

2002
PERLINDUSTRIA

Technical Data Sheet

Vermiculite V1 RA

Grade superfine

Vermiculite is a mineral formed by aluminium and iron-magnesium silicates extracted in open mines.

The vermiculite has the property of exfoliating when heated. The exfoliation range becomes 8 times its original volume and turns the dense mineral flakes into light porous granules that contain innumerable layers of air.

The exfoliated vermiculite is light and clean, has a high value of thermal and acoustic insulation, is incombustible and insoluble to water and has the ability to absorb liquids.

Physical properties

Colour	Brown
Apparent density	100-155 kg/m ³ (according to PLAB 0701)
Compacted density	120-180 kg/m ³ (according to PLAB 0702)
Melting temperature	1260 - 1350 °C
Softening temperature	1150 – 1250 °C
PH (in water)	6-9 (according to PLAB 0705)
Non-floating (V)	< 10 % (according to PLAB 0741)
Moisture absorption	< 10 % (according to PLAB 0754)
Calcination	3-10 % (according to PLAB 0718)
Refractive index	1.5
Thermal conductivity	≤ 0.04 W/mK a 20 °C
Specific heat	0.84 kJ/kgK
Combustibility	Non-combustible
Asbestos	Asbestos free

Applications

- Thermal insulation for fireplaces and boilers.
- Substrate for hydroponic crops.
- Absorbent of moisture and other liquid contaminants.
- Animals food
- Transport for dangerous goods

Packaging and conservation

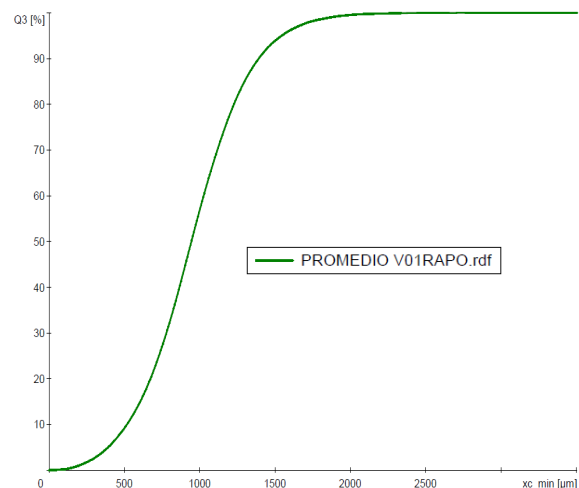
It can be packed in bags with 39 or 36 bags per pallet, big bags with 3 big bags per pallet and tanker truck.

Keep the original packaging in a cool and dry place.

Particle size

Sieve (µm)	% retained (vol.)
2000	< 3 %
1400	< 20 %
1180	5-25 %
600	40-75 %
300	< 30 %
150	< 10 %
0	< 5 %

*According to PLAB 0749.



Average particle size: From 0 to 1.5 mm (reference value)

Chemical composition

SiO₂	35-41 %
Al₂O₃	6-10 %
K₂O	3-6 %
MgO	21-26 %
Fe₂O₃	6-10 %
CaO	2-6 %

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