

MATERIAL SAFETY DATA SHEET

EM SCIENCE

-1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER.....:

PREPARATION DATE.: 12/09/92
DATE MSDS PRINTED.: DEC 21, 1992

EM SCIENCE
A DIVISION OF EM INDUSTRIES
P.O. BOX 70
480 DEMOCRAT RD.
GIBBSTOWN, N.J. 08027

INFORMATION PHONE NUMBER.: 609-354-9200
HOURS: MON. TO FRI. 8:30-5
CHEMTREC EMERGENCY NUMBER: 800-424-9300
HOURS: 24 HRS A DAY

CATALOG NUMBER(S):

MX0070 MX0078 MX0080 MX0208

CHEMICAL NAME.....:

MAGNESIUM SULFATE

TRADE NAME.....:

EPSOM SALTS

CHEMICAL FAMILY.: INORGANIC SALT

FORMULA.....: 1000 PPM BA IN SOLUTION

MOLECULAR WEIGHT.: 246.5

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	APPR %
MAGNESIUM SULFATE	10034-99-8	100%

-3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HANDLING CARE GENERALLY IN KEEPING WITH SAFE LABORATORY PRACTICES IS RECOMMENDED.

APPEARANCE.....:

WHITE ODORLESS CRYSTALS

POTENTIAL HEALTH EFFECTS (ACUTE AND CHRONIC)

SYMPTOMS OF EXPOSURE:

DUST INHALATION MAY IRRITATE UPPER RESPIRATORY PASSAGES.

MEDICAL COND. AGGRAVATED BY EXPOSURE:
DATA NOT AVAILABLE.

ROUTES OF ENTRY.....:
INHALATION, INGESTION

CARCINOGENICITY.....:
THE MATERIAL IS NOT LISTED (IARC, NTP, OSHA) AS CANCER CAUSING
AGENT.

-4. FIRST AID MEASURES

EMERGENCY FIRST AID:
GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.
SKIN: WASH THOROUGHLY WITH SOAP AND WATER.
EYES: IMMEDIATELY FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15
MINUTES.
DUST INHALATION: REMOVE TO FRESH AIR.
INGESTION: GET IMMEDIATE MEDICAL ATTENTION; IF CONSCIOUS, GIVE
WATER FREELY.

5. FIRE FIGHTING MEASURES

FLASH POINT (F).....: NONCOMBUSTIBLE
FLAMMABLE LIMITS LEL (%): N/A
FLAMMABLE LIMITS UEL (%): N/A
EXTINGUISHING MEDIA.....:
USE ANY SUITABLE FOR ADJACENT MATERIAL.

FIRE FIGHTING PROCEDURES.:
WEAR SELF-CONTAINED BREATHING APPARATUS.

FIRE & EXPLOSION HAZARDS.:
THERMAL DECOMPOSITION PRODUCES TOXIC FUMES.

6. ACCIDENTAL RELEASE MEASURES

SPILL RESPONSE:
EVACUATE THE AREA OF ALL UNNECESSARY PERSONNEL.
WEAR SUITABLE PROTECTIVE EQUIPMENT LISTED UNDER EXPOSURE /
PERSONAL PROTECTION.
ELIMINATE ANY IGNITION SOURCES UNTIL THE AREA IS DETERMINED TO BE
FREE FROM EXPLOSION OR FIRE HAZARDS.
CONTAIN THE RELEASE AND ELIMINATE ITS SOURCE, IF THIS CAN BE DONE
WITHOUT RISK.
TAKE UP AND CONTAINERIZE FOR PROPER DISPOSAL AS DESCRIBED UNDER
DISPOSAL.
COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS ON REPORTING
RELEASES. REFER TO REGULATORY INFORMATION FOR REPORTABLE

QUANTITY AND OTHER REGULATORY DATA.

7. HANDLING AND STORAGE

HANDLING & STORAGE:

- KEEP CONTAINER CLOSED.
- STORE AT CONTROLLED ROOM TEMPERATURE.
- DO NOT BREATHE DUST.
- DO NOT GET IN EYES.
- AVOID PROLONGED, OR REPEATED, SKIN CONTACT.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

- VENTILATION, RESPIRATORY PROTECTION, PROTECTIVE CLOTHING, EYE PROTECTION MATERIAL SHOULD BE HANDLED OR TRANSFERRED IN AN APPROVED FUME HOOD OR WITH ADEQUATE VENTILATION.
- PROTECTIVE GLOVES (NEOPRENE, PVC OR EQUIVALENT) SHOULD BE WORN TO PREVENT SKIN CONTACT
- SAFETY GLASSES WITH SIDE SHIELDS SHOULD BE WORN AT ALL TIMES.

WORK / HYGENIC PRACTICES:

- WASH THOROUGHLY AFTER HANDLING.
- DO NOT TAKE INTERNALLY.
- EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

EXPOSURE GUIDELINES

OSHA - PEL:

COMPONENT	TWA		STEL		CL		SKIN
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
MAGNESIUM SULFATE							

ACGIH - TLV:

COMPONENT	TWA		STEL		CL		SKIN
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
MAGNESIUM SULFATE							

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (C 760 MMHG): N/A
MELTING POINT (C): 1124C DECOMP.
SPECIFIC GRAVITY (H2O = 1): 1.67
VAPOR PRESSURE (MM HG): N/A
PERCENT VOLATILE BY VOL (%): N/A
VAPOR DENSITY (AIR = 1): N/A
EVAPORATION RATE (BUAC = 1): N/A
SOLUBILITY IN WATER (%): SOLUBLE
APPEARANCE:
WHITE ODORLESS CRYSTALS

10. STABILITY AND REACTIVITY

STABILITY: YES

HAZARDOUS POLYMERIZATION:
DOES NOT OCCUR

HAZARDOUS DECOMPOSITION:
SOX

CONDITIONS TO AVOID:

EXTREME HEAT

MATERIALS TO AVOID:

() WATER
() ACIDS
() BASES
() CORROSIVES
() OXIDIZERS
(X) OTHER :
NONE INDICATED

-11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

ORL-MAN TDLO: 183 MG/KG/4H-I

TOXICOLOGICAL FINDINGS:

NONE

CITED IN REGISTRY OF TOXIC EFFECTS OF SUBSTANCES (RTECS)

12. DISPOSAL CONSIDERATIONS

EPA WASTE NUMBERS:

TREATMENT:

MATERIAL DOES NOT HAVE AN EPA WASTE NUMBER AND IS NOT A LISTED WASTE, HOWEVER CONSULTATION WITH A PERMITTED WASTE DISPOSAL SITE (TSD) SHOULD BE ACCOMPLISHED.
 ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

13. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME...: NON-REGULATED

DOT ID NUMBER.....: NONE

14. REGULATORY INFORMATION

TSCA INVENTORY.....: THIS PRODUCT IS A "MIXTURE". THE CAS NUMBERS OF ALL COMPONENTS ARE LISTED ON THE TSCA INVENTORY.

COMPONENT	SARA EHS (302)	SARA EHS TPQ (LBS)	CERCLA RQ (LBS)
MAGNESIUM SULFATE			

COMPONENT	OSHA FLOOR LIST	SARA 313	DEMINIMIS FOR SARA 313 (%)
MAGNESIUM SULFATE			

15. OTHER INFORMATION

COMMENTS:
NONE

NFPA HAZARD RATINGS:
 HEALTH : 2
 FLAMMABILITY : 0
 REACTIVITY : 0
 SPECIAL HAZARDS :

REVISION HISTORY:
 03/01/82 10/23/86 10/27/87 03/01/91
 - = REVISED SECTION

N/A = NOT AVAILABLE
N/E = NONE ESTABLISHED

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MSDS - MX0070

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