



# GASKET MATERIAL



# C4400 Gasket Sheet

C4400 sheet gasket material offers safe and reliable sealing in many diverse applications, such as the chemical and water supply industries. This quality gasket material, conforming to BS7531 Grade AY, is based on aramid fibres with an NBR binder is resistant to the media detailed below, subject to temperature and pressure considerations\*.

Resistant to: - Water, Steam, Gases, Salt Solutions, Fuels, Alcohols, Lubricants, Hydrocarbons, Oils, Moderate Organic and Inorganic Acids and Refrigerants.

\*Consult the chemical resistance chart and pT diagram for more specific details

C4400 meets numerous industry tests and standards as follows: -

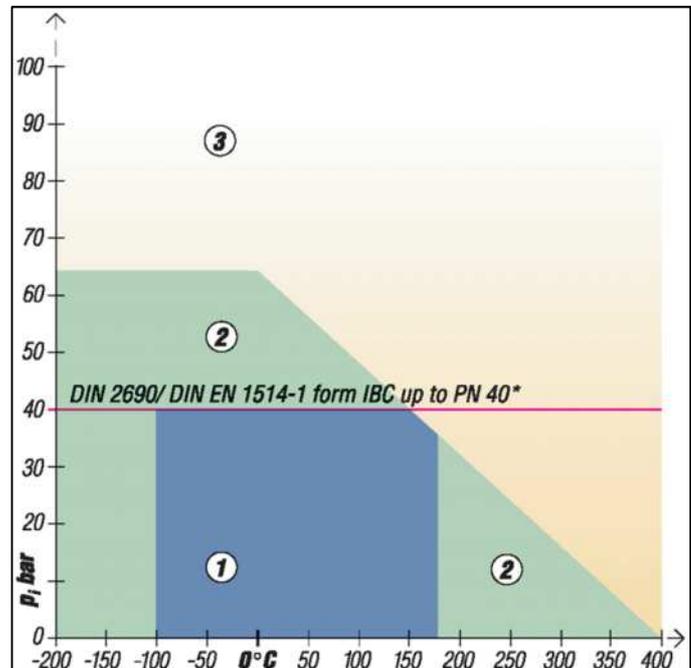
- KTW recommended, food toleration Austria.
- DIN-DVGW-permit NG-5123AT0251, HTB tested.
- Approved for gas supply in accordance with DIN 3535/6.
- Meets the technical requirements of BS 7531:2006 Grade AY.
- TA-Luft (Clean air) approval, tested in accordance with VDI 2440 at 200°C.
- BAM approval in accordance with UVV 28, oxygen (VBG 62) tested up to 100 bar and 80°C.
- TÜV-Poland
- SVGW-permit
- ÖVGW-permit
- Germanischer Lloyd.

<b>Standard Sheet Size</b>	: 2000 x 1500mm	<b>Length &amp; Width Tolerance</b>	: ± 50mm
<b>Thickness Range, mm</b>	: 0.25, 0.40, 0.5, 0.8, 1.0, 1.5, 2.0, 3.0	<b>Thickness Tolerance</b>	: ± 10%

## pT Diagram

The Klinger pT diagram at left, provides guidelines for determining the suitability of a particular gasket material for a specific application based on the operating temperature and pressure only. Additional stresses such as fluctuating load may significantly affect the suitability of a gasket in the application and must be considered separately. Always refer to the chemical resistance of the gasket to the fluid.

1. In area one, the gasket material is normally suitable subject to chemical compatibility.
2. In area two, the gasket materials may be suitable but a technical evaluation is recommended. Always refer to the chemical resistance of the gasket to the fluid.
3. In area three, do not install the gasket without a technical evaluation. Always refer to the chemical resistance of the gasket to the fluid.



### Important

This information should not be treated as a substitute for specific technical advice. AG does not offer such advice and cannot warrant the performance or suitability of products for particular applications. All data, values and information are subject to change without notice.

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## Typical Values

<u>Property</u>	<u>Standard</u>	<u>Result</u>
Compressibility	ASTM F 36 J	: 11%
Recovery, minimum	ASTM F 36 J	: 55%
Stress Relaxation	DIN 52913	
50 MPa, 16h/ 175°C		: 32 MPa
50 MPa, 16h/ 300°C		: 25 MPa
Stress Relaxation	BS 7531	
40 MPa, 16h/ 300°C		: 23 MPa
Klinger Cold/Hot Compression Test @ 50 MPa		
Thickness Decrease at 23°C		: 10%
Thickness Decrease at 300°C		: 20%
Tightness	DIN 3535/6	: 0.02 mg/s x m
Tightness Class <i>L</i>	DIN 28090-1	: 0.1
Specific Leak Rate $\lambda$	VDI 2440	: 1.64E-08 mbar x l/s x m
Cold Compression	DIN 28091-2	: 8 - 12%
Cold Recovery	DIN 28091-2	: 3 - 5%
Hot Compression	DIN 28091-2	: <15%
Hot Recovery	DIN 28091-2	: 1%
Spring Back <i>R</i>	DIN 28091-2	: 0.019 mm
Thickness Increase after	ASTM F 146	
Fluid Immersion: IRM 903 Oil: 5 h/150°C		: 3%
Fuel B: 5 h/23°C		: 5%
Density		: 1.6 gms/cm <sup>3</sup>
Average Surface Resistance, $R_{OA}$		: 1.4x10E12 $\Omega$
Average Specific Volume Resistance, $\rho_D$		: 1.2x10E12 $\Omega$ cm
Average Dielectric Strength		: 21.6 kV/mm
Average Power Factor @ 1 kHz, ca.2 mm thickness		: 0.075 tan $\delta$
Average Dielectric Coefficient @ 1 kHz, ca.2 mm thickness		: 7.7 $\epsilon_r$
Thermal Conductivity		: 0.40 - 0.42 W/mK
ASME-Code Sealing Factors; Tightness Class 0.1 mg/s x m		: $y = 20$ (MPa)
for Gasket Thickness 2,0 mm		: $m = 3.5$

Please note that these figures are provided as guidelines only. These limits do not necessarily operate together for all gasket thicknesses and service conditions. All temperatures & pressures are dependent on chemical compatibility; refer to the chemical compatibility chart or KLINGERexpert™ PC design software.

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