

Vermiculite



Vermiculite is the geological name given to a group of hydrated laminar minerals, which are aluminium-iron magnesium silicates and have the appearance of mica in its natural state. It is found in various parts of the world but the largest mine in use today is located in Phalaborwa in the North Eastern corner of South Africa. The vermiculite mined here has the remarkable ability to expand to many times its original volume when heated - a process known as exfoliation.

Vermiculite is lightweight, inorganic (incombustible), compressible, highly absorbent and is sterile due to the high temperatures during exfoliation.

Exfoliated vermiculite will readily hold water within the interlaminar voids. The water retained as a percentage of the dry weight is 240%.

Vermiculite is clean to handle, non-abrasive, reflective, rot-proof, odourless and insoluble in water and organic solvents.

Vermiculite is used in thousands of applications from potting soils, light weight concrete, fire protection construction materials, as a UN approved packaging material for the safe shipment of hazardous liquids and even texturizers in paints and coatings. It is also used in the construction of fireproof safes. In houses it is used as a thermal and acoustic insulator in ceilings.

Cape Agricultural Products markets and distributes Mandoval Vermiculite in the Western and Eastern Cape provinces of South Africa. Vermiculite is available in many forms but it is the technical efficiency of the Mandoval exfoliating process that sets their product apart from the rest. Mandoval's vermiculite is manufactured in compliance with the **ISO 9002** quality control system.

Sizes and Densities of the standard grades as packed per 100Lt bag

<u>Grade</u>	<u>Approximate granule size</u>	<u>Bag Mass</u>	<u>*kg/m³</u> <u>*g/litre</u>
Large	8mm & smaller	7Kg	Max 80
Medium	4mm & smaller	8Kg	Max 90
Fine	2mm & smaller	9Kg	Max 112
Superfine	1mm & smaller	10Kg	Max 125
Micron	0.5mm & smaller	10Kg	Max 125



[Click here for more technical data on Vermiculite, including absorption capacities./725Kb/](#)



[Click here for a safety data sheet on Vermiculite/33Kb/](#)

Vermiculite is used extensively for the following applications, and more information can be obtained by clicking on the relevant link.

[Horticultural uses for Vermiculite](#)

[Vermiculite in Construction](#)