



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

SUPERIOR	THERMAL RESISTANCE		CHEMICAL RESISTANCE
EXCELLENT	MECHANICAL RESISTANCE		
VERY GOOD			
GOOD		SEALABILITY PERFORMANCE	
MODERATE			

APPROPRIATE INDUSTRIES & APPLICATIONS

-  CHEMICAL INDUSTRY
-  HEATING SYSTEMS
-  PETROCHEMICAL INDUSTRY
-  HIGH TEMP. APPLICATIONS
-  AUTOMOTIVE AND ENGINE BUILDING INDUSTRY

Composition	Phlogopite mica flakes, silicon resin
Color	Yellow-Brown

TECHNICAL DATA

 Typical values for a thickness of 2 mm

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	DIN 52913		
50 MPa, 300 °C, 16 h		MPa	>20
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: $\epsilon_{WSW/200\text{ °C}}$		%	6,4
Max. operating temperature		°C	950
Max operating pressure		Bar	5

Sheet dimensions	Size (mm): 1000 x 1200 Thickness (mm): 0.4 - 3.0 Other dimensions and thicknesses available on request
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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.

- + Recommended
- o Recommendation depends on operating conditions
- Not recommended

Air (gas)	+
Argon (gas)	+
Asphalt	+
Bio-diesel	+
Borax	+
Calcium chloride	+
Carbon dioxide (gas)	+
Carbon monoxide (gas)	+

Flue gas (Exhaust/Coke oven)	+
Fuel oil	+
Hydraulic oil (Mineral type)	+
Hydraulic oil (Phosphate ester-based)	+
Mineral oil (ASTM no.1)	+
Motor oil	+
Naphtha	+
Nitrogen (gas)	+

Nitrous gases (NOx)	+
Oxygen (gas)	+
Paraffin oil	+
Petroleum (Crude oil)	+
Potassium chloride	+
Potassium nitrate	+
Sodium aluminate	+
Sodium chloride	+

Sodium silicate (Water glass)	+
Steam	+
Sulfur dioxide (gas)	+
Tar	+
Transformer oil (Mineral type)	+