

Technical Datasheet AF-SWELL (Non-Metallic)

Compressed Non-Asbestos Fibre (CNAF) Gasket Sheet



Material Composition

Aramid Fibres, Mineral Fibres. (Binders: SBR)

Application

Controlled swell gasket material for automotive and chemical applications, ensuring reliable sealing of engines, transmissions, hydraulics, and oils. It is also suitable for low-pressure joints such as housings, valve covers, and oil pans.

Color

Yellow (other color upon request)

Standard Dimensions of Sheets

1000 X 1000 mm, 1000 X 1500 mm, 1500 X 1500 mm, 1500 X 2000 mm, 1500 X 2250 mm, 1500 X 3000 mm, 1500 X 4500 mm, 2000 X 2000 mm, 2000 X 3000 mm

Available Thickness

0.30mm to 6.00mm

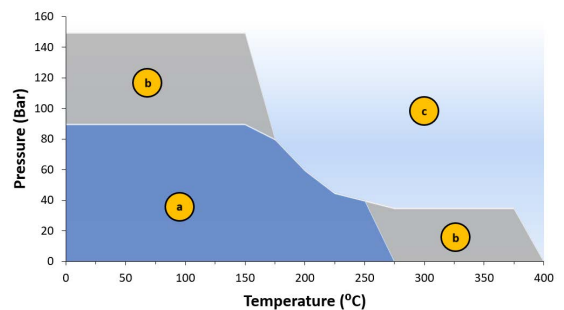
Operating Condition

Max. Peak Temperature : 400 °C
Max. Operating Temperature : 275 °C
Max. Peak Pressure : 150 bar
Max. Continuous Temp. with steam : 250 °C

Typical Physical Properties Applicable for Thickness 1.50mm

Typical Properties	Test Method	Typical Value	Unit
Density	ASTM F 1315	1.70 – 2.00	g/cm ³
Tensile Strength	ASTM F 152	12.0 (Min.)	N/mm ²
Compressibility	ASTM F 36J	7 – 17	%
Recovery	ASTM F 36J	50 (Min.)	%
Stress Relaxation (175 °C)	BS 7531	30 (Min.)	N/mm ²
Gas Permeability	BS 7531	≤ 1.0	ml/min
Ignition Loss	ASTM F 495	≤ 35.0	%
ASTM Oil No. 3/IRM 903 (5h, 150 °C)			
Thickness Increase	ASTM F 146	8 – 30	%
Weight Increase	ASTM F 146	8 – 30	%
ASTM Fuel B (5h, 23 °C)			
Thickness Increase	ASTM F 146	8 – 30	%
Weight Increase	ASTM F 146	8 – 30	%
Water (5h, 100 °C)			
Thickness Increase	ASTM F 146	≤ 7.0	%
Weight Increase	ASTM F 146	≤ 15.0	%

Operating Parameters



Guidelines for application

Area a: General suitability - Under common installation practices and chemical compatibility.

Area b: Conditional suitability - Technical consultation is recommended.

Area c: Limited suitability - Technical consultation is mandatory

*Size Tolerance: ± 10% | Thickness Tolerance: 0.10mm for <1.00mm & 10% for >1.00mm

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