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 919-781-4550

MATERIAL SAFETY DATA SHEET

Effective Date: 5-08
 Replaces: 12-05-2000

I – PRODUCT AND COMPANY IDENTIFICATION		
CHEMICAL NAME Gypsum	CHEMICAL FORMULA CaSO ₄ • 2H ₂ O	MOLECULAR WEIGHT 172.2
TRADE NAME Gypsum		
SYNONYMS Calcium(II) sulfate dihydrate, Gypsum stone, Hydrated calcium sulfate, Mineral white		DOT IDENTIFICATION NO. None

II – COMPOSITION/INFORMATION ON INGREDIENTS				
COMPONENT(S) CHEMICAL NAME	CAS REGISTRY NO	% by weight (approx)	MSHA/OSHA PEL	ACGIH TLV-TWA
Calcium Sulfate, Dihydrate	13397-24-5	49-99.9	(T) 15 mg/m ³ , (R) 5 mg/m ³	(I) 10 mg/m ³

(T) =total dust (R)= respirable dust (I)= Inhalable fraction

III – HAZARDS IDENTIFICATION	
White powder or colorless, crystalline solid [Note: May have blue, gray, or reddish tinge]. Odorless.	
Health Effects: The information below represents an overview of health effects caused by overexposure to one or more components in gypsum. The individual effects are described in Section XI.	
Primary routes(s) of exposure:	<input checked="" type="checkbox"/> Inhalation <input type="checkbox"/> Skin <input checked="" type="checkbox"/> Ingestion
EYE CONTACT:	Direct contact with dust may cause irritation by mechanical abrasion.
SKIN CONTACT:	Direct contact may cause irritation by mechanical abrasion.
SKIN ABSORPTION:	Not expected to be a significant route of exposure.
INGESTION:	If ingested, intestinal obstruction may occur if the material hardens, especially in the pyloric region.
INHALATION:	Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing and shortness of breath may occur following exposures in excess of appropriate exposure limits.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	
Inhaling respirable dust may aggravate existing respiratory system disease(s) and/or dysfunctions.	
Exposure to dust may aggravate existing skin and/or eye conditions. Smoking and obstructive/restrictive lung diseases may also exacerbate the effects of excessive exposure to this product.	

IV – FIRST AID MEASURES

EYES:	In case of contact, immediately flush eyes with plenty of water for a minimum of 15 minutes. Warm water is recommended, but cold water may be used.
SKIN:	In case of skin contact, immediately rinse skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation persists..
INGESTION:	Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control center immediately.
INHALATION:	If a person breathes large amounts of this product, move the exposed person to fresh air at once. Other measures are usually unnecessary.

V – FIRE FIGHTING MEASURES

FLASHPOINT Not flammable	FLAMMABLE LIMITS IN AIR Not flammable
EXTINGUISHING AGENT None required	
UNUSUAL FIRE AND EXPLOSION HAZARD None	

VI – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Sweep or vacuum spilled material into waste container for disposal. Avoid creating excessive dust. Wear approved respirators if necessary. Do not wash down drains, this material may plug drains.

None of the components in this product are subject to the reporting requirements of Title III of SARA, 1986, and 40 CFR 372.

VII – HANDLING AND STORAGE

Be sure proper ventilation, and respiratory and eye protection are used under dusty conditions. Dew point conditions or other conditions causing presence of moisture will harden gypsum during storage. Excessive particulate concentrations in work place air must be avoided even though it is inert and non-toxic.

VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS
Ventilation: Use local exhaust, general ventilation or natural ventilation adequate to maintain exposures below appropriate exposure limits. If a person breathes large amounts of this material, move the exposed person to fresh air at once; other measures are usually unnecessary.

EYE/FACE PROTECTION
Safety glasses with side shields should be worn as minimum protection. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated. If product contacts the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately. Contact lenses should not be worn when working with this material.

SKIN PROTECTION
Workers should wear close-fitting working clothes of dust-tight material.

RESPIRATORY PROTECTION

Respirator Recommendations:

NIOSH/MSHA approved respirator for nuisance dust.

Emergency or planned entry into unknown concentrations or IDLH conditions: Any self-contained breathing apparatus that has a full-face piece and is operated in a pressure-demand or other positive-pressure mode or any supplied-air respirator that has a full-face piece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus.

Escape from unknown or IDLH conditions: Any air-purifying, full-face piece respirator with a high-efficiency particulate filter or any appropriate escape-type, self-contained breathing apparatus.

GENERAL HYGIENE CONSIDERATIONS

There are no known hazards associated with this material when used as recommended. Following the guidelines in this MSDS are recognized as good industrial hygiene practices. Avoid breathing dust. Avoid skin and eye contact. Wash dust-exposed skin with soap and water before eating, drinking, smoking, and using toilet facilities. Wash work clothes after each use.

IX— PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR

White powder or colorless, crystalline solid [Note: May have blue, gray, or reddish tinge]. Odorless.

SPECIFIC GRAVITY.

2.17 – 2.32

BOILING POINT

Not applicable

VAPOR DENSITY IN AIR (AIR = 1)

Not applicable

VAPOR PRESSURE

Not applicable

% VOLATILE, BY VOLUME

0%

EVAPORATION RATE

Not applicable

SOLUBILITY IN WATER

0-.2% @ 40C

X – STABILITY AND REACTIVITY

STABILITY

Stable

CONDITIONS TO AVOID

Items listed in Incompatibility

INCOMPATIBILITY (Materials to avoid)

Aluminum (at high temperatures), diazomethane

HAZARDOUS DECOMPOSITION PRODUCTS

When heated to high temperatures gypsum may emit toxic fumes of oxides of sulfur and calcium.

XI – TOXICOLOGICAL INFORMATION

Calcium Sulfate, Dihydrate:

Exposure route: Inhalation, skin and/or eye contact

Target Organs: Eyes, skin, respiratory system

Acute Effect: Calcium sulfate dust has an irritant action on mucous membranes of the respiratory tract and eyes. There have been reports of conjunctivitis, chronic rhinitis, laryngitis, pharyngitis, impaired sense of smell and taste, bleeding from the nose and reactions of tracheal and bronchial membranes in exposed workers. .

Chronic Effect: N/A

XII – ECOLOGICAL INFORMATION

No data available.

XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

May be disposed of as an inert solid in sanitary landfill or by other procedures in accordance with all federal, state, and local regulations. May be used as a supplement on land and on some agricultural products.

XIV – TRANSPORT INFORMATION

DOT HAZARD CLASSIFICATION

None

PLACARD REQUIRED

None

LABEL REQUIRED

Label as required by the OSHA Hazard Communication standard {29 CFR 1910.1200(f)}, and applicable state and local regulations.

XV – REGULATORY INFORMATION

FDA: Product is manufactured for use as building construction material, agricultural applications, or other industrial applications. As such, FDA regulations are not deemed applicable.

XVI – OTHER INFORMATION

ACGIH: American Conference of Governmental Industrial Hygienists
CFR: US Code of Federal Regulations
DOT: US Department of Transportation
IARC: International Agency for Research on Cancer
IDLH: Immediately Dangerous to Life and Health
NIOSH: National Institute for Occupational Safety and Health, US Department of Health and Human Services
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration, US Department of Labor
PEL: Permissible Exposure Limit
SARA Title III: Title III of the Superfund Amendments and Reauthorization Act, 1986
TLV: Threshold Limit Value
TWA: Time-weighted Average
FDA: Food and Drug Administration

FOR FURTHER INFORMATION

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DATE OF PREPARATION 5/08

NOTICE: Martin Marietta Materials believes that the information contained on this Material Safety Data Sheet is accurate. The suggested precautions and recommendations are based on recognized good work practices and experience as of the date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance as not all use circumstances can be anticipated. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulation, rules or insurance requirement. However, product must not be used in a manner which could result in harm.

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MSDS 3600-002