

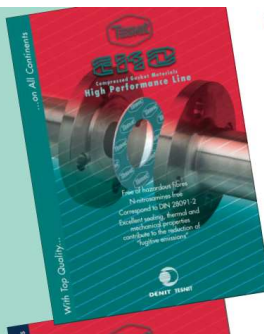


TESNIT BAGL 3000

- Excellent sealing, thermal and mechanical properties contribute to the reduction of fugitive emissions*
- Free of hazardous fibres
- "Nitrosamines free"
- Correspond to DIN 28091-2



Environment –friendly gasket material with outstanding torque retention and thermal resistance. Corresponds to TA Luft.



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



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

DONIT TESNIT d.d.
 Exco Komandita Stanoje 26
 12161 BRZDARICA, VIŠNJA
 Telephone: +386 (0)1 582 22 00
 Fax: +386 (0)1 582 22 06
 E-mail: info@donitesnit.si
 http://www.donitesnit.si



TESNIT BAGL 3000

Environment –friendly gasket material with outstanding torque retention and thermal resistance. Correspond to TA Luft.

BAGL 3000 is a supreme fibre gasket material produced from a combination of aramid and glass fibres, specially selected fillers and elastomeric binders. With a well-considered selection of all ingredients 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. Its carefully balanced composition provides exceptional thermal stability and torque retention when applied in flanged joints.

APPLICATION

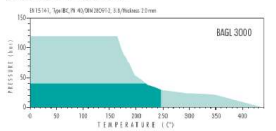
The exclusive properties of BAGL 3000, particularly its superior torque retention, enable its superior performance in high-temperature applications and when high internal pressure is applied. Additionally, superior thermal stability ensures low maintenance costs and high flange connection safety. Special 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 application in pipelines, steam supply, radiators, boilers and many different flanged joints.

BASIS	
Composition	Glass fibres, NBR
DIN 28091-2	FA-G1-D
Colour	Greenish blue / Green
DIMENSION OF STANDARD SHEET	
Sheet size*	1000 mm x 1500 mm 1500 mm x 1500 mm 3000 mm x 1500 mm 4500 mm x 1500 mm
Thickness	0.5 mm, 0.8 mm, 1.0 mm, 1.5 mm, 2.0 mm, 3.0 mm
Tolerances	Thickness: < 1.0 mm = ± 0.1 mm ≥ 1.0 mm = ± 10 % Length: ± 50 mm Width: ± 50 mm

TECHNICAL DATA	
Density	DIN 28090-2 1.6 – 1.8 g/cm³
Compressibility	ASTM F 36/J 6 – 12 %
Recovery	ASTM F 36/J > 55 %
Tensile strength	DIN 52910 = 9 MPa
Stress resistance	DIN 52913
T _{Ch} , 300°C, 50 MPa	= 30 MPa
T _{Ch} , 175°C, 50 MPa	= 35 MPa
Thickness increase	ASTM F 146
ASTM Fuel B, 3h, 200°C	≤ 5 %
Oil 100:90:10, 150°C	≤ 3 %
Specific leakage rate	DIN 3535/6 = 0.03 mg/(cm²)
Compression modulus:	DIN 28090-2
• At room temperature: E _{0.2/20°C}	6.5 – 12.3 %
• At elevated temperature: E _{0.2/250°C}	7.0 – 12.0 %
Percentage creep relaxation: DIN 28090-2	
• At room temperature: E _{0.2/20°C}	> 3.5 %
• At elevated temperature: E _{0.2/250°C}	> 1.2 %
Recovery R	DIN 28090-2 = 0.022 mm
*Max. operating conditions	
Temperature:	
• Peak	440°C / 824°F
• Continuous	350°C / 662°F
• With steam	250°C / 482°F
Pressure	120 bar / 1740 psi

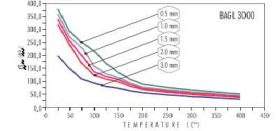
P-T DIAGRAM

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. temperatures 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 graphs to check suitability of chosen gasket material for your application (combination of pressures and temperature).



G_s DIAGRAM

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 assembling the sealing behaviour of gasket under service condition. σ_{rs} shows you maximal allowed surface stress (maximum in service compressive stress) on gasket by operating service temperature for different material thickness.



- General suitability using common installation practices under the condition 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.

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.

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 ability of the products depend upon a number of factors, the data may not be used to support any warranty claims.

Acetic acid 10%	Acetic acid 100%	Allylic acid	Ammonia	Ammonia carbonate	Ammonium chloride	Ammonium hydroxide	Any acetone	Aspirin	Benzene	Benzene on acid	Borax	Bromine	Butyl alcohol	Calcium chloride	Calcium hydroxide	Carbon dioxide	Chloroform	Chlorine, dry	Chlorine, wet	Chromic acid	Cinnic acid	Copper acetate	Cresote	Cresol	Cyclohexanol	Cardiolipone	Decaline	Dioxolane	Dimethyl sulfide	Dioxane	Ethylene glycol	Formaldehyde	Formic acid 65%	Formic acid 10%	Formic acid 45%	Hydrochloric acid	Hydrofluoric acid	Hydroperoxide	Hydroxy acid	Hydroxy acid (phenol ether type)	Hydroxy acid (ether type)	Hydrazine	Hydroperoxide acid 30%	Hydroperoxide acid 30%	Hydroperoxide acid 10%	Hydroperoxide acid 40%	Hydroperoxide acid 50%	Hydroperoxide acid 60%	Hydroperoxide acid 70%	Hydroperoxide acid 80%	Hydroperoxide acid 90%	Hydroperoxide acid 100%	Hydroperoxide acid 110%	Hydroperoxide acid 120%	Hydroperoxide acid 130%	Hydroperoxide acid 140%	Hydroperoxide acid 150%	Hydroperoxide acid 160%	Hydroperoxide acid 170%	Hydroperoxide acid 180%	Hydroperoxide acid 190%	Hydroperoxide acid 200%	Hydroperoxide acid 210%	Hydroperoxide acid 220%	Hydroperoxide acid 230%	Hydroperoxide acid 240%	Hydroperoxide acid 250%	Hydroperoxide acid 260%	Hydroperoxide acid 270%	Hydroperoxide acid 280%	Hydroperoxide acid 290%	Hydroperoxide acid 300%	Hydroperoxide acid 310%	Hydroperoxide acid 320%	Hydroperoxide acid 330%	Hydroperoxide acid 340%	Hydroperoxide acid 350%	Hydroperoxide acid 360%	Hydroperoxide acid 370%	Hydroperoxide acid 380%	Hydroperoxide acid 390%	Hydroperoxide acid 400%	Hydroperoxide acid 410%	Hydroperoxide acid 420%	Hydroperoxide acid 430%	Hydroperoxide acid 440%	Hydroperoxide acid 450%	Hydroperoxide acid 460%	Hydroperoxide acid 470%	Hydroperoxide acid 480%	Hydroperoxide acid 490%	Hydroperoxide acid 500%	Hydroperoxide acid 510%	Hydroperoxide acid 520%	Hydroperoxide acid 530%	Hydroperoxide acid 540%	Hydroperoxide acid 550%	Hydroperoxide acid 560%	Hydroperoxide acid 570%	Hydroperoxide acid 580%	Hydroperoxide acid 590%	Hydroperoxide acid 600%	Hydroperoxide acid 610%	Hydroperoxide acid 620%	Hydroperoxide acid 630%	Hydroperoxide acid 640%	Hydroperoxide acid 650%	Hydroperoxide acid 660%	Hydroperoxide acid 670%	Hydroperoxide acid 680%	Hydroperoxide acid 690%	Hydroperoxide acid 700%	Hydroperoxide acid 710%	Hydroperoxide acid 720%	Hydroperoxide acid 730%	Hydroperoxide acid 740%	Hydroperoxide acid 750%	Hydroperoxide acid 760%	Hydroperoxide acid 770%	Hydroperoxide acid 780%	Hydroperoxide acid 790%	Hydroperoxide acid 800%	Hydroperoxide acid 810%	Hydroperoxide acid 820%	Hydroperoxide acid 830%	Hydroperoxide acid 840%	Hydroperoxide acid 850%	Hydroperoxide acid 860%	Hydroperoxide acid 870%	Hydroperoxide acid 880%	Hydroperoxide acid 890%	Hydroperoxide acid 900%	Hydroperoxide acid 910%	Hydroperoxide acid 920%	Hydroperoxide acid 930%	Hydroperoxide acid 940%	Hydroperoxide acid 950%	Hydroperoxide acid 960%	Hydroperoxide acid 970%	Hydroperoxide acid 980%	Hydroperoxide acid 990%	Hydroperoxide acid 1000%
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... on All Continents

With Top Quality ...

www.williamjohnston.co.uk

Tel: 0141 620 1666

sales@williamjohnston.co.uk

Disclaimer
 Please note, failure to select the correct materials or products we supply ("the Products") may result in damage to plant, equipment or property. In some instances, it may cause death or personal injury. We are not designers and do not give advice about design related matters concerning the Products. We can help and assist with the technical specifications for the Products. In specific applications, particularly where critical conditions exist, we will try to assist you within the limitations of the services that we offer. All information supplied by us is intended as technical co-operation outlining the specifications of the different Products which we supply. To the extent permitted in law, no warranty is given in respect of any information supplied by us. The customer must satisfy themselves as to the suitability of the Products for their intended application and use. The correct fitting of Products is the responsibility of the customer. Your statutory rights remain unaffected. Save in respect of death, personal injury or fraud, our entire liability to you, however arising from the supply of Products shall be limited to the £10M indemnity amount provided by our insurers.