

MSDS Form K-MAG (GRANULAR, COMPACTED, PRILLS, STANDARD, FINE)

Material Safety Data Sheet

K-MAG GRANULAR, COMPACTED, PRILLS, MINI PRILLS, STANDARD, FINE  
Product Health & Safety Data Sheet (Approved by U.S. Department of  
Labor, 'Essentially similar to Form OSHA 20, Material Safety Data  
Sheet')

SECTION I PRODUCT IDENTIFICATION

MANUFACTURER: WESTERN AG-MINERALS COMPANY  
16800 Greenspoint Park Drive, Suite 250N  
Houston, TX 77060

TELEPHONE NO: 713-875-5624

EMERGENCY NO: 713-875-5624

TRADE NAME: K-MAG (Granular, Compacted, Prills, Mini Prills,  
Standard, Fines)

SYNONYMS: Langbeinite, Potassium Magnesium Sulfate,  $K_2SO_4 \cdot 2(Mg SO_4)$

SECTION II HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT IN HAZARDOUS CONCENTRATIONS % HAZARD DATA  
None

SECTION III HEALTH EFFECT INFORMATION

EYE CONTACT: May cause irritation of the eyes

SKIN CONTACT: No known effects

INHALATION: May cause irritation of the mucous membranes of the nose  
and throat

INGESTION: No known effects

HEALTH DATA: The Permissible Exposure limit (PEL) for nuisance  
particulates is 15 mg/M<sup>3</sup>.

SYSTEMIC EFFECTS: Potassium sulfate and magnesium sulfate are  
considered to be of a low order of toxicity.

SEE DISCLAIMER OF WARRANTY, at the end of MSDS.

SECTION IV EMERGENCY & FIRST AID PROCEDURES

EYE CONTACT: Wash eyes with water. If large particles are embedded in  
the eye, seek medical attention.

SKIN CONTACT: None required

INHALATION: Remove to fresh air

INGESTION: None required

SECTION V PERSONAL PROTECTION INFORMATION

EYE PROTECTION: Safety glasses or goggles may be worn to protect eyes  
from dust

SKIN PROTECTION: None required

RESPIRATORY PROTECTION: If dust concentrations exceed the PEL a half-  
mask dust respirator should be worn. Disposable type dust mask  
could be used if the exposure is of a short duration or if dust  
concentration is relatively low.

NOTE: Respirators must be NIOSH approved.

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VENTILATION: Adequate ventilation to reduce dust concentrations to below the PEL must be provided.  
OTHER: Wash hands and face with soap and water before eating or smoking.

SECTION VI FIRE PROTECTION INFORMATION

FLASH POINT (TEST METHOD): NA  
AUTO IGNITION TEMPERATURE (DEGREES F): NA  
FLAMMABLE LIMITS IN AIR % VOL: LOWER: NA UPPER: NA  
EXTINGUISHING MEDIA: NA  
SPECIAL FIRE FIGHTING PROCEDURE: None indicated  
UNUSUAL FIRE AND EXPLOSIVE CONDITIONS: None  
HAZARDOUS COMBUSTION PRODUCTS: None

SECTION VII REACTIVITY DATA

STABILITY (THERMAL, LIGHT, ETC.): STABLE  
CONDITIONS TO AVOID: NA  
INCOMPATIBILITY (MATERIALS TO AVOID): None  
HAZARDOUS DECOMPOSITION PRODUCTS: None  
HAZARDOUS POLYMERIZATION: Stable  
CONDITIONS TO AVOID: NA

SECTION VIII ENVIRONMENTAL PRECAUTIONS

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dust may be vacuumed or swept up.  
WASTE DISPOSAL METHOD: Disposal methods must conform to local, state and federal regulations. Large quantities may be disposed of at approved sanitary landfills.

SECTION IX SPECIAL PRECAUTIONS

HANDLING AND STORAGE REQUIREMENTS: None  
PRECAUTIONARY STATEMENTS: None

SECTION X PHYSICAL PROPERTIES

BOILING POINT (DEGREES C): Unknown  
MELTING POINT (DEGREES C): 927 degrees C  
SOLUBILITY: Soluble in water  
VAPOR PRESSURE (mmHg, TEMP): NA  
SPECIFIC GRAVITY (H2O=1): 2.8  
APPEARANCE, COLOR, ODOR, ETC.: Tetrahedral Crystals, pink to gray color  
MOLECULAR WEIGHT: 415  
PERCENT VOLATILE BY VOLUME (5): NA  
VAPOR DENSITY (AIR=1): NA  
VAPORATION RATE ( =1): NA  
OTHER:

APPROVED: G.R. Hagstrom

DATE: August, 1991

MIX for KHMAG (GRANULAR, COMPACTED, PRILL STANDARD, FILL)

The above information is based on data available to us and is believed to be correct. However, NO WARRANTY of MERCHANTABILITY, FITNESS for any use or any other warranty is expressed or to be implied regarding the accuracy of these data, the results to be obtained from the use thereof, the hazards connected with the use of the material, or that any such use will not infringe any patent. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, we do not assume any responsibility for the results of its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

REQUIRED UNDER USDL SAFETY AND HEALTH REGULATIONS FOR SHIP REPAIRING, SHIPBUILDING AND SHIP BREAKING (29 CFR 1915, 1916, 1917)