

Mica

LostCirculationMaterial



DESCRIPTION

Flake mica is obtained through a special processing of mica-bearing rocks. The flake structure of mica enables effective sealing of both porous and fractured formations.

Mica possesses unique physical properties. Its layered flakes are flat, flexible, transparent to opaque, resilient, dielectric, chemically inert, insulating, lightweight, and hydrophilic.

Three grades of mica are available.

APPLICATION

Mica fine is often used as a preventive measure to avoid small amounts mud losses. For larger circulation losses, medium and coarse mica grades are recommended.

DOSAGE

The dosage depends on the severity of losses and formation type and typically ranges from: 8 - 24 kg/m³

PROPERTIES

Sieve Analysis

Fine Grade - Fine Flakes 0.2 - 0.8 mm	Medium Grade - Medium Flakes 0.8 - 2.0 mm	Coarse Grade - Coarse Flakes 2.0 - 4.7 mm
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Sieve	Retained (%)	Sieve	Retained (%)	Sieve	Retained (%)
20 mesh	< 5	4 mesh	0	4 mesh	0
20-40 mesh	40 ± 15	10 mesh	< 5	4-10 mesh	< 5
40-70 mesh	45 ± 15	10-20 mesh	15 ± 8	10-20 mesh	65 ± 15
70 mesh	30 ± 10	20 mesh	85 ± 15	20 mesh	25 ± 10

Property	Fine	Medium	Coarse
Appearance	Transparent to opaque flakes	Transparent to opaque flakes	Transparent to opaque flakes
Bulk Density (kg/m ³)	650	800	700
Mohs Hardness	2.7	2.7	2.7
Specific Gravity	2.9	2.9	2.9

PACKAGING

Mica is packed in multi-layer paper bags, 25 kg each, 1000 kg per pallet.