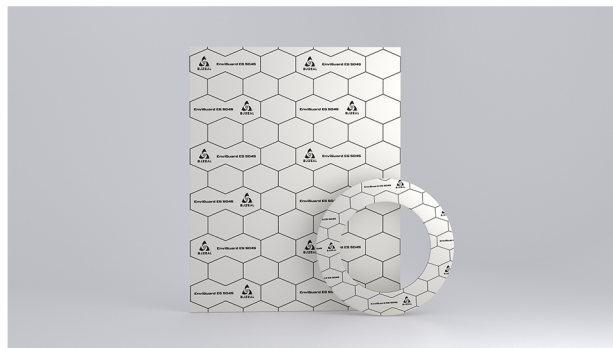
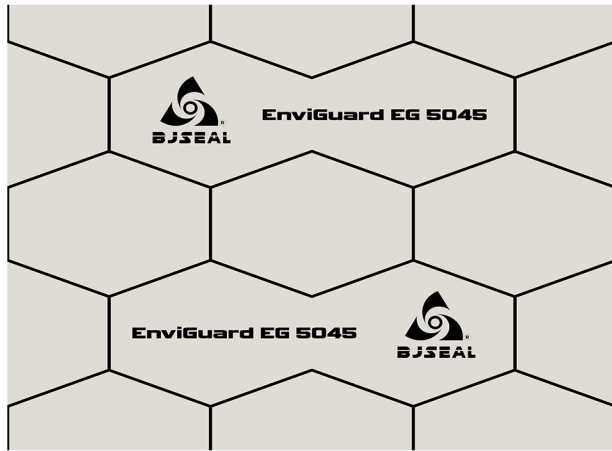


TECHNICAL DATA SHEET

BJSEAL-Enviguard EG 5045



Sheet Sizes

- 1500 X 1500 mm
- 1500 X 2000 mm
- 1500 X 2250 mm
- 1300 X 3900 mm
- 1500 X 4500 mm
- 1270 X 1270 mm
- 1500 X 1000 mm
- 2100 X 3000 mm
- 1000 X 1000 mm
- 1500 X 3000 mm
- 1500 X 4000 mm
- 2000 X 3000 mm

Have an application engineering questions or need expert advice?

Our team at BJSEAL is ready to assist you! Whether you need support with a specific application or have technical inquiries, we're here to provide tailored solutions that meet your needs. Don't hesitate to reach out to us at gasket@bjseal.com we'll be delighted to help you find the right answers.

The BJSEAL-Enviguard 5045 is a high-performance gasket material engineered for applications that demand exceptional thermal stability and resistance to a wide range of substances. Composed of a robust blend of aramid fiber, glass fiber, and rockwool, this gasket material is reinforced with a high-viscosity nitrile butadiene rubber (NBR) binder. The EnviGuard 5045 is designed to perform reliably across varying temperatures, from sub-zero to high-temperature environments, and offers excellent resistance to steam, water, oils, hydrocarbons, and boasts very low gas permeability. This versatile material is ideal for sealing applications that require durability and consistent performance under fluctuating conditions.

A composite gasket material consisting of Aramid fiber, glass fiber, and rock wool, bound together with a high-viscosity Nitrile Butadiene Rubber (NBR) matrix, engineered for enhanced durability, thermal stability, and resistance to pressure and mechanical stress.

Key Features and Applications:

Features:

- **Advanced Material Composition:** Combines the strength of aramid fiber, the thermal resilience of glass fiber, and the insulating properties of rockwool, all bonded with a high-viscosity NBR binder.
- **Wide Temperature Range:** Engineered to perform across a broad range of temperatures, from sub-zero to high-temperature environments.
- **Excellent Chemical Resistance:** Provides reliable sealing against steam, water, oils, hydrocarbons, and offers very low gas permeability, ensuring tight and durable seals.
- **Durability and Stability:** Designed to maintain integrity and performance under varying temperature and pressure conditions, offering long-lasting service life.

Applications:

- **Steam Systems:** Ideal for high-temperature steam applications, providing reliable sealing in boilers, heat exchangers, and piping systems.
- **Oil and Hydrocarbon Systems:** Suitable for sealing in environments exposed to oils and hydrocarbons, making it an excellent choice for automotive, petrochemical, and industrial machinery.
- **Water and Cooling Systems:** Effective in water and cooling liquid applications, ensuring dependable performance across varying temperature conditions.
- **Gas Sealing:** The material's very low gas permeability makes it ideal for applications where gas tightness is critical, ensuring minimal leakage and maximum efficiency.
- **General Industrial Use:** Versatile enough for a wide range of industrial applications that require robust sealing solutions in environments with fluctuating temperatures.

Key Industries

- HVAC Systems
- Water Treatment Plants
- Oil & Fuel Handling
- General Industrial Machinery
- Automotive Industry
- Food & Beverage Industry
- Pulp and Paper Industry
- Chemical Processing

Thickness

- Metallic – 0.8 mmto 6 mm
- Non Metallic – 0.4 mmto 6 mm

Tolerance

- Length and width - $\pm 5\%$
- Thickness $\leq 1.0\text{mm}$ - $\pm 0.1\text{mm}$
- Thickness $\geq 1.0\text{mm}$ - $\pm 10\%$

TECHNICAL DATA SHEET

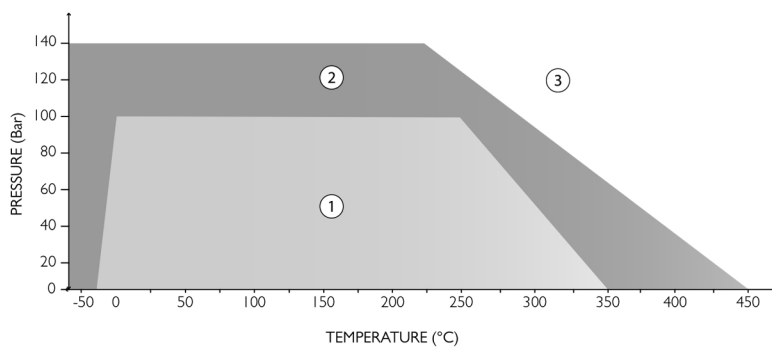
BJSEAL-EnviGuard EG 5045

Technical Data

Physical Properties	Test method	Unit	Specific Value
Density	ASTM F 1315	g/cm ³	1.60 - 1.90
Compressibility	ASTM F 36 J	%	5.0 - 15.0
Recovery	ASTM F 36 J	%	≥ 45.0
Tensile Strength	ASTM F 152	N/mm ²	≥ 10.0
Stress Relaxation (16h 300° C)	DIN 52913	Mpa	≥ 30.0
Gas Permeability	BS 7531	ml/min	≤ 0.50
ASTM oil no.3 (5h, 150°C)	ASTM F 146		
Thickness Increase		%	≤ 5.0
Weight Increase		%	≤ 10.0
ASTM Fuel B (5h, 23°C)	ASTM F 146		
Thickness Increase		%	≤ 5.0
Weight Increase		%	≤ 12.0
Water (5h, 100°C)	ASTM F 146		
Thickness Increase		%	≤ 5.0
Weight Increase		%	≤ 5.0
Max. Peak Temperature		°C/°F	-50 to 450/-58 to 842
Max. Operating Temperature		°C/°F	-25 to 350/-13 to 662
Max. Operating Pressure		Bar/PSI	140/2030
Colour			white

The values given in the table refer to the gasket thickness 2.0mm
Customers can request different color options.

Pressure vs Temperature



1. Suitable for chemical Compatibility
2. Suitable in some cases but check your application requirements with a technician team
3. Contact BJSEAL for applications with higher temperatures and pressures.

Other Envi-Guard Options

EG 5005 - Approx 165°C/329°F @ 50 Bar/725 psi
EG 5005S - Approx 200°C/392°F @ 65 Bar/953 psi
EG 5010 - Approx 200°C/392°F @ 60 Bar/870 psi
EG 5015 - Approx 225°C/437°F @ 80 Bar/1160 psi
EG 5020 - Approx 250°C/662°F @ 100 Bar/1450 psi
EG 5020S - Approx 300°C/572°F @ 120 Bar/1740 psi
EG 5030S - Approx 300°C/572°F @ 120 Bar/1740 psi
EG 5035 - Approx 275°C/527°F @ 100 Bar/1450 psi
EG 5040 - Approx 200°C/392°F @ 60 Bar/870 psi
EG 5050 - Approx 350°C/662°F @ 80Bar/1160 psi
EG 5055S - Approx 250°C/662°F @ 140 Bar/2030 psi

All recommendations and information contained in this data sheet are, to the best of our knowledge, accurate. Product specifications are intended as guidelines. Since service conditions are beyond our control, users must ensure that the products are suitable for their intended use. No guarantee or warranty is given or implied regarding the information or recommendations provided, nor that the use of the products will not infringe on the rights of third parties. We reserve the right to change product design and properties without prior notification.