

CRUDE NAMEKARA VERMICULITE SPECIFICATION SHEET

REVISION: 06

26/08/2026	Updated for use	TT	DD	IK
28/09/2024	Updated for use	TT	AM	IK
24/02/2022	Updated for use	TT	AM	IK
26/08/2020	Updated for use	TT	AM	IK
26/09/2018	Updated for use	ROB	JA	NM
28/04/2014	Approved for use	ROB	JW	HM
DATE REV	STATUS	PREPARED	CHECKED	APPROVED

DESCRIPTION

Vermiculite is the mineralogical name given to a group of naturally occurring hydrated laminar minerals which are magnesium-aluminium-iron silicates. When subjected to heat, vermiculite has the property of exfoliating or expanding, due to the generation of inter-laminar steam. The exfoliation process converts the dense flakes of ore into lightweight porous granules containing numerous minute air layers. The exfoliation characteristic is the basis for the commercial use of vermiculite.

PARTICLE SIZE DISTRIBUTION

PARTICLE SIZE RANGE		PRODUCT GRADE						
		PREMIUM	LARGE	MEDIUM	FINE	SUPERFINE	MICRON	RSU
Minimum percentage by weight retained in range indicated	5.6-11.2mm	80%						
	4.0-9.5mm		80%					
	2.0-4.75mm			80%				
	1.0-2.8mm				80%			
	0.3-1.7mm					80%		
	0.18-0.71mm						80%	
	0.18-0.50mm							60%

NONE EXFOLIATING (GRIT) CONTENT

Maximum percentage by weight	PRODUCT GRADE						
	PREMIUM	LARGE	MEDIUM	FINE	SUPERFINE	MICRON	RSU
	7%	7%	7%	7%	12%	15%	40%

TYPICAL CHEMICAL ANALYSIS

COMPONENT	COMPONENT TYPICAL WEIGHT (%)
SiO ₂	35 - 39
MgO	20 - 25
Fe ₂ O ₃	9 - 11
Al ₂ O ₃	10 - 13
TiO ₂	< 2
CaO	< 2
K ₂ O	< 1
Na ₂ O	< 1
P ₂ O ₅	< 1
Mn ₃ O ₄	< 1

OTHER TYPICAL PROPERTIES

	GRADE				
	PREMIUM	LARGE	MEDIUM	FINE	SUPERFINE
Loose bulk density (Crude – kg/m ³)	500-800	450 - 700	450 - 700	400 -700	350 - 650
Loose bulk density (Exfoliated – kg/m ³)	75-90	75 - 90	85 – 100	85 - 100	85 - 110
Surface Moisture	6 +/-1.5%	6 +/-1.5%	6 +/-1.5%	6 +/-1.5%	6 +/-1.5%
pH	7.0 – 8.85	7.0 – 8.85	7.0 – 8.85	7.0 – 8.85	7.0 – 8.85
Loss on Ignition	15% at 800 degrees celsius	15% at 800 degrees celsius	15% at 800 degrees celsius	15% at 800 degrees celsius	15% at 800 degrees celsius

PACKAGING

This is mainly demand driven mainly;

1.1 metric tonne Bulk Bag, 20 bags per 20/40'' container (loose or break bulk)

1.2 metric tonne bulk bag, 20 or 19 bags per 20/40'' container (loose or break bulk)

AS VERMICULITE IS A NATURAL PRODUCT, THIS SPECIFICATION MAY BE SUBJECT TO SLIGHT VARIATIONS. NAMEKARA VERMICULITE IS PERIODICALLY TESTED BY REPUTABLE INTERNATIONAL LABORATORIES FOR THE PRESENCE OF ASBESTIFORM MINERALS. NO ASBESTIFORM MINERALS HAVE BEEN DETECTED. CERTIFICATES OF ANALYSIS ARE AVAILABLE ON REQUEST.