Excellent sealing, thermal and mechanical properties contribute to the reduction of "fugitive emissions".

Free of hazardous fibres

"N-nitrosamines free"

Correspond to DIN 28091-2

Environment-friendly gasket material with enhanced resistance to steam and strong alkaline media.

In order to spread the most comprehensive knowledge of our products, our highly skilled group of experts organized in technical-service department can assist you by solving your sealing problem. If you need our help, contact us.

DONIT TESNIT
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Fax: +386 (0)1 582 32 06, 582 32 08
E-mail: info@donittesnit.si
http://www.donittesnit.si

Product range:
- Compressed gasket materials
  - Standard Line
  - High Performance Line
- Composite sealing materials
- Flexible graphite sealing materials
- PTFE sealing products
- Elastomeric sealing products
- High temperature insulation and technical textile
- Packings
- Fiber-reinforced graphite sealing materials
- Gaskets
  - non metallic flat gaskets
  - metal jacketed gaskets
  - spiral wound gaskets
  - gaskets for heat exchangers
  - grooved gaskets
  - corrugated metal gaskets
  - PTFE gaskets
**BACF 4000**

BACF 4000 is a premium-quality-grade gasket material based on a combination of aramide and carbon fibres, specially selected fillers, additives and elastomeric binders. With a careful selection of components, the material is free of N-nitrosamines (certified by MRPRA) and without fibres which are hazardous to human health. Additionally, when it is applied at high temperatures, no emission of hazardous degradation products has been detected. Apart from better sealability resulting in an important decrease of fugitive emission levels, the new material has also outstanding creep-relaxation as well as excellent chemical resistance especially in alkaline media. BACF 4000 is in compliance with DIN 28091-2 and BS 7531 Grade X requirements.

**Environment-friendly gasket material with enhanced resistance to steam and strong alkaline media.**

**APPLICATION**

A combination of carbon and aramide fibres together with carefully selected fillers and binders in BACF 4000 is utilized to contribute to the improvement of chemical and thermal stability. BACF 4000 has very high torque retention properties, excellent chemical resistance and sealability, which enables low maintenance costs and high gasket safety. Due to its outstanding chemical properties and steam resistance, BACF 4000 is a first-rate choice in sealing strong alkaline media and steam. BACF 4000 meets all demands for application in chemical industry, pulp and paper industry and saturated steam distribution. Special surface treatment provides simple replacement of the gasket after use. BACF 4000 can also be used as a superior material for the sealing of oils, fuels, gases, Freons, and for general application in pipelines, radiators, boilers and many other flanged joints.

**TECHNICAL DATA**

General information for a thickness of 2 mm

- **Density**
  - DIN 28090-2: 1.5 - 1.7 g/cm³
- **Compressibility**
  - ASTM F 36/J: 6 - 11 %
- **Recuperation**
  - ASTM F 36/J: > 35 %
- **Tensile strength**
  - DIN 52910: > 9 MPa
- **Stress resistance**
  - DIN 52913
- **Thickness increase**
  - ASTM F 36/J: 1.4%
- **Chi RM 903**: 5 %
- **Specific leakage rate**
  - DIN 3535/6: 0.10 mg/(l·min)
- **Compression modulus**: DIN 28090-2
  - At room temperature: ε = 6.5 - 11.3 %
  - At elevated temperature: ε = 8.0 - 12.0 %
- **Percentage creep relaxation**: DIN 28090-2
  - At room temperature: ε = 3.5 %
  - At elevated temperature: ε = 4.7 %
- **Recovery R**: DIN 28090-2
  - > 1.4 %
- **Max. operating conditions**
  - Temperature: ≤ 440°C / 824°F
  - Continuous: ≤ 350°C / 662°F
  - With steam: ≤ 280°C / 536°F
  - Pressure: 120 bar / 1740 psi

**CHEMICAL RESISTANCE CHART**

The recommendations made here are intended to be a guideline for the selection of the suitable gasket quality. Because the function and durability of the products depend upon a number of factors, the data may not be used to support any warranty claims.

**GASKET CALCULATION PROGRAM**

Computer program **DON** demonstrates a successful tool for proper choice of gasket materials & gaskets and for solving a majority of sealing problems connected to the static sealing area.

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**BASIS**

<table>
<thead>
<tr>
<th>Composition</th>
<th>DIN 28091-2/FACCT-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Greenish blue / Black</td>
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</tbody>
</table>

**DIMENSION OF STANDARD SHEET**

<table>
<thead>
<tr>
<th>Sheet size</th>
<th>Thickness</th>
<th>Tolerances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 mm x 1500 mm</td>
<td>0.5 mm</td>
<td>± 1.0 mm ± 0.1 mm</td>
</tr>
<tr>
<td>1500 mm x 1500 mm</td>
<td>0.5 mm</td>
<td>± 1.0 mm ± 0.1 mm</td>
</tr>
<tr>
<td>2000 mm x 1500 mm</td>
<td>0.5 mm</td>
<td>± 1.0 mm ± 0.1 mm</td>
</tr>
<tr>
<td>4000 mm x 1500 mm</td>
<td>0.5 mm</td>
<td>± 1.0 mm ± 0.1 mm</td>
</tr>
</tbody>
</table>

**SURFACE**

The standard version of BACF 4000 has a non-stick top and bottom layer. Additional surface treatment is in general unnecessary. Special treatment with graphite, silicone or PTFE on one or both sides is available on request.

**APPROVALS**

DIN, DVGW, HTB, UDT, TARRC/MRPA, BS 7531 Grade X, Approved by KTV

All information data quoted are based on years of experience in production and checking of many identical samples. However, in view of the wide variety of conditions under which our products are used, we cannot give any guarantee for the correct applicability of our products. Special conditions apply in case of using this gasket in certain applications. Therefore, we recommend that you contact our staff for assistance in determining the optimum sealing solutions.

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**P-T DIAGRAM**

The Pressure - Temperature charts are the most current values for gasket materials in a known application. Maximum figures for temperature and pressure can be misleading. Max. temperature and max. pressure represent maximum values and should not be used simultaneously. They are given only for guidance, since this max. values depend not only on the type of gasket material but also on the assembly conditions. Use the pressure and temperature graph to check suitability of chosen gasket material for your application (combination of pressure and temperature).

**GAS-TEMPERATURE CHART**

This diagram describes characteristic values of gasket materials for static seal for used in flanged applications. Given the wide range of gasket applications, these values should merely be considered as a means of assessing the sealing behaviour of gasket under service condition. This chart shows you most often allowed surface stress (maximum in service compressive stress) on gasket by operating service temperature for different material thickness.