



Material Safety Data Sheet

Gypblend

SECTION 1: PRODUCT AND COMPANY INFORMATION	
Product Name:	Gypblend
Generic Descriptions:	Calcium Sulfate Dihydrate (CaSO ₄ .2H ₂ O)
Recommended Use:	Agricultural use
Manufacturer Information:	Green Cal (Thailand) Co., Ltd. 29, 4J Building Phaholyothin RD., Soi 3, Phayathai, Bangkok 10400 Tel: +662 2724050-2 Fax: +662 2724053

SECTION 2: HAZARDS IDENTIFICATION	
<p>Appearance and Odor: A grey granular with no odor.</p> <p>Contains no asbestos. HMIS Hazard Class No.1, 0, 0</p>	
Emergency Overview:	Gypblend 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.
Potential Health Effects	
Primary Routes of Entry:	Inhalation, Dermal contact
Target Organs:	Respiratory system, skin, eyes.
Inhalation:	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
Skin Contact:	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.
Ingestion:	No known adverse effects. May result in obstruction or temporary irritation of the digestive tract.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

Component	CAS-Number	% by Weight
Calcium Sulfate Dihydrate (Gypsum)	10101-41-4	<95
Crystalline Silica (Quartz)	14808-60-7	<2

SECTION 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:	Calcium Sulphate 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.

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties:	Not flammable or combustible
	NFPA Hazard Class No: 1/010



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 (SO ₂) and oxides of carbon.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 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.

SECTION 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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.



Exposure Guidelines

Component	Exposure Limits		
	OSHA PEL (mg/m ³)	ACGIH TLV(mg/m ³)	NIOSH REL(mg/m ³)
Calcium Sulfate Dihydrate (Gypsum)	15 (T),5(R)	10(T)	-
Crystalline Silica (quartz)	0.1 (R)	0.025 (R)	-
Respirable quartz	10 (R)	0.05(R)	0.05(R)

T-Total Dust; R-Respirable Dust

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance: Grey Granular	Flammability: Not Applicable
Physical State: Solid	Flash Point: Not Applicable
Bulk Density: 0.93 lb/ft ³	Upper/Lower explosive limits: Not applicable
Ph: 7 – 7.5	Auto-ignition temperature: Not Applicable
Solubility (H2O): 2.1 g/L @ 20°C	Partition coefficient: n-octanol/water: Not applicable
Boiling, Freezing, Melting Point: Not Applicable	Evaporation rate: Not Applicable
Decomposition Temperature: >1450°C	Molecular weight: Not Applicable
Vapor pressure: Not Applicable	Taste: Nauseous metallic.
Vapor density: Not Applicable	Odor: -
Volatile organic compounds (VOC) content: None	Specific Gravity: 2.31- 2.85 g/cc

SECTION 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 (SO ₂) and various oxides of carbon. Will not spontaneously occur. Silica-containing respirable dust particles may be generated by handling.
Hazardous polymerization:	Will not occur.



SECTION 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 LD50 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].
	<i>In vivo</i> and <i>In vitro</i> studies for mutagenicity were negative.
	Reproduction/Developmental Toxicity Screening Tests were negative.

SECTION 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	Calcium sulphate a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable

SECTION 13: DISPOSAL



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

SECTION 14: TRANSPORTATION INFORMATION
- This product is not a DOT hazardous material
- Shipping Name: Same as product name
- ICAO/IATA/IMO: Not applicable

SECTION 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

SECTION 16: OTHER INFORMATION
Issue Date : 11 November 2011
Revision Date : 17 March 2017
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
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

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).

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