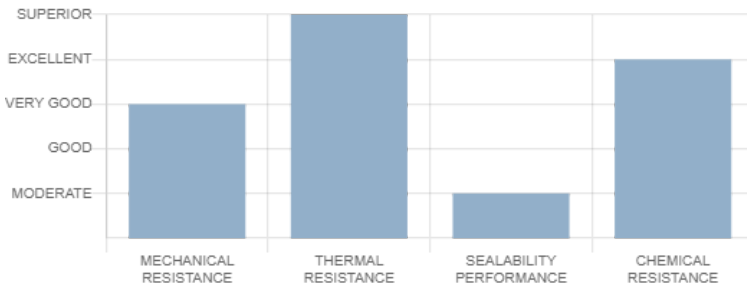




MICALIT® F contains a high percentage of phlogopite mica flakes, impregnated with a silicone binder. It has excellent thermal and good chemical properties, making it suitable for high-temperature applications in the automotive and steel industry for exhaust systems, gas turbines, oil and gas burners, furnaces, and ovens. It also offers good dielectric and low thermal conductivity properties.

PROPERTIES



APPROPRIATE INDUSTRIES & APPLICATIONS

- AUTOMOTIVE AND ENGINE BUILDING INDUSTRIES
- CHEMICAL INDUSTRY
- HEATING SYSTEMS
- HIGH-TEMPERATURE APP.
- PETROCHEMICAL INDUSTRY

Composition	Phlogopite mica flakes, silicon resin
Color	Yellow-Brown
Approvals and compliances	Please inquiry
Sheet dimensions	Size (mm): 1000 x 1200 Thickness (mm): 0.4 – 3.0 Other dimensions and thicknesses available on request

TECHNICAL DATA

Typical values for 2 mm thickness

Mica content		%	>90
Binder content		%	<10
Density	DIN 28090-2	g/cm ³	1.90
Compressibility	ASTM F36J	%	15-35
Recovery	ASTM F36J	%	30-45
Weight loss (at 800°C)	DIN 52911	%	<5
Tensile Strength	ASTM F152	MPa	>20
Residual stress	DIN 52913		
50 MPa, 300°C, 16 h		MPa	40
Dielectric Strength	ASTM D149		
50 % RH, 23°C, 24 h		kV/mm	>15
Thermal Conductivity			
at 20°C perpendicular		W/(m·K)	0.3
at 20°C horizontal		W/(m·K)	3.0
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{KSW}		%	14.4
At elevated temperature: $\epsilon_{WSW/200^\circ C}$		%	6.4
Max. operating temperature		°C	950
Max. operating pressure		bar	5

CHEMICAL RESISTANCE CHART

The recommendations made here are intended as a guideline for the selection of a suitable gasket type. As the function and durability of products are dependent upon a number of factors, the data may not be used to support any warranty claims. If there are specific type-approval regulations, these have to be complied with.

Legend: + Recommended ○ Recommendation depends on operating conditions, - Not recommended

Air (gas)	+	Carbon dioxide (gas)	+	Mineral oil type ASTM 1	+	Paraffin oil	+	Sodium silicate (Water glass)	+
Argon (gas)	+	Carbon monoxide (gas)	+	Motor oil	+	Petroleum (Crude oil)	+	Steam	+
Asphalt	+	Flue gas (Exhaust/Coke oven)	+	Naphtha	+	Potassium chloride	+	Sulfur dioxide (Gas)	+
Bio-diesel	+	Fuel oil	+	Nitrogen (Gas)	+	Potassium nitrate	+	Tar	+
Borax	+	Hydraulic oil (Mineral)	+	Nitrous gases (NOx)	+	Sodium aluminate	+	Transformer oil (Mineral type)	+
Calcium chloride	+	Hydraulic oil (Phosphate ester-based)	+	Oxygen (gas)	+	Sodium chloride	+		

All information and data quoted are based upon decades of experience in the production and operation of sealing elements. This data may not be used to support any warranty claims. With its publication this latest edition supersedes all previous issues and is subject to change without further notice.