

Mica is a mineral substance that has no hazards to health. Moreover, due to its good resistance to temperature (up to 1000°C), it has been converted to a great substitution for asbestos in many applications where the temperature does not exceed 1000°C. On top of Mica sheet's features in the sealing industry, high resistance to mechanical stress can be mentioned, as a result of which, the main use of industrial mica gaskets involves the compression of a bolt that may exceed 14 MPa (2000 psi). This explains why mica is extensively applied in industrial sealing systems. **THERMA-PAF 650** is a gasket constructed of premium quality phlogopite mica sheets. This style has a superior function in the sealing of aggressive and corrosive media and environments with elevated temperatures up to 1000°C.



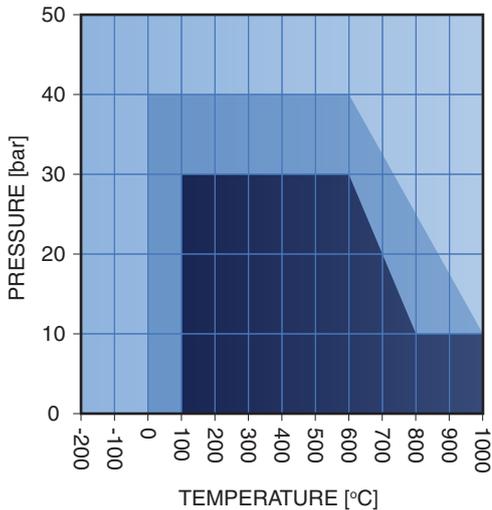
TECHNICAL DATA:

TYPICAL VALUES FOR A THICKNESS OF 2.0 MM				
Compressibility	ASTM F 36 J	-	%	20
Recovery	ASTM F 36 A	-	%	35
Residual Stress	DIN 52913	50Mpa, 16 hours at 300°C	Mpa	35
Cold Compressibility	DIN 28090-2	-	%	12
Cold Recovery	DIN 28090-2	-	%	5
Hot Recovery	-	-	%	2
Hot Creep	DIN 28090-2	-	%	10
Density	-	-	g/cm ³	1.8
Tensile Strength (transverse)	DIN 52910	-	Mpa	30
Dielectric strength	IEC 243	At 23°C	KV/mm	20
Thermal conductivity (perpendicular)	-	At 23°C	[W/(m K)]	0.07
Temperature (Min.)	-	-	°C (°F)	-200(-328)
Temperature (Max.)	-	-	°C (°F)	1000(1832)
Pressure (Max.)	-	-	bar (psi)	50 (725)

APPLICATIONS:

Glass industry, Energy sector, Electrical insulation, Automotive industry.

P-T DIAGRAM



■ In the darker shaded region (dark blue) the gasket is generally applicable for different chemical substances and is highly able to offer chemical compatibility.

■ In workplaces with the conditions this area, technical assessment of gasket material is recommended.

■ In the light blue region, installation of gasket without technical assessment should not be carried out.

DIMENSIONS

Size (mm):	1520*1520 mm 1220*1220 mm
Thickness (mm):	0.5, 0.8, 1.0, 1.5, 2.0, 3.0, 4.0, 5.0
Tolerances (mm):	Up to 1.0 mm thickness: ± 0.1 mm Above 1.0 mm thickness: $\pm 10\%$ Length & Width: $\pm 5\%$
Surface finish:	Color: Gold

CHEMICAL RESISTANCE CHART

THERMAPAF 650		THERMAPAF 650	
Air (gas)	✓	Nitrogen (Gas)	✓
Argon (gas)	✓	Nitrous gases (NOx)	✓
Asphalt	✓	Oxygen (gas)	✓
Bio-diesel	✓	Paraffin oil	✓
Borax	✓	Petroleum (Crude oil)	✓
Calcium chloride	✓	Potassium chloride	✓
Carbon dioxide (gas)	✓	Potassium nitrate	✓
Carbon monoxide (gas)	✓	Sodium aluminate	✓
Flue gas (Exhaust/Coke oven)	✓	Sodium chloride	✓
Fuel oil	✓	Sodium silicate (Water glass)	✓
Hydraulic oil (Mineral)	✓	Steam	✓
Hydraulic oil (Phosphate ester-based)	✓	Sulfur dioxide (Gas)	✓
Mineral oil type ASTM 1	✓	Tar	✓
Motor oil	✓	Transformer oil (Mineral type)	✓
Naphtha	✓		



Suitable



Depends on operating conditions



Unsuitable



No data or insufficient evidence