

**ILC RESOURCES  
MATERIAL SAFETY DATA SHEET**

**Section 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION**

ILC RESOURCES  
500 New York Avenue  
Des Moines, IA 50313-4908  
MSDS Information: 1-515-243-8106

24-Hour Emergency Number  
1-515-243-8106

PRODUCT NAME: potassium magnesium sulfate

COMMON NAME: K-Mag-Sulfate

CHEMICAL NAME: potassium magnesium sulfate

CHEMICAL FAMILY: Inorganic salt

CHEMICAL FORMULA:  $K_2SO_4 \cdot 2(MgSO_4)$

**Section 2 – COMPOSITION & INFORMATION ON INGREDIENTS**

INGREDIENTS	PERCENTAGES (by weight)	PEL (OSHA)	TLV (ACGIH)	CAS #
potassium magnesium sulfate	97.3 %	---	---	14977-37-8
chloride salts	2.1%	---	---	---
nuisance dust	< 2%	total dust 15 mg/m <sup>3</sup> TWA respirable dust 5 mg/m <sup>3</sup> TWA	Total dust 10 mg/m <sup>3</sup>	---

**Section 3 – HAZARDS IDENTIFICATIONS**

**\* E M E R G E N C Y   O V E R V I E W \***

Reddish tan to off-white crystals, odorless. Non-flammable. Non-hazardous to eyes, skin and throat.

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Eye contact, dermal, inhalation, ingestion.

ACUTE EFFECTS OF OVEREXPOSURE:

Eyes – Nuisance dust

Skin – Non-hazardous

Inhalation – Non-hazardous

Ingestion – Non-hazardous

CHRONIC EFFECTS OF OVEREXPOSURE: None known

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CARCINOGENICITY:      NTP: No              IARC: No              OSHA: No

Potassium magnesium sulfate is not classified as a hazardous material by the OSHA Hazard Communication Regulation 29CFR Part 1910,.1910.1200, "Hazard Communication."

#### Section 4 – FIRST AID MEASURES

##### EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact - If material comes in contact with the eyes, promptly wash the eyes with water. Get medical attention if any discomfort continues.

Skin Contact – No special precautions; flush with water.

Inhalation - If a person breathes in large amounts of this material, move the exposed person to fresh air at once. Other measures are usually unnecessary.

Ingestion No special precautions, although large oral doses could cause vomiting, gastrointestinal irritation, and diarrhea.

#### Section 5 – FIRE-FIGHTING MEASURES

FLASH POINT: N/A      AUTO IGNITION TEMP: N/A

FLAMMABLE LIMITS IN AIR	<u>LOWER</u>	<u>UPPER</u>
% BY VOLUME	N/A	N/A

EXTINGUISHING MEDIA: Use appropriate media to extinguish source.

SPECIAL FIRE FIGHTING PROCEDURES: N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: Potassium magnesium sulfate is not a fire hazard nor an explosive hazard.

HAZARD RATINGS:    NFPA 704: Health - 0                  Fire - 0                  Reactivity - 0

#### Section 6 – ACCIDENTAL RELEASE MEASURES

Potassium magnesium sulfate is not classified as a “toxic pollutant” or a “hazardous substance” under Sections 307 and 311 of the Clean Water Act. Accidental spills can be cleaned up by sweeping or vacuuming.

#### Section 7 – HANDLING & STORAGE

HANDLING AND STORING: Store in a dry area; material is an animal feed ingredient.

#### Section 8 – EXPOSURE CONTROL – PERSONAL PROTECTION

ENGINEERING CONTROLS: Mechanical ventilation may be necessary to maintain dust below exposure levels.

RESPIRATORY EQUIPMENT: An approved NIOSH dust respirator should be used when dust exposure standard is exceeded (nuisance dust 15 mg/m<sup>3</sup>).

EYE PROTECTION: Safety goggles.

PROTECTIVE CLOTHING: Not essential.

OTHER (SAFETY SHOWERS, EYE WASH STATIONS, ETC.): None

**Section 9 – PHYSICAL & CHEMICAL PROPERTIES**

APPEARANCE: Reddish tan to off-white crystals

ODOR: Odorless

MELTING POINT: 1700 ° F

SPECIFIC GRAVITY (water=1): 2.83

VAPOR PRESSURE: N/A

VAPOR DENSITY (air=1): N/A

SOLUBLE IN WATER: 24.4% @ 77° F

EVAPORATION RATE (ether=1): None

**Section 10 – STABILITY & REACTIVITY**

STABILITY: STABLE X  
UNSTABLE

INCOMPATIBILITY: CONDITIONS TO AVOID: High temperatures above 1000° F  
MATERIALS TO AVOID: None identified.

HAZARDOUS DECOMPOSITION PRODUCTS: Heating of product above 1000° F may release small amounts of sulfur oxides.

HAZARDOUS POLYMERIZATION: Will not occur

**Section 11 – TOXICOLOGY INFORMATION**

None found.

Note: ILC Resources has not conducted specific toxicity tests on this product.

**Section 12 – ECOLOGICAL INFORMATION**

Note: ILC Resources has not conducted specific ecological tests on this product. This product is used as an animal feed ingredient.

**Section 13 – DISPOSAL CONSIDERATION**

WASTE DISPOSAL PROCEDURES: Potassium magnesium sulfate is not classified as a hazardous waste under RCRA Section 3001. Use normal waste disposal procedures which are in compliance with federal, state, and local regulations.

**Section 14 – REGULATORY INFORMATION**

DOT PROPER SHIPPING NAME: Not regulated by DOT DOT HAZARD CLASS: N/A

DOT IDENTIFICATION NUMBER: N/A

DOT EMER. RESPONSE GUIDE NO.: N/A

**Section 15 – OTHER INFORMATION**

This product does not contain toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

SARA SECTION 311–312 HAZARD CATEGORIES (40 CFR 370.2):

FIRE: No      SUDDEN RELEASE OF PRESSURE: No    REACTIVE: No    ACUTE: No    CHRONIC: No

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