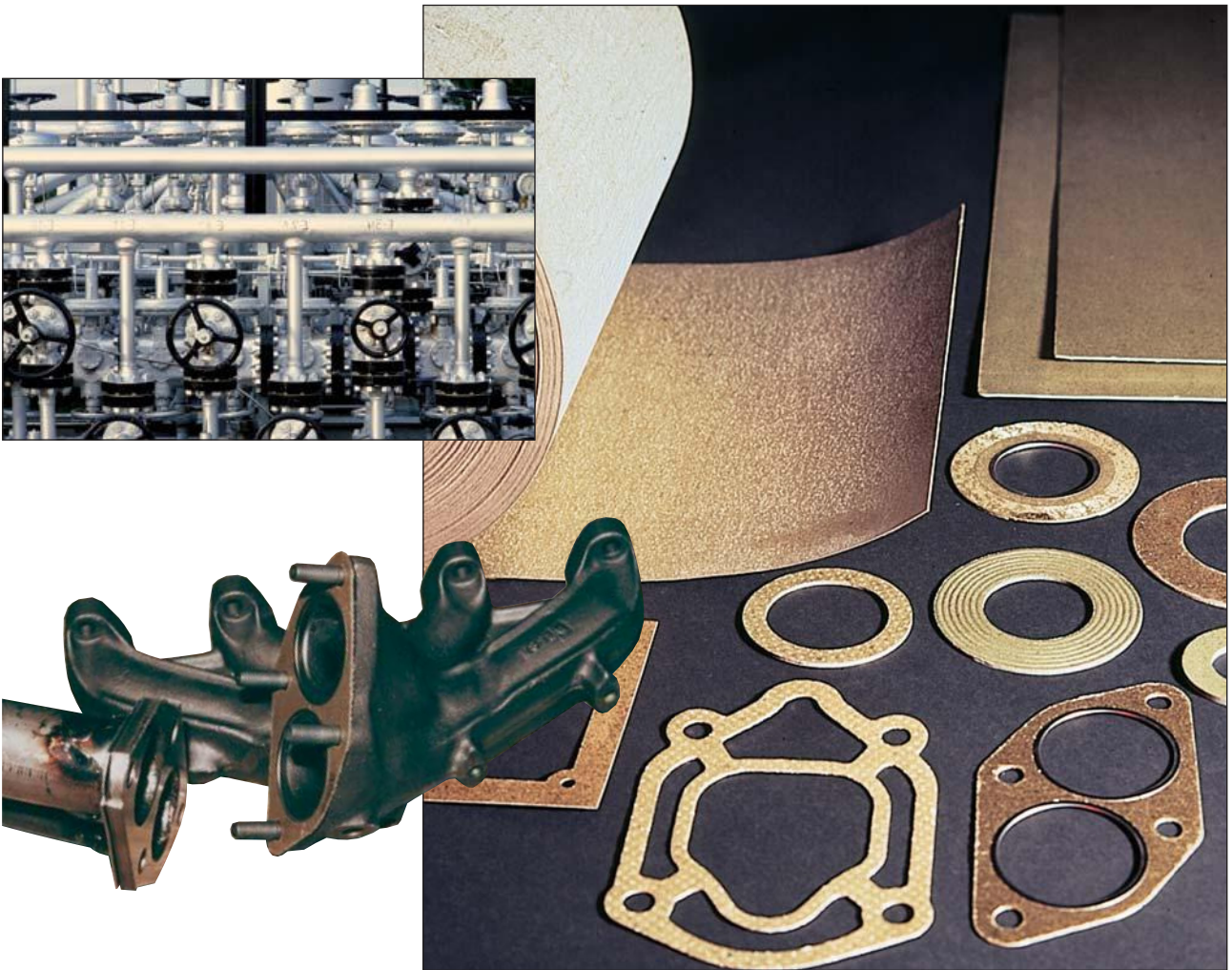


## High-temperature gasket material (up to 1000°C - 1832°F)



*Cogemica® Hi-Temp has been developed for the production of high temperature resistant gaskets up to 1000°C (1832°F). It does not contain any asbestos and is inert to most chemical substances.*

**APPLICATIONS** Cogemica® Hi-Temp ensures the sealing in applications where temperatures up to 1000°C (1832°F) can be reached. Gaskets made of Hi-temp are used in automobile exhaust manifolds, gas turbines, gas and oil burners, heat exchangers, and in other flange connections. It is also used as a filler for spiral wound gaskets and as a material for camprofile seals.

**COMPOSITION** Cogemica® Hi-Temp is a material containing a high percentage of phlogopite mica paper impregnated with a silicone binder. Mica, an aluminosilicate of mineral origin, has a lamellar and non-fibrous structure representing a satisfactory alternative to asbestos. This material gives 'Hi-Temp' its thermal characteristics - weight loss at 800°C (1472°F) less than 5% - and its chemical resistance to solvents, acids, bases and mineral oils.

**AVAILABILITY** **Hi-Temp 710**  
 Sheets of 1000 x 1200 and 2400 mm (39.37" x 47.24" and 94.49") or strips.  
 Thickness: 0.1 - 3 mm (0.004" - 0.125").

**Hi-Temp 730**  
 Rolls of 200 m (218 yds) length. Width of 1000 mm (39.37")  
 Thickness: 0.1 - 0.63 mm (0.004" - 0.025").

Other dimensions on request.



**TECHNICAL DATA**

General information	Hi-Temp 710	Hi-Temp 730
Class of mica	Phlogopite	
Binder	silicone resin	
Mica content	ca 90%	
Colour	dark green	
<b>Application range</b>		
Max. temperature	1000°C (1832°F)	
Max. pressure	5 bar (72.5 psi)	
<b>Physical properties</b> measured on 2 mm (0.08") test pieces		
Density (IEC 371-2)	1.9 g/cm <sup>3</sup> (±0.1) (118 lb/ft <sup>3</sup> )	1.7 g/cm <sup>3</sup> (±0.2) (106 lb/ft <sup>3</sup> )
Tensile strength (DIN 52910)	Approx. 20 N/mm <sup>2</sup> (2,900 psi)	Approx. 10 N/mm <sup>2</sup> (1,450 psi)
Compressibility (ASTM F36-J)	approx. 25 %	
Recovery (ASTM F36-J)	approx. 35 %	
Ignition loss at 800°C (DIN 52 911)	< 5 %	
Dielectric strength (IEC 243 - 23°C)	approx. 20 kV/mm (508 V/mil)	
Creep strength (DIN 52913)		
50 MPa, 300°C 7252 psi, 572°F	approx. 40 N/mm <sup>2</sup> * (5,800 psi) *	

\*The measurement was performed on Hi-Temp with a pegged steel insert.

Cogemica® : Registered trademark of Compagnie Royale Asturienne des Mines s.a., division Cogebi.

Data are average results of laboratory tests conducted under standard procedures and are subject to variation. These do not constitute a warranty or representation for which we assume legal responsibility.





High-temperature gasket material  
(up to 1000°C - 1832°F)

Supply form



Hi-Temp 710  
Sheets

0.1- 1.5 mm x 1200 x 1000 mm (0.004" - 0.060" x 47.24" x 39.37")  
2.0 - 6.0 mm x 1220 x 1016 mm (0.080" - 0.240" x 48" x 40").

Standard thickness: 0.4 / 0.5 / 0.6 / 1.0 / 1.5 / 2.0 / 3.0 mm  
(0.016" / 0.020" / 0.024" / 0.039" / 0.059" / 0.079" / 0.12").

2400 mm (94.94") length and customized strips available on request.

Hi-Temp 730  
Rolls

0.1- 0.63 mm x 1000 mm (0.004" - 0.025" x 39.37").

Standard thickness: 0.34 / 0.45 / 0.47 / 0.63 mm (0.013"/0.018"/0.019"/0.025").

Other thicknesses and widths available on request.

Width 1000 mm (39.37") = rolls 100 or 200 m length (328ft or 656ft).

Customized width = rolls as from 30m up to 300 m (98.43ft up to 984ft).

COMPOSITION PROPERTIES	TEST METHOD	Hi-Temp 710	Hi-Temp 730
Phlogopite mica content IEC 371-2		min 90%	min 90%
Silicone Binder content IEC 371-2		max 10%	max 10%
Density	IEC 371-2	1.9 g/cm <sup>3</sup> (+/- 0.1) (118 lb/ft <sup>3</sup> )	1.7 g/cm <sup>3</sup> (+/-0.1) (106 lb/ft <sup>3</sup> )
Weight loss	DIN 52911	< 5%	<5%
Tensile strength	DIN 52910	approx. 20N/mm <sup>2</sup> (2,900 psi)	approx. 10N/mm <sup>2</sup> (1,450 psi)
Compressibility	ASTM F36-J	15%	25%
Elastic recovery	ASTM F36-J	40%	35%
Creep relaxation 50 MPa - 300° C (7252 psi - 572° F)	DIN 52913	40 N/mm <sup>2</sup> (5,800 psi)	40 N/mm <sup>2</sup> (5,800 psi)
The measurement was performed on Hi-Temp with a pegged steel insert			
Dielectric strength	IEC 243 - 23° C	approx. 20kV/mm (508 V/mil)	approx. 20kV/mm (508 V/mil)
Thermal resistance 2 hr to 800° C	swelling in thickness	stable	stable
Thermal conductivity measured	perpendicular	+/- 0.3 W/m.°K at 20°C (68°F)	+/- 0.3 W/m.°K at 20°C (68°F)
	horizontally	+/- 3 W/m.°K at 20°C (68°F)	+/- 3 W/m.°K at 20°C (68°F)
Max temperature range continuous		1000° C (1832° F)	1000° C (1832° F)
	peaks	1100°C (2012°F)	1100°C (2012°F)
Max pressure		5 bar (72,5 psi)	5 bar (72,5 psi)