

LISKUN-mikanit- mica



LISKUN-Mica is a mineral that offers a wide range of exceptional properties. For about fifty years, Mica has been involved in processing mica into industrial material, without changing it's valuable natural characteristics.

As you read through the available information, you may find that some of the properties of mica could improve your own products. Please do not hesitate to contact us. We can offer a wide selection of materials based on mica, each of them meeting a series of specific requirements and designed for a particular application. We will be able to determine the material best suited to your requirements. If we cannot find one, we will meet with your engineers so that we can develop a new material to meet your needs.

This approach, emphasizing direct contact, has helped us adapt our products to the real world and has allowed us to create the materials of tomorrow, today.

Natural Mica

Natural mica has exceptional physical characteristics. It can be found throughout the world, most notably in the presence of Paleozoic rocks. Accessible deposits are located primarily in India, on the American continent, in southern Africa and in Russia.

Mica's chemical composition places it in the aluminium

silicates group. Two types are extracted – Muscovite, in which there is a predominance of potassium and Phlogopite, in which the presence of magnesium can be detected.

As a mineral, mica has a special characteristic – it can be cleft to obtain very thin flakes of constant thickness.

Properties

THERMAL

Mica can withstand temperature in excess of 1000°C/1830°F (Phlogopite), it is flame-retardant, non-flammable, does not give off fumes, and conducts very little heat, especially perpendicular to its strata.

ELECTRICAL

Natural mica has a dielectric strength greater than 25kV/mm (625V/mil), has good resistance to arcing and electrical erosion, and is permeable to microwaves.

HEMICAL

Mica is tolerant of water and most chemical agents, such as solvents, acids, bases and mineral oils.

MECHANICAL

Mica

has good compressive strength. It behaves well in the presence of tensile and bending stresses. It has a high modulus of elasticity.

MAIN TECHNICAL CHARACTERSTICS

Characteristics	Test Method	MICA HEATER PLATE	
		Muscovite	Phlogopite
Mica Content	IEC 371-2	> 90 %	

Silicone Content		IEC 371-2	< 10 %	
Thickness Tolerance, mm	Average	IEC 371-2	+/- 5%	
	Individual		+/- 6%	
Standard Size (mm)		IEC 371-2	1000 x 1000, 1000 x 1200, 1000 x 2400	
Density (gm/cm³)		IEC 371-2	2,0~2.20	2,0~2.20
Flexural strength (N/mm²)		ISO 178	≥200	≥210
Dielectric strength (KV/mm) at 23°C		IEC 243	>20	>25
Insulation resistance (M-ohm) at 23°C		IEC 93	200 ~ 600	100 ~ 600
Resistance to temperature		continuous	1000°C	1100°C
		Peak	1100°C	1200°C
Weight Loss @ 550°C for 4 Hrs		IEC371-2	<1%	
Water Absorption after 24 hrs		ISO 62	<0,5%	

Mica Paper Tube

Product Description

Mica paper tube is a hard pipe insulating material prepared by using mica paper with silicon binder

Application

electric motor, electric appliances and resistors.

Available:

with wrapped on SS threaded rods

MAIN TECHNICAL CHARACTERSTICS

Characteristics		Muscovite Mica	Phlogopite Mica
Binder		Silicone	
Thickness Tolerance	OD	+/- 0.20 mm	
	ID	+/- 0.10 mm	
Standard Length		1 Meter	
Density (gm/cm³)		1.8	
Wall Thickness		Min. 0.5 mm Max. 13 mm	
Electric Strength		Parallel to laminate (In oil at 90°C) 22 KV/mm Min. 26 KV/mm Avg.	
Electric strength		Normal to laminate (In oil at 90°C) 10 MV/m Min. 12 KV/m Avg.	
Insulation resistance		After 24 hours in water 1 mega-ohm Min.	
Temperature classification		500°C ~ 550°C	650°C ~ 700°C
Water Absorption		1.6 mg/cm ² Avg 2.0 mg/cm ² Max	