



LD45 FR (Flame Retarded) LOW DENSITY POLYETHYLENE FOAM

MATERIAL SPECIFICATION SHEET

Property	Test Standard	Units	Typical Values
Apparent Density (Skin/Skin)	BE EN ISO 7214:2012	Kg/m ³	45 (nominal)
Cell Size (Cell Diameter)	Internal	Mm	0.4
Compression Stress-Strain (25% Compression)	BS EN ISO 7214:2012 (25mm cell-cell)	kPa	88
Compression Stress-Strain (50% Compression)	BS EN ISO 7214:2012 (25mm cell-cell)	kPa	161
Tensile Strength	BE EN ISO 7214:2012	kPa	449
Tensile Elongation	BE EN ISO 7214:2012	%	158
Compression Set (25% Comp, 22hr, 23°C) 1/2 hr Recovery	BS EN ISO 7214:2012 (25mm cell-cell)	%	8
Compression Set (25% Comp, 22hr, 23°C) 24 hr Recovery	BS EN ISO 7214:2012 (25mm cell-cell)	%	3
Tear Strength	BS EN ISO 8067:2008 Method B	N/m	2404
Shore Hardness OO Scale	BS EN ISO 868:2003		64
Recommended Maximum Operation Temperature *	Internal	°C	105
Flammability Aviation	CS 25.853 App.F 1A 1ii FAR 25.853 App.F 1a 1ii	<100mm/min	12 second test Pass at 3 & 12mm
Flammability UL94	UL94 Ed6		HF1 at 3-3.3mm
Water Absorption	ISO 2896:2001 Ed3	%	< 1
Thermal Conductivity Mean Temperature 10°C	ISO 8301:1991	W/mK	0.038

* 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. The 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.



The company's products are used for a multiplicity of purposes and as the company has no control over the method of their applications or use, the company excludes all conditions or warranties, expressed or implied by statute or otherwise, as to their products and/or their fitness for any particular purpose. Any technical co-operation between the company and the customer is given for customers assistance only and without liability on the part of the company