

MAGNESIUM SULPHATE

\*\*\* OFFICE REQUEST \*\*\*

ORDER NO:  
PROD NO: 04380989

VAN WATERS & ROGERS INC., SUBSIDIARY OF UNIVAR  
1600 NORTON BLDG. SEATTLE, WA 98104-1564 (408) 435-8700

-----EMERGENCY ASSISTANCE-----

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL CHEMTREC (800)424-9300

-----FOR PRODUCT AND SALES INFORMATION-----

CONTACT YOUR LOCAL VAN WATERS & ROGERS BRANCH OFFICE

-----PRODUCT IDENTIFICATION-----

PRODUCT NAME: EPSOM SALT, TECHNICAL CAS NO.: 10034-99-8  
COMMON NAMES/SYNONYMS: MAGNESIUM SULFATE VW&R CODE: T1418006  
HEPTAHYDRATE: BITTER SALTS

FORMULA: Mg O4 S . 7 H2O DATE ISSUED: 08/89  
HAZARD RATING (NFPA 704) SUPERCEDES: 05/86  
HEALTH: 0 HAZARD RATING SCALE:  
FIRE: 0 0=MINIMAL 3=SERIOUS  
REACTIVITY: 0 1=SLIGHT 4=SEVERE  
SPECIAL: NONE 2=MODERATE

-----HAZARDOUS INGREDIENTS-----

COMPONENT	%	EXPOSURE LIMITS, PPM			HAZARD
		OSHA PEL	ACGIH TLV	OTHER LIMIT	
MAGNESIUM SULFATE HEPTAHYDRATE	>99	NONE	NONE	NONE	NONE

-----PHYSICAL PROPERTIES-----

BOILING POINT, DEG F: N/A VAPOR PRESSURE, MM HG/20 DEG C: N/A  
MELTING POINT, DEG F: 392 (-H2O) VAPOR DENSITY (AIR=1): N/A  
SPECIFIC GRAVITY (WATER=1): 1.68 WATER SOLUBILITY, %: SOLUBLE  
APPEARANCE AND ODOR: EVAPORATION RATE (BUTYL ACETATE=1): N/A  
CLEAR CRYSTAL; ODORLESS

-----FIRST AID MEASURES-----

IF INHALED: REMOVE TO FRESH AIR, GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET IMMEDIATE MEDICAL ATTENTION.  
IN CASE OF EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LOTS OF RUNNING WATER FOR 15 MINUTES. LIFTING THE UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION.  
IN CASE OF SKIN CONTACT: WASH OFF IN FLOWING WATER.  
IF SWALLOWED: IF LARGE AMOUNTS INGESTED, IMMEDIATELY INDUCE VOMITING BY GIVING 2 GLASSES OF WATER AND STICKING A FINGER DOWN THE THROAT. GET

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IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCON-

-----HEALTH HAZARD INFORMATION-----

PRIMARY ROUTES OF EXPOSURE: EYE CONTACT.

SIGNS AND SYMPTOMS OF EXPOSURE  
INHALATION: BREATHING DUST MAY IRRITATE THE NOSE AND THROAT AND  
CAUSE COUGHING AND CHEST DISCOMFORT.

EYE CONTACT: DUSTS MAY IRRITATE THE EYES AND CAUSE SLIGHT TRANSIENT  
CORNEAL INJURY.

SKIN CONTACT: PROLONGED OR REPEATED CONTACT WITH THE DUST MAY  
IRRITATE THE SKIN.

SWALLOWED: SWALLOWING LARGE AMOUNTS MAY CAUSE CATARRHS, VOMITING,  
CRAMPS AND/OR DIARRHEA.

CHRONIC EFFECTS OF EXPOSURE: NO SPECIFIC INFORMATION AVAILABLE.  
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE KNOWN.

-----TOXICITY DATA-----

ORAL: RAT LD50 > 4000 MG/KG  
DERMAL: NO DATA FOUND  
INHALATION: NO DATA FOUND

CARCINOGENICITY: THIS MATERIAL IS NOT CONSIDERED TO BE A CARCINOGEN  
BY THE NATIONAL TOXICOLOGY PROGRAM, THE INTERNATIONAL AGENCY FOR  
RESEARCH ON CANCER, OR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OTHER DATA: NONE

-----PERSONAL PROTECTION-----

VENTILATION: LOCAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MINIMIZING  
DUST EMISSIONS AT THE POINT OF USE.

RESPIRATORY PROTECTION: NIOSH-APPROVED DUST RESPIRATOR OR MASK IN THE  
ABSENCE OF ADEQUATE ENVIRONMENTAL CONTROLS AT THE POINT OF USE.

EYE PROTECTION: SAFETY GLASSES WITH SIDE SHIELDS.  
PROTECTIVE CLOTHING: LONG-SLEEVED SHIRT, TROUSERS, AND SAFETY SHOES.

OTHER PROTECTIVE MEASURES: AN EYEWASH AND SAFETY SHOWER SHOULD BE  
NEARBY AND READY FOR USE.

-----FIRE AND EXPLOSION INFORMATION-----

FLASH POINT, DEG F: N/A  
METHOD USED: N/A  
FLAMMABLE LIMITS IN AIR, %  
LOWER: N/A UPPER: N/A  
EXTINGUISHING MEDIA: THIS MATERIAL IS NOT COMBUSTIBLE. USE ANY APPRO-  
PRIATE MEDIUM FOR EXTINGUISHING SURROUNDING FIRE.

SPECIAL FIRE FIGHTING PROCEDURES: NONE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE.

-----HAZARDOUS REACTIVITY-----

STABILITY: STABLE  
POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: EXTREMELY HIGH TEMPERATURES.

MATERIALS TO AVOID: PHOSPHORUS, MALEIC ANHYDRIDE.

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HAZARDOUS DECOMPOSITION PRODUCTS: MAY LIBERATE SULFUR OXIDES AND MAGNESIUM OXIDE AT VERY HIGH TEMPERATURES. INHALATION OF MAGNESIUM OXIDE FUMES CAN CAUSE METAL FUME FEVER AND LEUKOCYTOSIS.

-----SPILL, LEAK, AND DISPOSAL PROCEDURES-----

ACTION TO TAKE FOR SPILLS OR LEAKS: WEAR PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON, AND CHEMICAL GOGGLES. FOR SMALL SPILLS, SWEEP UP AND DISPOSE OF IN DOT-APPROVED WASTE CONTAINERS. FOR LARGE SPILLS, SHOVEL INTO DOT-APPROVED WASTE CONTAINERS. COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS ON SPILL REPORTING, AND HANDLING AND DISPOSAL OF WASTE.

DISPOSAL METHODS: DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES.

NOTE: EMPTY CONTAINERS CAN HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

-----SPECIAL PRECAUTIONS-----

STORAGE AND HANDLING PRECAUTIONS: STORE IN A COOL, DRY PLACE. KEEP CONTAINERS DRY AT ALL TIMES. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.

REPAIR AND MAINTENANCE PRECAUTIONS: NONE.

OTHER PRECAUTIONS: CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL.

-----FOR ADDITIONAL INFORMATION-----

CONTACT MSDS COORDINATOR, VAN WATERS & ROGERS INC.  
DURING BUSINESS HOURS, PACIFIC TIME (408)435-8700

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-----REVISION-----

05/86: CORRECTED TYPOGRAPHICAL ERROR IN ORAL TOXICITY DATA AND IN FIRST AID FOR SWALLOWING.

08/89: CHANGED HEADING AND CONTACT INFORMATION.

\*\*\*\* E N D O F M S D S \*\*\*\*

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