

# SAFETY DATA SHEET

## Section 1. Identification

<b>Product name</b>	VAN GEL® K	<a href="#"><u>In case of emergency</u></a>
<b>Code</b>	50064	1-203-295-2140
<b>Supplier/Manufacturer</b>	Vanderbilt Minerals, LLC 33 Winfield Street Norwalk, CT 06855	Chemtrec: 1-800-424-9300 Outside US: +1-703-527-3887
<b>Chemical name</b>	Magnesium Aluminum Silicate	
<b>Synonym</b>	Smectite clay, Bentonite, CAS No. 1302-78-9	
<b>Material uses</b>	Agricultural Suspensions	
<b>Product type</b>	Solid.	

### [Relevant identified uses of the substance or mixture and uses advised against](#)

Not applicable.

## Section 2. Hazards identification

<b>OSHA/HCS status</b>	While this material is not considered hazardous by the OSHA Hazard Communication 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.
<b>Classification of the substance or mixture</b>	Not classified.
<b><a href="#"><u>GHS label elements</u></a></b>	
<b>Signal word</b>	No signal word.
<b>Hazard statements</b>	No known significant effects or critical hazards.
<b><a href="#"><u>Precautionary statements</u></a></b>	
<b>General</b>	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.
<b>Storage</b>	Store locked up. Store in a dry place.
<b>Hazards not otherwise classified</b>	Not an acute hazard. May cause mechanical eye or skin irritation. Prolonged inhalation 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

<b>Substance/mixture</b>	Substance
<b>Chemical name</b>	Magnesium Aluminum Silicate

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

## Section 3. Composition/information on ingredients

Non-respirable crystalline silica (quartz, CAS number 14808-60-7) contained as an impurity between 0.1% and 1% in this product is encapsulated within the clay particle. Exposure to free respirable quartz is not expected under normal conditions of use and processing of this product. Respirable quartz may be released by vigorous grinding or abrading of this product.

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

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	Flush with plenty of water for at least 15 minutes, occasionally lifting upper and lower eyelids. If irritation develops and persists, seek medical attention.
<b>Skin contact</b>	Flush skin with plenty of water. Seek medical attention if irritation develops.
<b>Inhalation</b>	Move to fresh air. If respiratory distress develops, seek medical attention.
<b>Ingestion</b>	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

<b>Eye contact</b>	Not a primary eye irritant. May cause mechanical irritation.
<b>Skin contact</b>	No known significant effects or critical hazards.
<b>Inhalation</b>	No known significant effects or critical hazards.
<b>Ingestion</b>	No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	No specific data.
<b>Skin contact</b>	No specific data.
<b>Inhalation</b>	No specific data.
<b>Ingestion</b>	No specific data.

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

<b>Notes to physician</b>	Treat symptomatically.
<b>Specific treatments</b>	No specific treatment.
<b>Protection of first-aiders</b>	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

<b>Suitable extinguishing media</b>	This product is not combustible. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	No restrictions on extinguishing media for this product.

### Specific hazards arising from the chemical

<b>Hazardous thermal decomposition products</b>	No specific fire or explosion hazard. This product is not flammable and does not support fire. There are no hazardous decomposition products.
---	--

## Section 5. Fire-fighting measures

### Special protective actions for fire-fighters

Product may become slippery when wet.

### Special protective equipment for fire-fighters

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

## 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.

#### Large spill

Minimize dust generation.

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

Put on appropriate personal protective equipment (see Section 8).

#### Advice on general occupational hygiene

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.

#### Recommended Storage

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

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
smectite clay	<b>OSHA PEL (United States).</b> TWA: 15 mg/m <sup>3</sup> total dust; 5 mg/m <sup>3</sup> from respirable dust (PNOR) <b>ACGIH TLV (United States).</b> TWA: 10 mg/m <sup>3</sup> inhalable dust; 3 mg/m <sup>3</sup> from respirable dust (PNOS)

Non-respirable crystalline silica (quartz, CAS number 14808-60-7) contained as an impurity between 0.1% and 1% in this product is encapsulated within the clay particle. Exposure to free respirable quartz is not expected under normal conditions of use and processing of this product. Respirable quartz may be released by vigorous grinding or abrading of this product.

The OSHA PEL for quartz (respirable fraction) is 0.05 mg/m<sup>3</sup> as a TWA. The ACGIH TLV for quartz (respirable fraction) is 0.025 mg/m<sup>3</sup> as a TWA.

#### **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 side-shields. Recommended: splash goggles

#### **Skin protection**


##### **Hand protection**

Protective gloves should be worn under normal conditions of use.

##### **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.

## Section 8. Exposure controls/personal protection

<b>Other skin protection</b>	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.
<b>Respiratory protection</b>	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
<b>Personal protective equipment (Pictograms)</b>	

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid. [Granules]
<b>Color</b>	Off-white to tan.
<b>Odor</b>	Odorless.
<b>pH</b>	9 - 10 [Conc. (% w/w): 5%]
<b>Melting point</b>	Not available.
<b>Boiling point</b>	Not applicable.
<b>Flash point</b>	[Product does not sustain combustion.]
<b>Evaporation rate</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.6
<b>Solubility in water</b>	Insoluble
<b>Viscosity</b>	Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	Not reactive
<b>Chemical stability</b>	The product is stable.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	No specific data.
<b>Incompatible materials</b>	No specific data.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### 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

Non-respirable crystalline silica (quartz, CAS number 14808-60-7) contained as an impurity between 0.1% and 1% in this product is encapsulated within the clay particle. Exposure to free respirable quartz is not expected under normal conditions of use and processing of this product. Respirable quartz may be released by vigorous grinding or abrading of this product.

Overexposure to respirable crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. "Inhalable" crystalline silica (quartz) is listed by IARC as a Group 1 carcinogen (lung) based on "sufficient evidence" in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Some studies have not demonstrated a cancer association and controversy exists concerning the IARC and NTP classification.

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

<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Teratogenicity</b>	No known significant effects or critical hazards.
<b>Developmental effects</b>	No known significant effects or critical hazards.
<b>Fertility effects</b>	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Not available.

### Other information

Not available.

## Section 12. Ecological information

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Other adverse effects

No known significant effects or critical hazards.

## 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 active or exempted.

### SARA 302/304

#### Composition/information on ingredients

No products were found.

### SARA 311/312

**Classification** Not applicable.

### State regulations


**Massachusetts** None of the components are listed.

**New York** None of the components are listed.

**New Jersey** None of the components are listed.

**Pennsylvania** None of the components are listed.

### California Prop. 65

 **WARNING:** This product can expose you to Silica, crystalline, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### International regulations

#### International lists

**Australia Inventory (AIIC):** All components are listed or exempted.

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

**Japan Inventory (CSCL):** All components are listed or exempted.

**Japan inventory (ISHL):** All components are listed or exempted.

**Korea inventory (KECI):** 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 Chemical Substances Inventory (TCSI):** All components are listed or exempted.

**Turkey Inventory (CICR):** All components are listed or exempted.

## Section 16. Other information

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

Health	*	1
Flammability		0
Physical hazards		0
Personal protection		E

\* Chronic Potential

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

### History

**Date of printing** 10/30/2023

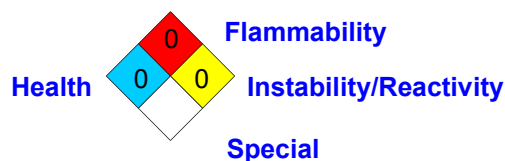
**Validation date** 10/30/2023

**Date of previous issue** 10/26/2021

**Version** 2

### Key to abbreviations

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





## Section 16. Other information

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 = 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](http://www.vanderbiltminerals.com) for more information.

### Notice to reader

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any patent or in violation of any law or regulation. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.