

CRUDE NAMEKARA VERMICULITE

Description

Vermiculite is the geological name given to a group of naturally occurring hydrated laminar minerals which are aluminium-iron-magnesium silicates. The exfoliation process converts the dense flakes of ore into lightweight porous granules containing innumerable minute air layers. When exfoliated, vermiculite has high insulation properties and will absorb a wide range of liquids.



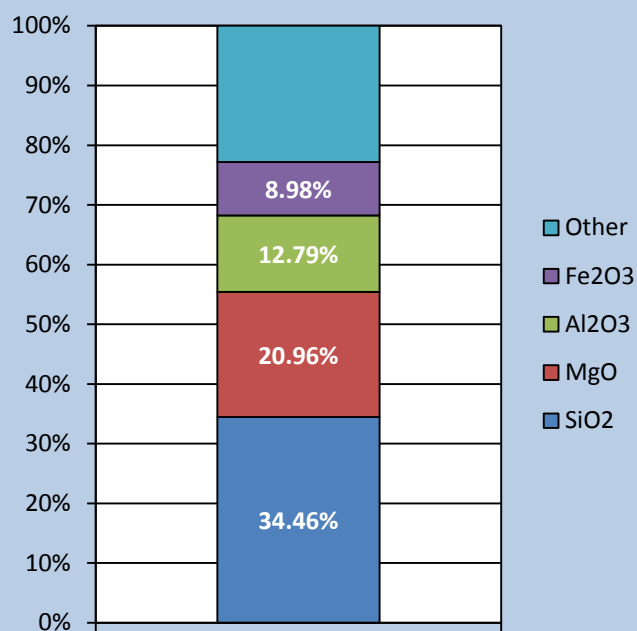
Typical Chemical Analysis

SiO₂	34.46%	Mn₃O₄	0.15%
MgO	20.96%	V₂O₅	<0.05%
Fe₂O₃	8.98%	Cr₂O₃	<0.05%
Al₂O₃	12.79%	BaO	<0.05%
TiO₂	1.59%	ZrO₂	<0.05%
CaO	0.54%	ZnO	<0.05%
K₂O	0.29%	SrO	<0.05%
Na₂O	0.07%	Carbon	0.03%
P₂O₅	0.29%	Fluorine	0.44%

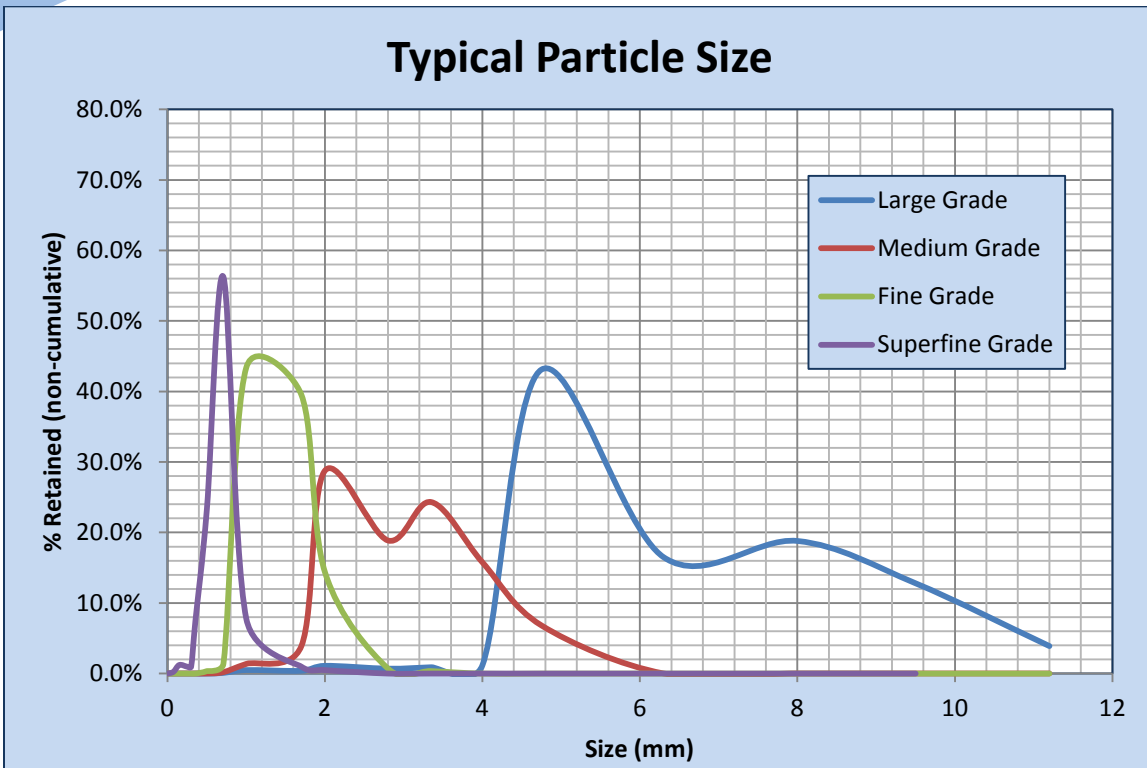
Typical Properties

Surface Moisture	<6%
Specific Gravity	2.5
Moh's Hardness	1 – 2
pH	8 – 9.5
Loss on Ignition	15% at 800°C
Thermal Conductivity (Exfoliated)	0.063 W/mK
Water Absorption Capacity (Exfoliated Medium Grade)	337% by wt

Chemical Analysis of Major Components



Typical Physical Properties	Nominal Particle Size (80% retained between)	Loose Bulk Density (Crude) (Kg/m ³)	Yield Of Exfoliated Product ¹ (m ³ per Metric Tonne)	Non Exfoliating Material	Loose Bulk Density (Exfoliated) (Kg/m ³)
LARGE	11.2 – 4.75mm	550 – 700	8	<7%	75 – 90
MEDIUM	4.75 – 2.0mm	600 – 700	9	<7%	85 – 100
FINE	2.8 – 1.0mm	500 – 700	9.5	<7%	85 – 100
SUPERFINE	1.7 – 0.3mm	400 - 650	8.5	<7%	85 – 110



¹ Typical Volume Yields were achieved using a commercial rotary furnace. Values may vary depending on equipment used.

Information presented above is given in good faith as accurate and reliable but is not to be taken as a guarantee. The figures provided are intended to be a guide to expected average values and should not be interpreted as a specification. Any potential applications referred to are not to be construed as recommendations. It is the responsibility of the user to determine suitability for any specific purpose.

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