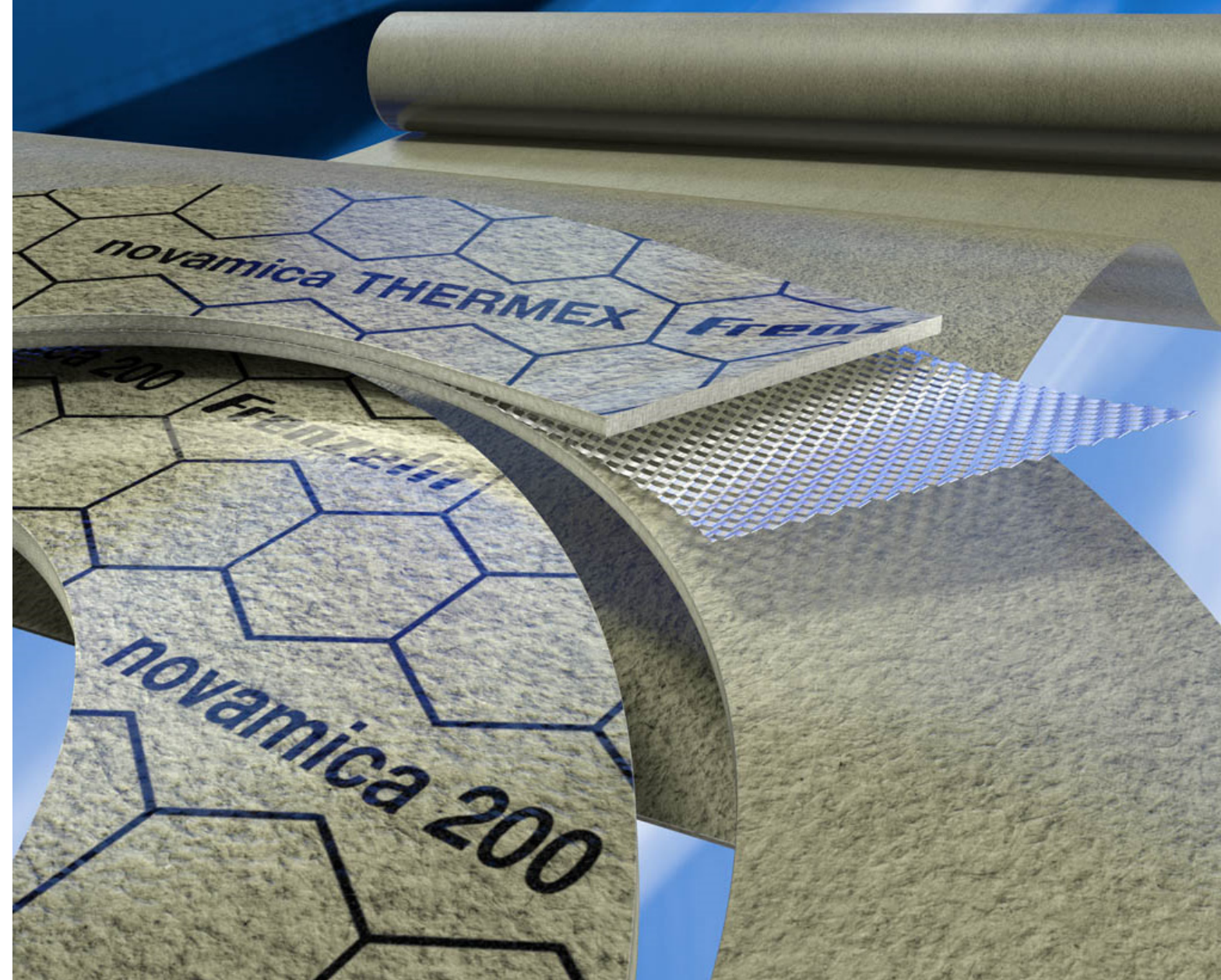


novamica®

Phlogopite mica for highest temperatures,
chemical resistance and electrical insulation.



GASKETS

TECHNICAL TEXTILES

EXPANSION JOINTS

INSULATION

NEW MATERIALS

 **Frenzelit**
creating hightech solutions

Why novamica®?

Our materials made from optimised phlogopite mica have outstanding temperature resistance, chemical resistance, electrical insulation and processing properties.

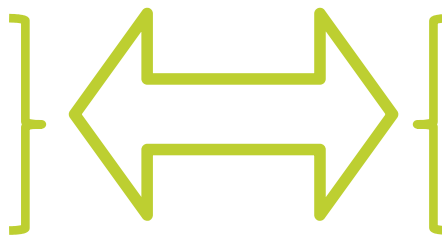
With the novamica® portfolio, we are supplying individual solutions for:

- Sealing at high temperatures up to 1000°C
- Sealing of aggressive / corrosive media at high temperatures
- Soft mica layers for metal gaskets (e.g. grooved and spiral wound gaskets)
- Production of parts with filigree geometry
- Processability with all the standard methods (plotter, water jet, punch, shears, cutter)



Applications

- Machine manufacturing
- Process industry
- Energy sector
- Glass industry
- Furnace manufacturing
- Automotive industry / mobility



Typical application areas

- Gaskets (high-temperature)
- Electrical insulation
- Soft layer
- Temperature-resistant compensation elements

Excellent material characteristics

The phlogopite mica used in the novamica® products resists temperatures of up to more than 1000°C. Other mica materials are far less resistant. Muscovite mica starts to calcinate at about 600°C, for example, while such structures as vermiculite that are similar to mica begin to calcinate at as low as 100°C.

With the material combination consisting of high-quality phlogopite mica, an efficient bonding system and expanded metal (THERMEX), it is possible to produce premium solutions for a wide range of high-temperature applications.

The material combinations

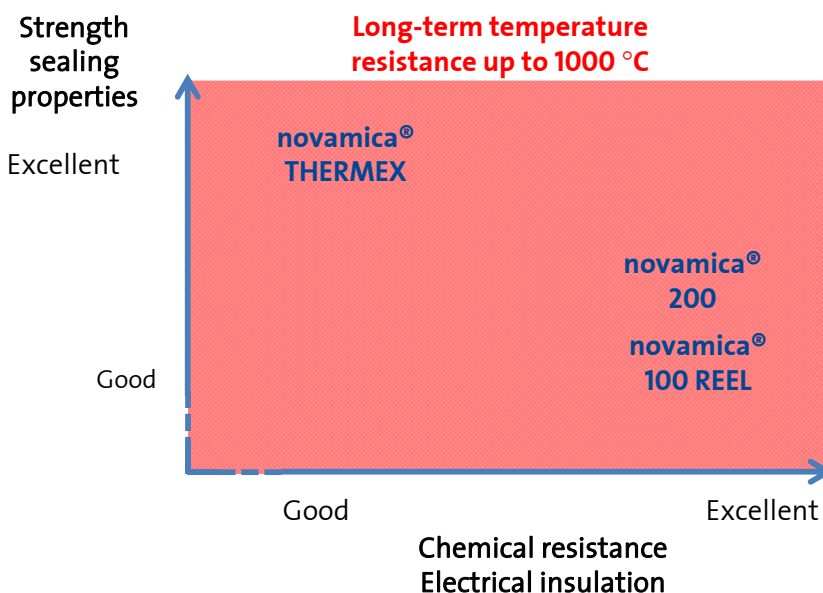
novamica®	THERMEX	200	100 REEL
High-quality phlogopite mica	◆	◆	◆
Stainless steel expanded metal insert	◆		
High-temperature bonding system	◆	◆	◆
Product range			
Sheets	◆	◆	
Reels			◆

Technical details

novamica®		THERMEX	200	100 REEL
Density (* = modal value)	[g/cm ³]	1.80*	1.80*	1.60*
Thickness range	[mm]	1.0 / 1.5 2.0 / 3.0	0.8 / 1.0 1.5 / 2.0 / 3.0	0.5
Sheet length x width	[mm]	1,200 x 1,000	1,200 x 1,000	-
Reel width x length	[mm]	-	-	1,000 x 50,000 4.0 / 4.5 / 5.6 / 6.0 / 6.5 / 7.0 / 7.2 / 8.0 x 25,000
Material strength		✓✓✓	✓✓	✓
Temperature resistance		✓✓✓	✓✓	✓✓
Adaptability / flexibility		✓✓✓	✓✓	✓✓✓
Sealing properties		✓✓✓	✓✓	✓✓
Media resistance		✓✓	✓✓✓	✓✓✓
Electrical insulation		✓	✓✓✓	✓✓

✓ = Basically suitable ✓✓ = Very suitable ✓✓✓ = Highly suitable

novamica® family: efficient operation in high temperature ranges



Possible applications



Highly temperature-resistant compensation element



Gasket with sophisticated geometry



Electrical insulation



Corrosive media

If you have any application engineering questions, we will be delighted to answer them. Just contact:

gaskets@frenzelit.com

Good for people and the environment.

From research and development to our manufacturing operations and use of the product by the customer: quality assurance and a responsible approach to resources and the environment are a firm commitment we observe in everything we do throughout the life cycle of all products. The Frenzelit gasket division has obtained certification that the company complies with the requirements of ISO 9001, ISO 14001 and ISO 50001. This means complete transparency in all areas and therefore provides a high degree of security – for the benefit of our employees, the environment and our customers.

Quality management

ISO 9001





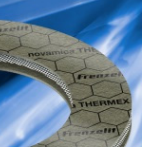

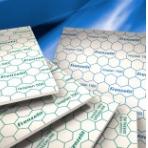
Environmental management

ISO 14001

Energy management

ISO 50001

Engineered by Frenzelit: Gasket materials / fibre-reinforced compounds

novapress®	novatec®	novafilon®	novaphit®	novamica®	novaplan®	isoplan®
						
200°C	250°C	260°C	550°C	1000°C	1000°C	1100°C
-100°C	-100°C	-200°C	-200°C	-200°C	-100°C	-100°C
Elastomer-bonded fibre compound gaskets	Fibre-reinforced graphite gaskets	Modified and filled PTFE gaskets	Expanded graphite with/without stainless steel expanded metal insert	Phlogopite mica with/without stainless steel expanded metal insert	Soft layer/insert for heat shield applications and cylinder head gaskets	High-temperature insulation materials

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