

Material Safety Data Sheet

Charlotte, NC 28211

Gold Bond® BRAND Miscellaneous Gypsum Products

MSDS No: GB-1201

> Page 1 of 7 July 1, 2009

Date: Supersedes Date: May 22, 2006

PRODUCT AND COMPANY INFORMATION

For Emergency Product Information Call: **Manufacturer Information:**

National Gypsum Company **Director Quality Services** 2001 Rexford Road

(704) 551-5820 - 24 Hour Emergency Response

Website: www.nationalgypsum.com

Gypsum **Land Plaster Product Name:**

Accelerator **Cement Rock**

Agricultural Gypsum

Use: Accelerate set of gypsum plaster, Stabilize soil, Accelerate set of cement

Generic

Gypsum rock, Calcium Sulfate Dihydrate Descriptions:

HAZARDS IDENTIFICATION 2.

Appearance and Odor: A white solid/powder with no odor.

Contains no asbestos. HMIS Hazard Class No. 1, 0, 0.

Emergency Overview

Gold Bond® BRAND Gypsum Products do not present an inhalation, ingestion, or contact health hazard unless subjected to operations such as sawing, sanding or machining which result in the generation of airborne particulate. This product contains quartz (crystalline silica) as a naturally occurring contaminant. It is recommended that a NIOSH approved particulate respirator be worn whenever working with this product results in airborne dust exposure exceeding the prescribed limits.

(See Section 11 - Toxicological Information)

OSHA Regulatory Status

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

2. HAZARDS IDENTIFICATION (CONTINUED)

Potential Health Effects

Primary Routes of Entry: Inhalation, Dermal contact

Target Organs: Respiratory system, skin, eyes.

<u>Inhalation</u>: Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, general irritation of the nose, throat, and upper respiratory tract, and impaired pulmonary function. Chronic exposures may result in lung disease (silicosis and/or lung cancer). (See Section 11 - Toxicological Information)

Exposures to respirable crystalline silica have not been documented during normal use of this product. However, good housekeeping practices and industrial hygiene monitoring is recommended when the potential for significant exposure exists.

<u>Skin Contact</u>: Continued and prolonged contact may result in dry skin. Contact with dust or glass fibers may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

Eye Contact: Direct contact may cause mechanical irritation.

<u>Ingestion</u>: No known adverse effects. May result in obstruction or temporary irritation of the digestive tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-Number	Weight Percent
Calcium Sulfate Dihydrate (Gypsum)	10101-41-4	>85
Crystalline Silica (Quartz)	14808-60-7	<5

4. FIRST AID MEASURES

- **Inhalation:** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
- **Skin:** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
- Eye: Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.
- Ingestion: Gypsum is non-hazardous and no harmful effects are expected upon ingestion of small amounts. Larger amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

5. FIRE FIGHTING MEASURES

Flammable Properties

- Not flammable or combustible
- NFPA Hazard Class No: 1/0/0

Extinguishing media

Dry chemical, foam, water, fog or spray

Protection of firefighters

• Standard protective equipment and precautions

Fire and Explosion Hazards

None

Hazardous Combustion Products

- None
- Above 1450°C, material can decompose and release sulfur dioxide (SO₂) and oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

General recommendations:

- Shovel or scoop up back into container for use if possible, or disposal.
- Wear appropriate Personal Protective Equipment. (See Section 8)
- Maintain proper ventilation.
- Waste material is not a hazardous waste. Dispose of in accordance with applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

- Avoid contact with eyes, skin and clothing.
- Wear recommended personal protective equipment when handling. (See Section 8)
- Avoid breathing dust.
- Minimize generation of dust.
- Store material in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

	Exposure Limits	
Component	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Calcium Sulfate Dihydrate (Gypsum)	15 ^(T) 5 ^(R)	10 ^(T)
Crystalline Silica (quartz)	0.1 ^(R)	0.025 ^(R)

T-Total Dust R-Respirable Dust

Engineering Controls

- Work/Hygiene Practices: The score and snap method of cutting is recommended. Sawing, drilling or machining will produce dust.
- Ventilation: Provide local and general exhaust ventilation to maintain a dust level below the PEL/TLV.
- Utilize wet methods, when appropriate, to reduce generation of dust.

Personal Protective Equipment

- Respiratory Protection: A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.
- Eye Protection: Safety glasses or goggles.
- Skin: Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White/gray powder

Odor: None

Physical State: Solid

Ph: ~7

Solubility (H2O): 2.1 g/L @ 20°C

Boiling, Freezing, Melting Point: Not Applicable

Decomposition Temperature: 1450°C Vapor pressure: Not Applicable Vapor density: Not Applicable

Volatile organic compounds (VOC) content: None

Flammability: Not Applicable Flash Point: Not Applicable

Upper/Lower explosive limits: Not applicable **Auto-ignition temperature:** Not Applicable

Partition coefficient: n-octanol/water: Not applicable

Evaporation rate: Not Applicable Molecular weight: 172.2 grams Molecular formula: CaSO₄.2H₂O Specific Gravity: 2.31 g/cc Bulk Density: ~55 lb/ft3

10. STABILITY AND REACTIVITY

Chemical stability: Stable in dry environments.

Conditions to avoid: Contact with strong acids may result in generation of carbon dioxide.

Incompatibility: None

Hazardous decomposition: Above 1450°C gypsum will decompose to calcium oxide (CaO), with

releases of sulfur dioxide (SO₂) and various oxides of carbon.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Data presented is for the major component of this product: Gypsum (calcium sulfate dihydrate)

Human Data

There is no information on toxicokinetics, metabolism and distribution.

There have been reports of irritation to mucus membranes of the eyes and respiratory tract upon acute exposure to dusts in excess of the recommended limits.

Chronic exposure to crystalline silica (a naturally occurring contaminant in gypsum) in the respirable size has been shown to cause silicosis, a debilitating lung disease. In addition, the International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted during gypsum panel installation utilizing recommended procedures.

Animal Data

The acute oral toxicity study [OECD TG 420, Fixed dose procedure] of calcium sulfate dihydrate showed that this chemical did not cause any changes even at 2,000 mg/kg b.w. Therefore, the oral LD_{50} value was more than 2,000-mg/kg b.w. for female rats (Sprague-Dawley).

Calcium sulfate, dihydrate was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404]. There is no indication of skin sensitization in guinea pigs [OECD TG 406].

Invivo and *Invitro* studies for mutagenicity were negative.

Reproduction/Developmental Toxicity Screening Tests were negative.

12. ECOLOGICAL INFORMATION

This product does not present an ecological hazard to the environment.

Ecotoxicological Information

Toxicity studies performed with fish, aquatic invertebrates and aquatic plants showed no toxic effect.

Environmental Fate

Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

13. DISPOSAL CONSIDERATIONS

- Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.
- Recycle if possible.

14. TRANSPORTATION INFORMATION

This product is not a DOT hazardous material

• Shipping Name: Same as product name

• ICAO/IATA/IMO: Not applicable

15. REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

Federal Regulations

SARA Title III: Not listed under Sections 302, 304, and 313

CERCLA: Not listed RCRA: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

State Regulations

California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

Canada WHMIS

All components of this product are included in the Canadian Domestic Substances List (DSL). Crystalline silica: WHMIS Classification D2A

16. OTHER INFORMATION

MSDS Revision Summary

Effective Date Change: 5/22/06 Supersedes: 1/26/04

Format Changes: ANSI Z400.1-2004

Key/Legend

ACGIH American Conference of Governmental Industrial Hygienists

CAS Chemical Abstract Services Number

CFR Code of Federal Regulations
DOT Department of Transportation
EPA Environmental Protection Agency
HEPA High Efficiency Particulate Air

HMIS Hazardous Material Identification System
IARC International Agency for Research on Cancer
IATA International Air Transport Association
ICAO International Civil Aviation Organization

IMO International Maritime Organization
NIOSH National Institute for Occupational Safety and Health

National institute for Occupational Safety and the

NFPA National Fire Protection Association

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit
PPE Personal Protective Equipment

TLV Threshold Limit Value
TSCA Toxic Substance Control Act
TWA Time Weighted Average

WHMIS Workplace Hazardous Materials Information System

16. OTHER INFORMATION (CONTINUED)

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This material safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and with the Workplace Hazardous Materials Information System (WHMIS).

Disclaimer of Liability:

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate, but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained for the use thereof.