

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 1

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Vermiculite

Article No.: 53240

UFI:

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

*In its unpolished state as raw vermiculite as a functional filler.
As expanded vermiculite, used as a lightweight aggregate and insulating material in building materials.
For the production of insulating materials, fire-resistant plasters and panels, and other molded parts.
As a functional filler for friction linings in the automotive industry.
For growing young plants and as a soil improver.
As a chemical binder or packaging granulate for liquid hazardous substances.
As a carrier material for liquid substances in the feed sector.*

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.com

EMail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product is not classified as hazardous according to the CLP/GHS guidelines.

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

next page: 2

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 2

Revised edition: 17.06.2024

Version: 4

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Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

2. 3. Other Hazards

*Repeated inhalation of large quantities of dust over a longer period of time increases the risk of lung diseases.
When stirred up, there is a risk of foreign bodies being mechanically introduced into the eye.*

3. Composition/Information on Ingredients

3. 1. Substance

3. 2. Mixture

Chemical Characterization: Aluminium-iron-magnesium-silicate

Information on Components / Hazardous Ingredients:

Vernuculite	85 - 95 %	CAS-Nr: 1318-00-09 EINECS-Nr: 310-127-6 EC-Nr: 603-518-9
Quartz, Silica (STOT RE1, H372)	0.01 - 0.05 %	CAS-Nr: 14808-60-7 EINECS-Nr: 238-878-4 EC-Nr:
Mica (potassium aluminium silicate)	< 5 %	CAS-Nr: 12001-26-2 EINECS-Nr: EC-Nr:
Diopside	< 5 %	CAS-Nr: 14483-19-3 EINECS-Nr: EC-Nr:
Apatite, Ca ₅ (F, Cl)(PO ₄) ₃	< 5 %	CAS-Nr: EINECS-Nr: EC-Nr:
Crystalline silica (cristobalite)	< 0.1 %	CAS-Nr: 14464-46-1 EINECS-Nr: 238-455-4 EC-Nr:

Additional information:

Exempted from the mandatory REACH Registration.

4. First Aid Measures

4. 1. Description of the First Aid Measures

General information:

next page: 3

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 3

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

Seek medical attention in case of complaints.

After inhalation:

Take affected person to fresh air.

After skin contact:

No special measures required.

After eye contact:

Rinse open eye for several minutes under running water. Should irritation continue, seek medical advice.

After ingestion:

*Rinse mouth and give plenty of water to drink.
If symptoms persist, call a physician.*

4. 2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No special first-aid measures necessary.

5. Fire-Fighting Measures

5. 1. Extinguishing Media

Suitable extinguishing media:

Product itself does not burn.

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

No special hazards.

5. 3. Advice for Firefighters

Protective equipment:

No special measures required.

Further information:

6. Accidental Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Ensure adequate ventilation.

Avoid formation of dust, wear protective clothing.

Avoid inhalation of dust.

6. 2. Environmental Precautions

next page: 4

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 4

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

Environmental precautions:

No special measures required.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Clean up by moistening product to avoid dust formation or use special vacuum cleaner.

6.4. Reference to other Sections

*For information for safe handling see Section 7.
Protective clothing, see Section 8.*

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Wear adequate protective clothing (see para. 8).
Prevent the formation of airborne dust.*

Hygienic measures:

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Store in tightly sealed containers in a dry room.
Protect against humidity.*

Requirements for storage areas and containers:

Open and handle container with care.

Information on fire and explosion protection:

No special measures necessary.

Storage class:

13; Non combustible solids (TRGS 510)

Further Information:

Store in original packaging, protected from humidity: shelf-life at least 24 months.

7.3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

*TLV: 1.25 mg/m³ air-borne fraction (general dust limit)
TLV: 10 mg/m³ inhalable fraction (general dust limit)
Quartz / Cristobalite dust: 0.05 mg/m³ airborne fraction*

Parameters to be controlled:

Derived No-Effect Level (DNEL):

next page: 5

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 5

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

PNEC (Predicted No-Effect Concentration):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Provide adequate ventilation/exhaust system.

Personal Protection

General protective measures:

Wash contaminated clothes before reuse.

Respiratory protection:

Dust mask recommended when very dusty (with particle filter FFP2).

Hand protection:

Protective gloves recommended for workers with sensitive skin or dermatitis.

Protective glove material:

Eye protection:

Recommended in case of dust formation (EN 166).

Body protection:

Environmental precautions:

Prevent from getting into the soil, surface water and sewage system.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: *solid*

Color: *beige*

Odor: *odorless*

Odor threshold:
not applicable

pH-Value: *7 - 8.5 (40 g/l H₂O, 20°C)*

Melting temperature: *> 1330°C*

Boiling temperature:
not applicable

Flash point:
not applicable

Evaporation rate:
not relevant

Flammability (solid, gas):
non-combustible

next page: 6

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 6

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

Upper explosion limit:

no information available

Lower explosion limit:

no information available

Vapor pressure:

not applicable

Vapor density:

not applicable

Density:

not available

Solubility in water:

insoluble

Coefficient of variation (n-Octanol/Water):

not determined

Auto-ignition temperature:

No information available.

Decomposition temperature:

A stable state of liquidus is reached at approximately 1570°C and sintering (firing) at temperatures beyond 1000°C/1832°F.

Viscosity, dynamic:

not applicable

Explosive properties:

not applicable

Oxidizing properties:

none

Bulk density:

70 - 130 kg/m³

9.2. Further Information

Solubility in solvents:

*Insoluble in organic solvents.
Soluble in strong mineral acids.*

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

*Particle characteristics:
No data available.*

Other information:

10. Stability and Reactivity

next page: 7

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 7

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

10.1.	Reactivity	<i>Stable if used according to specifications.</i>
10.2.	Chemical Stability	<i>Stable if used according to specifications.</i>
10.3.	Possibility of Hazardous Reactions	<i>Unknown.</i>
10.4.	Conditions to Avoid	<i>Conditions to avoid:</i> <i>Avoid humidity.</i> <i>Thermal decomposition:</i>
10.5.	Incompatible Materials	<i>Hydrofluoric acid</i>
10.6.	Hazardous Decomposition Products	<i>None known.</i>
10.7.	Further Information	

11. Toxicological Information

11. 1.	Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008	<i>No toxicity expected.</i>
	<i>Acute Toxicity</i>	
	<i>LD50, oral:</i>	
	<i>LD50, dermal:</i>	
	<i>LC50, inhalation:</i>	
	<i>Primary effects</i>	
	<i>Irritant effect on skin:</i>	<i>No irritant effect known.</i>
	<i>Irritant effect on eyes:</i>	<i>No irritant effect known.</i>
	<i>Inhalation:</i>	<i>No information available.</i>
	<i>Ingestion:</i>	<i>No information available</i>
	<i>Sensitization:</i>	<i>No sensitizing effects known.</i>
	<i>Mutagenicity:</i>	<i>No mutagenic effects known.</i>
	<i>Reproductive toxicity:</i>	<i>No relevant data found.</i>
	<i>Carcinogenicity:</i>	

next page: 8

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 8

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

No cancerogenic effect known.

Teratogenicity:

No relevant data found.

Specific target organ toxicity (STOT):

*Single exposure: Not classified based on available information.
Repeated exposure: Not classified based on available information.*

Aspiration hazard:

No risk of aspiration.

11. 2. Information on other Hazards

*Endocrine Disrupting Properties: no information available.
Asbestos-free, test report IOM-Guildford, order no.: S-31209
dated March 3, 2023*

12. Ecological Information

12. 1. Aquatic Toxicity

Not hazardous to the aquatic environment.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

12. 2. Persistency and Degradability

Inorganic substance, biologically non-degradable.

12. 3. Bioaccumulation

No data available.

12. 4. Mobility

No data available.

12. 5. Results of PBT- und vPvB Assessment

This product is neither a PBT or vPvB substance nor does it contain a PBT or vPvB substance.

12. 6. Endocrine Disrupting Properties

No data available.

12. 7. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

Do not let product enter waterways or sewage system.

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

next page: 9

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 9

Revised edition: 17.06.2024

Version: 4

Printed: 03.11.2025

Product:

If possible reuse product.

Dispose according to the waste disposal guidelines 2008/98/EC.

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

Not classified as environmentally hazardous.

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

next page: 10

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



53240 Vermiculite

Page 10

Revised edition: 17.06.2024

Version: 4

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14. 7. Maritime Transport in Bulk according to IMO Instruments

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

0, not hazardous (according to the German Regulation AwSV)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

Exempted from the mandatory REACH Registration (Annex V No. 7)

15. 3. Further Information

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.