



Environment friendly gasket material with excellent torque retention and thermal resistance.

BAGL 3000 is a supreme fiber gasket material produced from a glass fibers, specially selected fillers and elastomeric binders. With well - researched selection of all ingredients the material is free of harmful nitrosamines (certified by MRPRA) and fibers which are hazardous to human health. Additionally, when it is applied at high temperatures, no significant emission of hazardous degradation products has been detected. Its carefully balanced composition provides exceptional thermal stability and torque retention when applied in flanged joints. BAGL 3000 is in compliance with DIN 28091-2 and BS 7531 Grade X requirements.

## PROPERTIES AND APPLICATIONS

The exclusive properties of BAGL 3000 - particularly its excellent torque retention - enable its superior performance in high - temperature applications and when high internal pressure is applied. Additionally, superb thermal stability ensures low maintenance costs and high flange connection safety. Special surface treatment on BAGL 3000 facilitates dismantling after use. These unique properties make BAGL 3000 a reliable choice for use in compressors and pumps. BAGL 3000 is also suitable for sealing thermal oils, fuels, freons and gases, and for general applications in pipelines, steam supply, radiators, boilers and many different flanged joints.

### Basis

Composition	<b>Glass fibers, NBR</b>
DIN 28091-2	<b>FA-G1-0</b>
Approvals	<b>BAM (oxygen), DIN - DVGW DIN 3535-6, DVGW VP 401, TARC/MRPRA, TA-Luft (VDI 2440), WRAS/WQc, Germanischer Lloyd, Fire safe API 607</b>

## SURFACE TREATMENT

The standard version has anti - stick top and bottom layer. Additional surface treatment is generally unnecessary. Special treatment with graphite, silicone or PTFE on one or both sides is available on request.

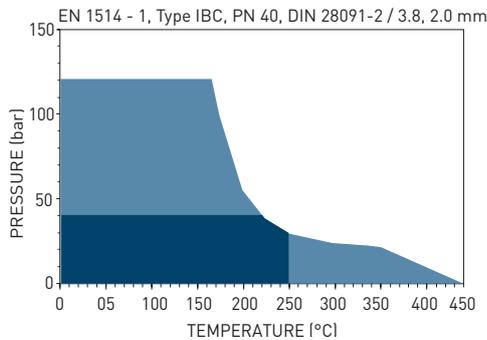
## DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500 | 3000 x 1500 | 4500 x 1500  
 Thickness (mm): 0.5 | 0.8 | 1.0 | 1.5 | 2.0 | 3.0  
 Other dimensions and thicknesses on request.

## TECHNICAL DATA

Typical values for a thickness of 2 mm

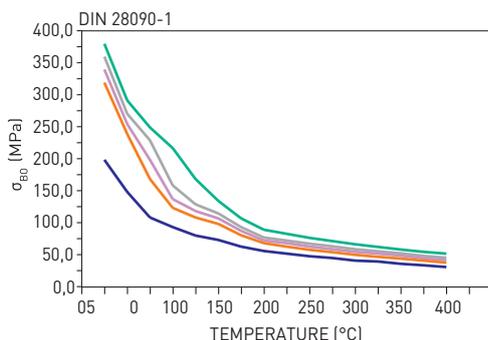
<b>Density</b>	DIN 28090-2	g/cm <sup>3</sup>	16 – 1.8
<b>Compressibility</b>	ASTM F 36J	%	6–12
<b>Recovery</b>	ASTM F 36J	%	> 55
<b>Tensile strength</b>	DIN 52910	MPa	≈ 9
<b>Stress resistance</b>	DIN 52913		
16h, 300°C, 50MPa		MPa	≈ 30
16h, 175°C, 50MPa		MPa	≈ 35
<b>Thickness increase</b>	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	≤ 5
ASTM Fuel B, 5h, 23°C		%	≤ 5
<b>Specific leak rate</b>	DIN 3535-6	mg/(s•m)	≈ 0.03
<b>Compression modulus</b>	DIN 28090-2		
At room temperature: $\epsilon_{ksw}$		%	6.5 – 12.3
At elevated temperature: $\epsilon_{wsw}/200^\circ\text{C}$		%	7.0 – 12.0
<b>Percentage creep relaxation</b>	DIN 28090-2		
At room temperature: $\epsilon_{krw}$		%	> 3.5
At elevated temperature: $\epsilon_{wrw}/200^\circ\text{C}$		%	≈ 1.2
<b>Recovery R</b>	DIN 28090-2	mm	≈ 0.022
<b>Max. operating conditions</b>			
Peak temperature		°C/°F	440/824
Continuous temperature		°C/°F	350/662
- with steam		°C/°F	250/482
Pressure		bar/psi	120/1740



### P - T DIAGRAM

- General suitability using common installation practices under the conditions of chemical compatibility.
- Max. performance is ensured through appropriate measures for joint design and gasket installation. Consultation is recommended.
- Limited application area - Technical consultation is mandatory.

The Pressure - Temperature charts are the most current method of determining the suitability of a gasket material 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 these max. values depend not only on the type of gasket material but also on the assembly conditions. Use the pressure and temperature graphs to check suitability of chosen gasket material for your application (combination of pressure and temperature).



### $\sigma_{B0}$ DIAGRAM

This diagram describes characteristic values of gasket materials for static seal for use in flanged applications. Given the wide range of gasket applications, these values should merely be considered as a means of assembling the sealing behaviour of gasket under service conditions. Sigma diagram shows the maximal allowed surface stress (maximum in - service compressive stress) on gasket by operating service temperature for different material thickness.