

ZOTEK® NB 50

High Performance Foams



Product information

Typical values

ZOTEK® N B50 is closed cell foam of density 50 kg/m³ made from polyamide 6 available in sheet form. The material will thermoform into simple and complex shapes. This product information sheet provides typical values for the foam and does not constitute a specification.

All samples tested were conditioned for 6 days at 23 °C ±1 50% RH ±5

Property	Test Standard	Units	Typical Value
Apparent Density			
Skin/Skin	BS EN ISO 7214:2012	kg/m ³ (pcf)	50 (3.1)
Cell/Cell			48 (3)
Cell Size (cell diameter)			
	Internal	mm (in)	0.25 (0.01)
Compression Stress-Strain			
25% compression	BS EN ISO 7214:2012	kPa (psi)	190 (27.5)
50% compression	1 st Compression		280 (40.6)
Tensile Strength			
	BS EN ISO 7214:2012	kPa (psi)	1300 (188)
Tensile Elongation			
		%	90
Compression Set			
25% comp. / 22hr / 23°C	BS EN ISO 7214:2012		
½ hr recovery	25mm cell-cell	% set	16
Thermal Conductivity			
Mean Temperature	ISO 8301	W/mK	0.0381
	25 °C (77 °F)	(Btu in/ft ² .hr.°F)	(0.264)
Maximum Operating Temperature*			
	Internal	°C (°F)	205 (401)

***Recommended maximum operating temperature**

The maximum operating temperature shown is defined as the temperature which will typically cause a linear shrinkage of 5% after a 24hr exposure period, using sample dimensions of 100mm x 100mm x 25mm. This figure is provided for general guidance only. The actual level of shrinkage the foam will undergo at any particular temperature is dependent on a number of system variables such as, sample dimensions, cell size, loading conditions and exposure period.

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