



MICALIT[®] P contains a high percentage of phlogopite mica flakes, impregnated with a silicone binder and reinforced by a tanged stainless steel insert. It has excellent thermal, good chemical and mechanical properties, making it suitable for high temperature and pressure 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 EXCELLENT VERY GOOD GOOD MODERATE	MECHANICAL RESISTANCE	THERMAL RESISTANCE	CHEMICAL RESISTANCE
	MECHANICAL RESISTANCE	THERMAL RESISTANCE	CHEMICAL RESISTANCE
	MECHANICAL RESISTANCE	THERMAL RESISTANCE	CHEMICAL RESISTANCE
	MECHANICAL RESISTANCE	THERMAL RESISTANCE	SEALABILITY PERFORMANCE
	MECHANICAL RESISTANCE	THERMAL RESISTANCE	SEALABILITY PERFORMANCE

APPROPRIATE INDUSTRIES & APPLICATIONS

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

Composition	Phlogopite mica flakes, silicon resin, tanged stainless steel insert (AISI 316L in 0.1 mm)
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	2.19
Compressibility	ASTM F36J	%	15-35
Recovery	ASTM F36J	%	30-45
Weight loss (at 800 °C)	DIN 52911	%	< 5
Stress Resistance	DIN 52913		
50 MPa, 300 °C, 16 h		MPa	42
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{KSW}		%	20,3
At elevated temperature: $\epsilon_{WSW/200\text{ °C}}$		%	4,1
Max. operating temperature		°C	950
Max. operating pressure		Bar	40

Sheet dimensions	Size (mm): 1000 x 1200 Thickness (mm): 1.5 2.0 3.0 Other sizes 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	o
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)	o
Oxygen (gas)	+
Paraffin oil	+
Petroleum (Crude oil)	+
Potassium chloride	+
Potassium nitrate	+
Sodium aluminate	o
Sodium chloride	+

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