

SAFETY DATA SHEET

GHS

United States English

Section 1. Identification

In case of emergency VAN GEL® B **Product name**

1-203-295-2140 50140 Code

Chemtrec: 1-800-424-9300 Vanderbilt Minerals, LLC Supplier/Manufacturer Outside US: +1-703-527-3887

33 Winfield Street Norwalk, CT 06855

Magnesium Aluminum Silicate **Chemical name**

Smectite clay, Bentonite, CAS No. 1302-78-9 **Synonym**

Industrial **Material uses** Solid. **Product type**

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Section 2. Hazards identification

While this material is not considered hazardous by the OSHA Hazard Communication **OSHA/HCS** status

> Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available

for employees and other users of this product.

Classification of the substance or mixture Not classified.

GHS label elements

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

General Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand. Avoid excessive dust generation. Avoid

breathing dust. Use only with adequate ventilation.

Hazards not otherwise

Not an acute hazard. May cause mechanical eye or skin irritation. Prolonged inhalation classified

may cause lung injury. Physical form is unlikely to generate dust under normal

conditions of use. Material will become slippery when wet.

Section 3. Composition/information on ingredients

Substance/mixture Substance

Chemical name Magnesium Aluminum Silicate

Ingredient name	CAS number	% by weight
smectite clay	12199-37-0	100

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Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Flush with plenty of water for at least 15 minutes, occasionally lifting upper and lower Eye contact

eyelids. If irritation develops and persists, seek medical attention.

Skin contact Flush skin with plenty of water. Seek medical attention if irritation develops. Inhalation Move to fresh air. If respiratory distress develops, seek medical attention.

Ingestion Unlikely to be toxic by ingestion. Rinse mouth out with water. Do not induce vomiting

unless directed to do so by medical personnel. Seek medical attention if significant

quantities have been ingested or symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact Not a primary eye irritant. May cause mechanical irritation.

Skin contact No known significant effects or critical hazards. **Inhalation** No known significant effects or critical hazards. Ingestion No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eve contact No specific data. Skin contact No specific data. Inhalation No specific data. Ingestion No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. **Specific treatments** No specific treatment.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing This product is not combustible. Use an extinguishing agent suitable for the surrounding fire.

media

Unsuitable extinguishing media

No restrictions on extinguishing media for this product.

Specific hazards arising from the chemical

No specific fire or explosion hazard. This product is not flammable and does not support fire.

Hazardous thermal

There are no hazardous decomposition products.

decomposition products

Special protective actions for fire-fighters

Product can become slippery when wet.

Special protective

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

equipment for fire-fighters

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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal

protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-

emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill Minimize dust generation.

> Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal

contractor.

Minimize dust generation. Large spill

> Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Advice on general occupational hygiene Put on appropriate personal protective equipment (see Section 8).

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene

measures.

Conditions for safe storage, including any

incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Store away from direct sunlight in dry conditions. Close container after use.

Section 8. Exposure controls/personal protection

Control parameters

Recommended Storage

Occupational exposure limits

Ingredient name	Exposure limits
smectite clay	OSHA PEL (United States). TWA: 15 mg/m³ total dust; 5 mg/m³ respirable dust (PNOR)
	ACGIH TLV (United States). TWA: 10 mg/m³ total dust; 3 mg/m³ respirable dust (PNOS)

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Section 8. Exposure controls/personal protection

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below established levels below recommended exposure limits. If user operations generate dust, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Under controlled laboratory test conditions the granular particulate form of this product was found to produce a 3 fold reduction in airborne respirable dust (<10 microns) when compared to flake particulate forms of the same product. Use in an industrial setting is likely to yield similar aerosol dust suppression. As per sound industrial hygiene practice, however, dust levels should be determined by direct dust monitoring at the work site to address variations in material handling and dust control practices.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields. Recommended: splash goggles

Skin protection

Protective gloves should be worn under normal conditions of use.

Hand protection Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: disposable particulate mask

Personal protective equipment (Pictograms)



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Section 9. Physical and chemical properties

Appearance

Physical state Solid. [Granules]

Color White.

Odor Odorless.

pH Not available.

Melting point Not available.

Boiling point Not applicable.

Flash point [Product does not sustain combustion.]

Evaporation rateNot applicable.Vapor pressureNot applicable.Vapor densityNot applicable.

Relative density 2.6
Solubility in water Insoluble
Viscosity Not available.

Section 10. Stability and reactivity

Reactivity Not reactive.

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid No specific data.

Incompatible materials No specific data.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
smectite clay	LD50 Dermal LD50 Oral		>3500 mg/kg >50000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

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Section 11. Toxicological information

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not applicable.

Information on the likely routes of exposure

Not available.

Potential chronic health effects

General

Excessive exposure to any dust may aggravate pre-existing respiratory conditions.

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Other adverse effects No known significant effects or critical hazards.

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Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG*: Packing group

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b)

All components are listed or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification Not applicable.

State regulations

MassachusettsNone of the components are listed.New YorkNone of the components are listed.New JerseyNone of the components are listed.PennsylvaniaNone of the components are listed.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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Section 15. Regulatory information

International regulations

Canada inventoryAll components are listed or exempted. **Europe inventory**All components are listed or exempted.

International lists

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted. **Korea inventory**: All components are listed or exempted.

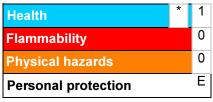
Malaysia Inventory (EHS Register): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted. **Taiwan inventory (CSNN)**: All components are listed or exempted.

Section 16. Other information

Hazardous Material Identification System (U.S.A.)



National Fire Protection Association (U.S.A.)



The customer is responsible for determining the PPE code for this material.

History

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Key to abbreviations ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Information contact Vanderbilt Global Services, LLC

Corporate Risk Management

1-203-295-2143

Visit www.vanderbiltminerals.com for more information.

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^{*} Chronic Potential