

Vermiculite Data Sheet

Brazil



Data, Facts and Information



Vermiculite in its Variety of Applications

Environmental Protection



Plaster and Mortar Industry



Renovation & Dry Construction



Plant & Furnace Construction



Fire Protection & Acoustics



Transport & Packaging



Automotive



Steelworks & Foundries



Orthopedics & Model Making



Glass Production



Animal Husbandry & Agriculture



Plant Cultivation & Gardening



Chemical and Physical Values

- pH value: approx. 7.5
- Sintering temperature: approx. 1,260 °C
- Melting point: approx. 1,315 °C
- No silicosis risk, industrial hygiene compliant
- Non-combustible, class A1
- Thermal conductivity: 0.07 W/mK (DIN 4108)
- Bulk density: 100–125 g/L (DIN 1060)
- Tamping volume: 650–900 ml per 100 g

SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	Na ₂ O
34,00 - 43,00%	7,00 - 15,0%	5,00 - 13,0%	0,10 - 0,30%
CaO	MgO	K ₂ O	
0,20 - 1,00%	20,00 - 28,00%	0,01 - 0,1%	



Product Description

Vermiculite is produced from an aluminum-iron-magnesium silicate that is suddenly exposed to high temperatures, expanding to many times its original volume. Vermiculite is sterile, bacteria-free, and germ-free.

Mixture:		0 - 1 mm		WMB/mic	
Dimension		Quota		Focus	
> 0.25 mm		< 10 %		90%	
0.25	bis	0.50 mm	20 - 35 %		
0.50	bis	1.00 mm	60 - 80 %		
1.00	bis	2.00 mm	< 10 %		



Packaging & Bulk Density

- Weight approx. 120-130 kg/m³
- Packaging: 100l bags (12kg each), 27 bags per pallet, or in big bag/silo.

Mixture:		1 - 2 mm		WMB/SF	
Dimension		Quota		Focus	
> 0.25 mm		1 - 5 %		90%	
0.25	bis	0.50 mm	1 - 10 %		
0.50	bis	1.00 mm	35 - 55 %		
1.00	bis	2.00 mm	40 - 60 %		
2.00	bis	3.15 mm	< 5 %		



Packaging & Bulk Density

- Weight approx. 100-110 kg/m³
- Packaging: 100l bags (10kg each), 27 bags per pallet, or in big bag/silo.

Mixture:		2 - 3 mm		WMB/F	
Dimension		Quota		Focus	
> 0.50 mm		0 - 1 %		95%	
0.50	bis	1.00 mm	1 - 5 %		
1.00	bis	2.00 mm	45 - 65 %		
2.00	bis	3.15 mm	40 - 50 %		
<		3.15 mm	1 - 5 %		



Packaging & Bulk Density

- Weight approx. 90-100 kg/m³
- Packaging: 100l bags (8kg each), 27 bags per pallet, or in big bag/silo.

Mixture:		3 - 6 mm		WMB/M	
Dimension		Quota		Focus	
> 1.00 mm		1 - 6 %		80%	
1.00	bis	2.00 mm	1 - 15 %		
2.00	bis	3.15 mm	30 - 45 %		
3.15	bis	5.60 mm	35 - 45 %		
<		5.60 mm	1 - 15 %		



Packaging & Bulk Density

- Weight approx. 100-110 kg/m³
- Packaging: 100l bags (8kg each), 27 bags per pallet, or in big bag/silo.



Ultra-light Vermiculite from environmentally friendly, mineral granulate.

Vermiculite is a natural mica mineral with exceptional properties due to its crystalline structure. In our facilities, the material is rapidly heated to over 1,000 °C (exfoliation process). The plate-like minerals expand accordion-like, trapping millions of tiny air cells within their layers. Under the microscope, the worm-like deformation is visible, which gave this additive-free natural product its name (Latin Vermis = worm). The result is a unique porosity of up to 90%. Vermiculite is sterile, bacteria-free, and germ-free.



Certified Chemical Absorbent

The product Vermiculite has been tested by TÜV Rheinland (Order No.



644/10863921) according to BAM test methods for absorbents as a chemical binder, evaluating both absorption performance and heat emission. Additionally, under Order No. 644/10863921-1, Vermiculite has been tested as an absorbent, cushioning, and insulating material for occupational safety and environmental harmlessness.