

TECHNICAL DATA SHEET

BJSEAL-Enviguard EG 5035



Fluid Sealing Solutions



The BJSEAL-Enviguard 5035 is a high-performance gasket material specifically designed to withstand medium-stress conditions and frequent fluctuations in temperature and pressure. Composed of a blend of aramid fibers and organic fibers, bound with a nitrile butadiene rubber (NBR) binder, this gasket material offers exceptional durability and adaptability. It is suitable for sealing a wide range of substances, including oils, fuels, lubricants, alcohols, gases, hydrocarbons, steam, water, cooling liquids, and most diluted acids and alkalis. Engineered for versatile performance, the Enviguard 5035 provides reliable sealing in dynamic industrial environments where consistency and resilience are crucial.

This gasket material is engineered with a blend of organic fibers, aramid fibers, and an NBR binder to provide superior strength, flexibility, and chemical resistance, with the added durability of steel wire reinforcement.

Key Features and Applications:

Features:

- **Adaptable Material Composition:** Combines the strength of aramid fiber with the flexibility of organic fiber, reinforced with an NBR binder for enhanced chemical resistance and durability.
- **Medium-Stress Performance:** Designed to provide consistent sealing under medium-stress conditions, even with frequent temperature and pressure fluctuations.
- **Chemical Versatility:** Suitable for a broad spectrum of substances, including oils, fuels, lubricants, alcohols, gases, hydrocarbons, steam, water, cooling liquids, and most diluted acids and alkalis.
- **Resilience to Dynamic Conditions:** Engineered to maintain integrity and performance in environments where temperature and pressure conditions frequently change.

Applications:

- **Oil and Fuel Systems:** Ideal for applications in automotive, petrochemical, and industrial machinery, where exposure to oils, fuels, and hydrocarbons is common.
- **Chemical Processing:** Reliable sealing for systems involving alcohols, gases, and a variety of industrial fluids, especially in environments with dynamic temperature and pressure conditions.
- **Steam and Water Systems:** Provides effective sealing in steam and water applications, including boilers, heat exchangers, and piping systems, where conditions may vary.
- **Cooling Systems:** Suitable for sealing cooling liquids in refrigeration and cooling systems that experience fluctuating operational conditions.
- **General Industrial Use:** Versatile enough for a wide range of industrial applications requiring robust sealing solutions under medium-stress conditions and frequent operational changes.

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 mm to 6 mm
- Non Metallic – 0.4 mm to 6 mm

Tolerance

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

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.

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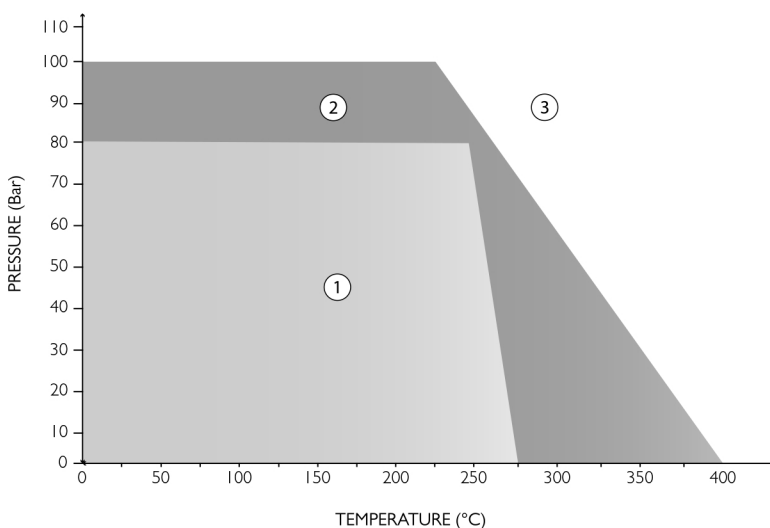
BJSEAL-EnviGuard EG 5035

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	%	7.0 - 17.0
Recovery	ASTM F 36 J	%	≥ 50.0
Tensile Strength	ASTM F 152	N/mm ²	≥ 11.0
Gas Permeability	BS 7531	ml/min	≤ 1.0
Stress Relaxation (16h 300° C)	DIN 52913	Mpa	≥ 20.0
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		%	≤ 7.0
Weight Increase		%	≤ 12.0
Water (5h, 100°C)	ASTM F 146		
Thickness Increase		%	≤ 5.0
Weight Increase		%	≤ 10.0
Max. Peak Temperature		°C/°F	400/752
Max. Operating Temperature		°C/°F	275/527
Max. Operating Pressure		Bar/PSI	100/1450
Colour		Blue	

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

Pressure vs Temperature



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 5040 - Approx 200°C/392°F @ 60 Bar/870 psi
EG 5045 - Approx 350°C/662°F @ 140 Bar/2030 psi
EG 5050 - Approx 350°C/662°F @ 80 Bar/1160 psi
EG 5055S - Approx 250°C/662°F @ 140 Bar/2030 psi

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.

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.