

Vermiculite Data Sheet

Palabora (It)



Data, Facts and Informations



Vermiculite Sample of Applications

Environment Protection



Plestar & Mortar Industry



Dry Construction



Plant & Furnace Construction



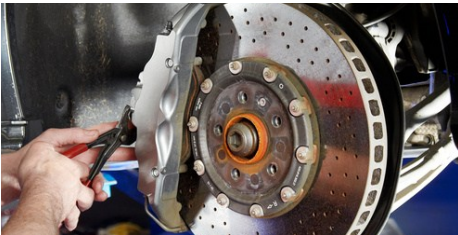
Fire Prevention & Acoustics



Transport & Packaging



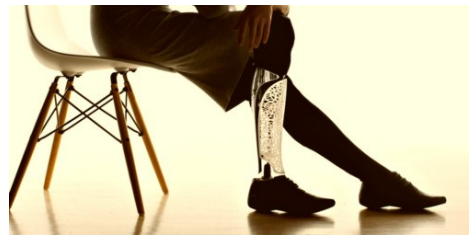
Automotive



Steel Production



Orthopedics & Modeling



Glass Production



Cattle Breeding & Agriculture



Crop Production & Gardening



Chemical and Physical Properties

- pH-Number ca. Ph-Wert ca. 7-9
- Sinter Temperature ca. 1.260 °C
- Melting Point ca. 1.300 - 1.430 °C
- No Silicone, Industrial Hygiene
- Fire Protection Classification A1
- Thermal Conductivity 0,07 W/mK
- Bulk Density 100 -125 g/Ltr (DIN 1060)

SiO_2	Al_2O_3	Fe_2O_3	MgO
35,00 - 41,00%	6,00 - 9,50%	6,00 - 9,50%	21,50 - 25,50%
CaO	K_2O	TiO_2	P_2O_5
2,00 - 6,00%	3,00 - 6,00%	0,60 - 1,40%	0,20 - 2,00%
Cr_2O_3	F	CL	CO_2
0,01 - 0,15%	0,20 - 0,80%	0,00 - 0,50%	0,60 - 2,50%

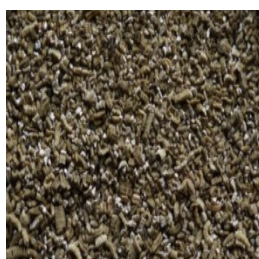


Product Description

Vermiculite is made from aluminum-iron-magnesium silicate, which expands to many times its original volume when exposed to a very high temperature in a shock-like manner. Vermiculite is sterile, free of bacteria and germs.

Art-No.: 28004

Mixture		1 - 2 mm		superfine	
Dimension		Quota		Focus	
0.25	>	mm	< 10 %		
0.25	bis	0.50 mm	< 20 %		
0.50	bis	1.00 mm	30 - 60 %		75%
1.00	bis	2.00 mm	25 - 65 %		
2.00	bis	2.80 mm	< 3 %		



Delivery Form & Bulk Weight

- Weight approx. 100 -110 kg/m³
- Packed in 100 litre sacks
à 10 kg à 27 Sack/Palette,
in a big bag or as a silo



The Ultralight Original Vermiculite

Made from environmentally friendly mineral granules

Vermiculite is a naturally occurring mica mineral with exceptional properties resulting from its crystalline structure. In our production facilities, the material is rapidly heated to temperatures well above 1,000°C in a process known as exfoliation. Through this industrial refinement, the plate-like mineral particles expand in an accordion-like manner, trapping millions of tiny air pockets between their layers. Under a microscope, the characteristic worm-like shape becomes visible. This structure gave the additive-free natural material its name: vermis is the Latin word for "worm". The result is a uniquely porous material with a porosity of up to 90%.

Vermiculite is sterile and free from bacteria and other microorganisms.



Tested and approved

The Vermiculite product was tested by TÜV Rheinland under Order No. 644/10863921 in accordance with the BAM test methods for absorbent materials. Its performance and thermal behaviour as a chemical binding agent were assessed. Under Order No. 644/10863921-1, Vermiculite was also tested as an absorption, cushioning and insulation material with regard to occupational health and environmental safety.



Certificate No. 3022-1320 was issued by the Rosenheim Institute for Building Biology. The product submitted for testing is an inorganic, purely mineral iron-aluminium-magnesium silicate belonging to the mica mineral group and intended

for applications in the construction sector.

In **agriculture** and the **animal feed industry**, quality marks such as ...



... provide information about the relevant authorisation and quality standards, which should be verified in advance for each individual application. Isola Vermiculite is authorised as a manufacturer of feed additives in accordance with Regulation (EC) No 1831/2003 under registration number R29010NW. Commission Implementing Regulation (EU) 2026/1234 authorises vermiculite as a feed additive for chickens for fattening, chickens reared for laying or breeding purposes, and laying hens.