coestan
SEALING TECH

FICHA TÉCNICA

GRAFITO

Material data SIGRAFLEX® FOIL						
Foil grade		**APX**	**C**	**E**	**D**	**Z**
Standard bulk density	g/cm³	0.7 – 1.3				
Ash content (DIN 51903)	%	≤ 2.0	≤ 2.0	≤ 1.0	≤ 4.0	≤ 0.15
Total chloride content	ppm	≤ 25	≤ 25	≤ 10	≤ 50	≤ 10
Foil thickness* (supplied on rolls)	mm	0.35 – 1.0				0.15 – 1.0
Foil thickness (supplied as sheets, 1000 mm x 1000 mm) under the label SIGRAFLEX BASIS	mm		1.0/1.5 2.0/3.0			1.0/1.5 2.0
Roll width*	mm	500/1000				
Tape width*	mm	≥ 4				
Roll length*	m	50				
Typical material data of SIGRAFLEX® FOIL grade Z with bulk density of 1.0 g/cm³						
Thermal conductivity at 20 °C in plane through plane	 W/K · m W/K · m	 180 – 200 4 – 6				
Resistivity at 20 °C in plane through plane	 Ωμm Ωμm	 6 – 8 650 – 700				
Coefficient of thermal expansion (20 – 1000 °C) in plane through plane	 10^{-6}/K 10^{-6}/K	 approx. 1 approx. 50				
Permeability coefficient for air through plane	 cm²/s	 $< 2 \cdot 10^{-5}$				
Shore hardness (D)		30				
Tensile strength Elongation at break	N/mm² %	≥ 4 ≥ 1				
Max. permissible compressive stress Specimen: 20 mm x 20 mm x thickness 0.35 mm 0.50 mm 1.00 mm	 N/mm² N/mm² N/mm²	 220 200 140				
Residual stress (DIN 52913) $\sigma_{DIN\ 52913,\ 300°C,\ 30\ N/mm^2}$	N/mm²	≥ 48				
Coefficient of friction against steel, roughness ≤ 10 μm		0.1				
The gasket factor conversion formulas as per AD Merkblatt B7 are as follows		$k_0 \cdot K_D = \sigma_{VS} \cdot b_D$ $k_i = m \cdot b_D$				

ISO 9001