidic, organic, n.o.s. (5-chloro-2-methyl-2H-isothiazole-3-one)
<b>CLASS OR DIVISION:</b>	8
<b>SUB RISK:</b>	None
<b>HAZARD LABEL(S):</b>	Corrosive
<b>PACKAGING GROUP:</b>	PG II
<b>LIMITED QUANTITY PKG INSTRUCTION:</b>	Y840
<b>MAXIMUM LIMITED QUANTITY:</b>	0.5L
<b>SPECIAL PROVISIONS:</b>	None
<b>ERG CODE:</b>	8L

## 15. REGULATORY INFORMATION

**PRODUCT RISK STATEMENTS:** R8, R36, R37, R38, R39

**PRODUCT SAFETY STATEMENTS:** S17, S26, S36, S37, S39

## 16. OTHER INFORMATION