

# PRODUCT SPECIFICATION SHEET

## MATERIAL : WCL Excelsior

Non-asbestos jointing sheet, composed of kevlar® aramid fibres, special glass fibres and thermally resistant fillers, bonded with high ACN-content NBR elastomer. The formulation gives the material good chemical stability and excellent resistance to creep at high temperature.

### Applications

High temperature applications, in presence of gases, fuels, oils, mild acids and steam. Suitable for food industry, public utilities, water treatment plants, chemical plants, etc.

#### **Technical Data** (values relate to 2 mm thickness)

Density	DIN 3754		1.75	g/cm <sup>3</sup>
Service limits*:				
Maximum short term temperature			440	°C
Max. continuous operating temperature with non-aggressive media			350	°C
Max. continuous operating temperature with steam			250	°C
Max. operating pressure			100	bar
Compressibility	ASTM F36		7 - 12	%
Recovery	ASTM F36	min.	50	%
Stress retention:				
- 16 hrs, 300°C, 50 N/mm <sup>2</sup>	DIN 52913	min.	30	N/mm <sup>2</sup>
- 16 hrs, 175°C, 50 N/mm <sup>2</sup>		min.	35	N/mm <sup>2</sup>
Tensile Strength (across grain)	DIN 52910	min.	9	N/mm <sup>2</sup>
Gas permeability (N <sub>2</sub> , 40 bar, 30 N/mm <sup>2</sup> , 200°C)	DIN 28090	max.	0.05	mg/m sec
Immersion test in ASTM Oil 3 for 5 hrs. at 150°C				
- weight increase	ASTM F146	max.	10	%
- thickness increase		max.	8	%
Immersion test in ASTM Fuel B for 5 hrs at 20°C				
- weight increase	ASTM F146	max.	10	%
- thickness increase		max.	8	%



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Compression strength $\sigma_{VO}$ at Room Temp.:	DIN 28090	min.	240	N/mm <sup>2</sup>
" " " $\sigma_{BO}$ at 100°C:	"	min.	110	N/mm <sup>2</sup>
" " " $\sigma_{BO}$ at 200°C:	"	min.	50	N/mm <sup>2</sup>

\* Max. temperature and pressure do not hold simultaneously and are reported for proper seating conditions and gasket design

### Supply data

Surface color:	blue	Surface finishing:	4xA Anti-stick coating
Sheet size - Standard:	1500 x 1500 mm (upon request: 1500x3000 and 1500x4500 mm)	tolerance:	+/- 50 mm
Thickness:	from 0.3 to 5.0 mm	tolerance:	+/- 10%

**References:** BS 7531 grade X, DIN 28091 FA - GA N-0

Note: jointing manufacture is quality assured in accordance with ISO 9001

Data here reported, corresponding to laboratory and field tests results, are meant as non-binding guideline for gasket selection. No guarantee claim can be inferred from them. When needed, we shall be pleased to assist you with specific technical assistance.



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