Material Safety Data Sheet





Magnesium Aluminum Silicate -

C.A.S. Number: 1302-78-9 / MSDS C.A.S. Code: 0750

(HECTORITE 353)

MATERIAL SAFETY DATA SHEET:

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT/MATERIAL: MAGNESIUM ALUMINUM SILICATE

MANUFACTURER/DISTRIBUTOR: MINERAL AND PIGMENT SOLUTIONS, INC.

ADDRESS: 1000 COOLIDGE STREET

SOUTH PLAINFIELD, NJ 07080

EMERGENCY TELEPHONE NO. (908) 561-6100

SECTION II - COMPOSITION, INFORMATION ON INGREDIENTS:

CHEMICAL NAME: MAGNESIUM ALUMINUM SILICATE

CAS NUMBER: 12199-37-0

HAZARDOUS INGREDIENTS: CRYSTALLINE SILICA (QUARTZ, 14808-60-7) IS PRESENT AT LESS THAN 1.0% AS A NATURALLY OCCURRING COMPONENT NOT REMOVED FROM THE CLAY ORE DURING PROCESSING. SEE SECTION 11 FOR FURTHER INFORMATION.

SECTION III -HAZARDS IDENTIFICATION:

HMIS RATING: HEALTH: 1*

 $(*POSSIBLE\ HAZARD\ FROM\ CHRONIC\ EXPOSURE\ TO\ DUST,\ SEE\ SECTION\ 11)$

FLAMMABILITY: 0
REACTIVITY: 0
PERSONAL PROTECTION: E

EMERGENCY OVERVIEW: UNDER NORMAL USAGE OR CONTAINED SPILLS THIS MATERIAL DOES NOT POSE A SIGNIFICANT EMERGENCY RISK. THIS MATERIAL IS VERY SLIPPERY WHEN WETTED WITH WATER. APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO AVOID SLIPS AND FALLS.

POTENTIAL HEALTH EFFECTS:

EYE - MAY CAUSE SLIGHT EYE IRRITATION. DIRECT CONTACT SHOULD BE AVOIDED TO PREVENT PHYSICAL ABRASION.

SKIN - NONE KNOWN

INHALATION - SHORT TERM EXPOSURE TO HIGH DUST LEVELS COULD CAUSE MINOR IRRITATION. LONG TERM EXPOSURE TO HIGH CONCENTRATIONS OF DUST SHOULD BE AVOIDED DUE TO THE PRESENCE OF QUARTZ, WHICH CAN CAUSE SEVERE AND PERMANENT LUNG DAMAGE WHEN INHALED. CONTROL DUST LEVELS WITH USE OF A NIOSH APPROVED DUST RESPIRATOR IF ENGINEERING CONTROLS ARE INADEQUATE.

Information presented herein is believed to be accurate and reliable but is not intended to meet any specification and does not imply any guarantee or warranty by Mineral and Pigment Solutions, Inc. (MPSI). For more information and assistance, contact Technical Services at 1 (908) 561-6100.

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CARCINOGENICITY - IARC HAS CLASSIFIED CRYSTALLINE SILICA AS A HUMAN CARCINOGEN, CLASS 1. **TARGET ORGAN** - LUNGS.

SECTION IV - EMERGENCY AND FIRST AID MEASURES:

SKIN - WAS OFF WITH SOAP AND WATER

EYE - FLUSH WITH TEPID WATER FOR 15 MINUTES

INHALATION - REMOVE PERSON TO FRESH AIR. SEEK MEDICAL ATTENTION IF SHORTNESS OF BREATH OR IRRITATION PERSISTS.

INGESTION - COULD RESULT IN INTESTINAL BLOCKAGE. IF LARGE AMOUNTS ARE SWALLOWED SEEK MEDICAL ATTENTION.

NOTES TO PHYSICIAN - MIXTURE IS ORALLY NON-TOXIC. SEE SECTION 11 FOR ADDITIONAL TOXICOLOGICAL INFORMATION.

SECTION V - FIRE FIGHTING MEASURES:

FLASHPOINT:

UPPER EXPLOSIVE LIMIT:

LOWER EXPLOSIVE LIMIT:

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

THIN-FILM IGNITION TEMPERATURE:

NOT APPLICABLE

HAZARDOUS COMBUSTION PRODUCTS: NONE

BASIC FIRE FIGHTING GUIDANCE: USE APPROPRIATE MEASURES FOR SURROUNDING FIRE

EXTINGUISHING MEDIA: NOT APPLICABLE

SECTION VI - ACCIDENTAL RELEASE MEASURES:

WET DOWN LARGE SPILLS WITH WATER MIST TO AVOID GENERATING EXCESSIVE DUST LEVELS. CAUTION: THIS MATERIAL IS VERY SLIPPERY WHEN WET. APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO AVOID SLIPS AND FALLS.

CLEAN-UP PROCEDURES AND EQUIPMENT: USE OF A DUSTLESS VACUUM SYSTEM OR SHOVELING. FLUSHING WITH WATER IS ALSO AN ACCEPTABLE METHOD. AVOID DRY SWEEPING OR OTHER METHODS THAT MAY GENERATE HIGH DUST CONCENTRATIONS. WEAR NIOSH APPROVED DUST RESPIRATOR.

SECTION VII - HANDLING AND STORAGE:

HANDLING: ADEQUATE VENTILATION IS NECESSARY IN HANDLING AREAS TO PREVENT EXCESSIVE AIRBORNE DUST.

STORAGE: STORE IN CLOSED CONTAINERS IN A DRY AREA.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION:

ENGINEERING CONTROLS: PROVIDE GENERAL OR LOCAL VENTILATION ADEQUATE TO MAINTAIN AIRBORNE LEVELS BELOW OCCUPATIONAL EXPOSURE LIMITS.

PERSONAL PROTECTIVE EQUIPMENT:

EYE - USE SAFETY GOGGLES OR GLASSES

SKIN - NONE

RESPIRATORY PROTECTION - USE A NIOSH APPROVED, AIR PURIFYING DUST RESPIRATOR IF DUST DEVELS ARE APOVE EXPOSURE LIMITS. HALF-MAKS ARE USUALLY SUFFICIENT FOR NORMAL USE.

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SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: SOFT WHITE FLAKES OR POWDER

ODOR: NONE PHYSICAL STATE: SOLID

MELTING POINT:

VAPOR PRESSURE:

NOT APPLICABLE

NOT APPLICABLE

NOT APPLICABLE

SPECIFIC GRAVITY: 2.5

pH: NOT APPLICABLE
 BOILING POINT: NOT AVAILABLE
 SOLUBILITY IN WATER: NOT APPLICABLE

SECTION X - STABILITY AND REACTIVITY:

INCOMPATIBLES: NONE

CONDITIONS TO AVOID: NOT APPLICABLE

STABILITY: THIS MATERIAL IS STABLE UNDER NORMAL STORAGE AND HANDLING CONDITIONS.

HAZARDOUS POLYMERIZATION: NOT APPLICABLE

SECTION XI - TOXOLOGICAL INFORMATION:

THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER HAS DETERMINED THAT OVER-EXPOSURE TO CRYSTALLINE SILICA CAN CAUSE LUNG CANCER AND SILICOSIS, A PROGRESSIVE LUNG DISEASE IN HUMANS. HEALTH EFFECTS FROM EXPOSURE TO CRYSTALLINE SILICA OCCUR ONLY HEN IT IS INHALED.

INHALATION EFFECTS: CRYSTALLINE SIOLICA HAS BEEN SHOWN TO CAUSE SILICOSIS AND LUNG CANCER. CRYSTALLINE SILICA ONLY CAUSES THESE CONDITIONS WHEN INHALED.

SKIN CONTACT - PROLONGED SKIN CONTACT MAY LEAD TO DRYING OR CRACKING OF THE SKIN DUT TO THE ABSORPTION OF MOISTURE.

EYE CONTACT - AS WITH ANY DUST, WILL BE IRRITATING TO THE EYES DUE TO PHYSICAL ABRASION.

MEDICAL CONDITIONS AGGREVATED - RESPIRATORY DISORDERS.

OCCUPATIONAL EXPOSURE LIMITS - STUDIES HAVE SHOWN THAT THE CRYSTALLINE SILICA IS EVENLY DISTRIBUTED THROUGHOUT ALL PARTICLE SIZES OF THIS PRODUCT. KEEP DUST LEVELS BELOW PERMISSIBLE LIMITS.

ACGIH TWA 0.1 mg/cu.m. (as quartz)

ACGIH STEL N.A.

OSHA PEL (respirable) $10 \text{ mg/cu.m.} / \% \text{SiO}_2 + 2$ OSHA PEL (total dust) $30 \text{ mg/cu.m.} / \% \text{SiO}_2 + 2$

SECTION XII - ECOLOGICAL INFORMATION:

ECOLOGICAL INFORMATION: NONE KNOWN

SECTION XIII - DISPOSAL CONSIDERATIONS:

DISPOSE OF IN A MANNER ACCORDANCE WITH LOCAL AND FEDERAL REGULATIONS. THIS INFORMATION APPLIES TO MATERIAL AS MANUFACTURED; CONTAMINATION OR PROCESSING MAY CHANGE WASTE CHARACTERISTICS AND REQUIREMENTS.

SECTION XIV - TRANSPORT INFORMATION:

THIS MATERIAL IS NOT REGISTERED BY THE DEPARTMENT OF TRANSPORTATION.

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MATERIAL SAFETY DATA

SECTION XV - REGULATORY INFORMATION:

STATE: CONSULT LOCAL AND STATE HAZARD COMMUNICATION REGULATIONS.

FEDERAL: SARA 313: NONE KNOWN

TSCA:

EUROPEAN INDUSTRY:

CANADIAN DSL:

AUSTRALIAN AICS:

LISTED

EXEMPT

LISTED

CALIFORNIA PROPOSITION 65: CRYSTALLINE SILICA IN AIRBORNE PARTICLES OF RESPIRABLE SIZE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

EUROPE: QUARTS EXPOSURE LIMITS.

 BELGIUM:
 0.1 mg/cu.m. TWA

 DENMARK:
 0.1 mg/cu.m. TWA

 SWEDEN:
 0.1 mg/cu.m. TWA

 U.K.
 0.1 mg/cu.m. (respirable)

 0.3 mg/ cu.m. (total dust)

 RUSSIA:
 14.0 mg/cu.m. (STEL)

 THAILAND:
 10.0 mg/cu.m. (respriable)

30.0 mg/cu.m. (total dust)

 FINLAND:
 0.2 mg/cu.m. TWA

 GERMANY:
 0.2 mg/cu.m. TWA

 SWITZERLAND:
 0.15 mg/cu.m. TWA

NOTE: DIFFERENT COUNTRIES APPLY QUARTZ OCCUPATIONAL EXPOSURE LIMITS IN DIFFERENT MANNERS, DEPENDING ON HOW THEY DEFINE "REPIRABLE" FRACTION, AND MASS PERCENTAGE OF A TOTAL MIXTURE: CONSULT LOCAL AUTHORITIES FOR APPLICATION.

SECTION XVI - OTHER INFORMATION:

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Issued: 11/02 Supercedes: 1/97

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