



2002
PERLINDUSTRIA

Data Sheet

Vermiculite V3 RA

Medium Grade

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 10 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	90-130 kg/m ³ (according to PLAB 0701)
Compacted density	100-150 kg/m ³ (according to PLAB 0702)
Melting temperature	1260 - 1350 °C
Softening temperature	1150 - 1250 °C
PH (in water)	7-9 (according to PLAB 0705)
Non-floating	<25 % (according to PLAB 0741)
Relative humidity	<5 % (according to PLAB 0713)
Calcination	4-9 % (according to PLAB 0718)
Refractive index	1.5
Thermal conductivity	≤ 0.04 W/mK to 20 °C
Specific heat	0.84 kJ/kgK
Combustibility	Non-combustible
Asbestos	Asbestos free

Applications

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

Packaging and conservation

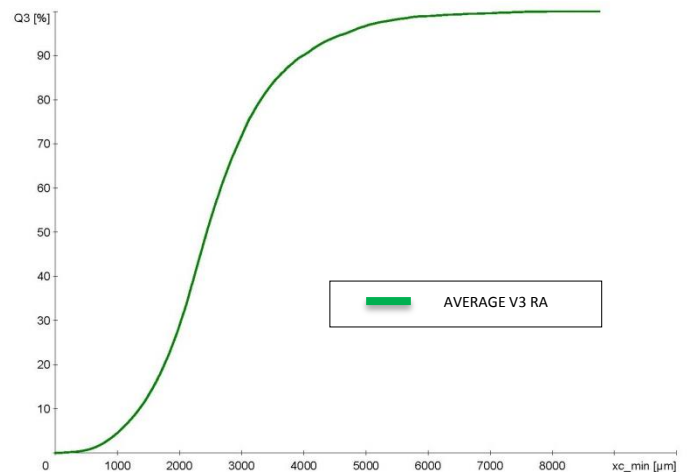
It can be packed in bags with 39 or 36 bags per pallet, big bags with 3 big bags per pallet and tanker truck.

Keep the original packaging in a cool and dry place.

Particle size

Sieve (µm)	% retained (vol.)
5000	< 15 %
3150	10-40 %
2000	35-60 %
1180	5-35 %
0	< 20 %

* According to PLAB 0749.



Average particle size: 1 to 4 mm (reference value)

Chemical composition

SiO₂	45-55 %
Al₂O₃	7-15 %
K₂O	0.05-0.15 %
MgO	20-28 %
Fe₂O₃	5-13 %
CaO	<0.2-1 %