



MATERIAL SAFETY DATA SHEET

KML-52

Revision Date: 1/1/09

SECTION 1 - COMPANY IDENTIFICATION

Product Name: KML-52
 Company Name: KML, Incorporated
 Company Address: P.O. Box 380
 108 South Main Street
 LaOtto, IN 46763-0380

Company Phone: (800) 423-1879
 Company FAX: (260) 897-3433
 Company Website: www.kmlinc.com
 24 Hour Emergency: (800) 424-9300

Health	3
Flammability	0
Reactivity	0
Protection	D

SECTION 2 - PRODUCT IDENTIFICATION

Primary Hazards	CAS #	% BY WT	ACGIH TLV	OSHA PEL
5-Chloro-2-methyl-4-isothiazolin-3-one	26172-55-4	< 4.1%	0.1 mg/m3 (TWA)	
2-Methyl-4-isothiazolin-3-one	2682-20-4	< 0.4%	1.5 mg/m3 (TWA)	
Magnesium Nitrate	10377-60-3	< 4.7%		

* All other components of this product are considered proprietary information.

SECTION 3 - HAZARDS IDENTIFICATION

Inhalation: May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.

Eyes: Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering, and itching.

Skin: Hazardous in case of skin contact (corrosive, irritant, sensitizer). Skin contact may produce burns.

Ingestion: Material is harmful if swallowed. Ingestion is not expected to be a primary route of exposure.

Chronic Effects: Chronic exposure to material may cause allergic contact dermatitis.

Carcinogenicity: IARC, NTP, and OSHA do not list product ingredients as carcinogenic.

SECTION 4 - FIRST AID MEASURES

Inhalation: If exposure by inhalation is suspected move to fresh air. If individual experiences nausea, headache, dizziness, difficulty breathing or cyanotic seek a health care professional immediately. If breathing stops, have trained personnel give artificial respiration. If breathing is difficult administer oxygen.

Eyes: Do not rub eyes. With eyelids open, flush eyes immediately with water for 15 minutes. Take exposed individual to a health care professional.

Skin: Remove contaminated clothing and footwear. Wash thoroughly with soap and water, and do not reuse clothing until properly cleaned.

Ingestion: DO NOT INDUCE VOMITING. Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately. After first aid, get appropriate medical support. Note to Physicians: Probable mucosal damage may contraindicate the use of gastric lavage. Material is corrosive. Measures against circulatory shock and convulsions may be necessary.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 212 F
Method Used: Pensky-Martens
Flammable Limits: Lower: N/A Upper: N/A

Extinguishing Media: Water fog, Dry chemical, foam and carbon dioxide.

Fire-Fighting Procedures: Use water spray to cool containers to prevent rupture. If spill is ignited, use water spray to disperse vapors. Water may be used to flush spills away from a fire and dilute spills. Do not flush into a storm drain or public sewer.

Hazardous Combustion Products: Hydrogen chloride, nitrogen oxides, sulfur oxides.

Unusual Fire/Explosion Hazards: Closed containers may rupture due to steam pressure build-up if exposed to extreme heat.

Fire-Fighting Equipment: Self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode. Full protective clothing.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Small Spills: WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT (Section 8). Soak up with an absorbent material and place in an approved waste disposal container.

Large Spills: For large spills, collect all spills with inert material. Transfer liquids and solid diking material to separate suitable container for recovery or disposal. This product is a pesticide and spill or leak residuals may meet the criteria of a characteristic hazardous waste under RCRA. Empty containers contain product waste and should be disposed of in a proper manner. Decontaminate spill area with a solution of 10% sodium bisulfite in water. Rinse decontaminated solution to a chemical sewer after standing for 30 minutes. Incineration of liquid and contaminated solids in accordance with local, state and federal regulation is recommended.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

SECTION 7 - HANDLING AND STORAGE

Handling: Use proper PPE and wash thoroughly after handling. Eyewash and safety showers are recommended in the immediate work area. For industrial use only.

Storage: This material is safe to store in well ventilated areas at ambient temperatures. Keep containers closed when not in use. Protect product from freezing.

SECTION 8 - CONTROL MEASURES

Respiratory Protection: Respiratory protection is required for work areas where misting may occur. If necessary, wear MSHA/NIOSH-approved respirator, following OSHA respirator regulations (29 CFR 1910.134).

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Protective Gloves: Rubber, butyl, neoprene, or plastic gloves should be worn when using this material to avoid skin contact.

Eye Protection: Wear protective face shield and eyeglasses or chemical safety goggles and face shield, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Do not wear contact lenses. Appropriate eye protection must be worn instead of contact lenses.

Other Protective Equipment: Not required under normal working conditions. End user must determine if the process or methods involved require other PPE.

Hygienic Practices: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Clear Liquid	pH:	3.0 - 4.0
Appearance and Odor:	Light Green - Mild Aromatic Odor	Water Solubility:	Complete
Vapor Density (Air=1):	0.62 estimate	Boiling Point:	212 F
Specific Gravity:	1.01 - 1.03	Evaporation Rate (BuAc=1):	< 1
		VOC (lbs/gal):	N/D but expected to be zero

SECTION 10 - STABILITY AND REACTIVITY

Stability:	Product is stable at room temperature in closed containers under normal storage and handling conditions.
Polymerization:	Hazardous polymerization cannot occur.
Chemical Incompatibilities:	Strong acids, strong bases, strong oxidizers, reducing agents, amines, and mercaptans.
Conditions to Avoid:	Do not overheat containers.
Hazardous Byproducts:	Thermal decomposition products may include: Hydrogen chloride, nitrogen oxides, sulfur oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Effects:	Oral (LD50) = 3810 mg/kg Rat; Dermal (LD50) = >5000 mg/kg Rabbit; Inhalation (LC50) = 1.4 mg/l (4 hr) Female rat = 1.5 mg/l (4 hr) Male rat.
Irritant Effects:	Very hazardous in eye contact (irritant, corrosive). Hazardous in skin contact (corrosive, irritant, sensitizer). May be harmful if inhaled.
Sensitization Effects:	Skin sensitizer.
Carcinogenic Potential:	IARC, NTP, and OSHA do not list product ingredients as carcinogenic.
Other Health Effects:	Pre-existing skin problems may be aggravated by repeated or prolonged exposure.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Impact:	LC50 = 0.16 mg/l 48 hours Daphnia magna; LC50 = 0.28 mg/l 96 hours Bluegill sunfish.; LC50 = 0.19 mg/l 96 hours Rainbow trout. LC50 = 0.3 mg/l 96 hours Sheepshead minnow.; LC50 = 0.55 mg/l 96 hours Sand shrimp.; LC50 = 0.01 mg/l 96 hours Bay mussel.
------------------------------	--

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal:	Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. Generators of waste material are required to evaluate all waste for compliance with RCRA and any local disposal procedures and/or regulations. NOTE: State and local regulations may be more stringent than federal regulations. Empty Containers: Since empty containers retain material residues, all labeled hazard precautions must be observed.
------------------	--

SECTION 14 - TRANSPORTATION INFORMATION

This material is regulated by the DOT?	Yes
DOT Description from Hazardous Materials Table 49 CFR 172.101:	UN3265, Corrosive liquid, acidic, organic, n.o.s., 8, II, (5-chloro-2-methyl-4-isothiazolin-3-one, 2-Methyl-4-isothiazolin-3-one)
In Case of Transportation Emergency Call CHEMTREC:	(800) 424-9300

SECTION 15 - REGULATORY INFORMATION

RCRA Hazardous Waste Number (40 CFR 261.33):	No components of this product are listed or are above the de minimus levels.
RCRA Hazardous Waste Classification (40 CFR 261):	No components of this product are listed or are above the de minimus levels.
CERCLA Hazardous Substance (40 CFR 302.4):	If this product is to be discarded, it is classified as a hazardous waste (D002 - corrosive.) CERCLA RQ,
CERCLA Reportable Quantity (RQ):	100 lbs,
SARA 312 Hazard Category:	Immediate (Acute) Health Hazard, and Delayed (Chronic) Health Hazard
SARA 313 Toxic Chemical:	Magnesium Nitrate,
SARA 302 Extremely Hazardous Substances List:	No components of this product are listed or are above the de minimus levels.
OSHA Air Contaminant (29 CFR 1910.1000, Table Z-1):	No components of this product are listed or are above the de minimus levels.

SECTION 16 - OTHER INFORMATION

Prepared By:	Ed Hodges	Date Prepared:	January 1, 2009	Supersedes:	March 27, 2006
Title:	General Manager				

ABBREVIATION	DEFINITION	ABBREVIATION	DEFINITION
N/A	Not Applicable	TLV	Threshold Limit Value
N/E	Not Established	PEL	Personal Exposure Limit
N/D	Not Determined	STEL	Short Term Exposure Limit
UNK	Unknown	C	Ceiling Limit
EHS	Environmental, Health, and Safety Department	TCC	Tag Closed Cup
OSHA	Occupational Safety and Health Administration	PNOR	Particulates Not Otherwise Regulated
ACGIH	American Conference of Governmental Industrial Hygienists	PNOC	Particulates Not Otherwise Classified
IARC	International Agency for Research on Cancer	NTP	National Toxicology Program

*** Please Note:** The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

The regulatory listings provided herein are not all inclusive of possible regulation affecting this material. It is the end-user's responsibility to determine all local, state, federal, or international regulation/restrictions that may apply.

SECTION 17 - DISCLAIMER

The information on this Material Safety Data Sheet reflects the latest information and data that we have on the hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application which is not described in the Product Bulletin is the responsibility of the user. This Material Safety Data Sheet was prepared to comply with the OSHA Hazard Communication regulations.