

Technical specification

Flame Retardant Low Density Polyethylene Foam – LD45 FR

Description Closed-cell, cross linked polyethylene foam containing flame retardant additives.

Properties	Unit	Value	Test method
Density (nominal)	kg/m ³	45	BS ISO 7214 1998
Cell Size (typical diameter)	mm	0.4	Internal
Tensile Strength	Kpa	435	ISO 7214 1998
Elongation at break (tensile)	%	180	BS ISO 7214 1998
Tear strength	N/m	1200	BS EN ISO 8067 1995
Compressive strength (stress-strain)			
10% Compression	kPa	69	BS ISO 7214 1998
25% compression	kPa	86	BS ISO 7214 1998
40% compression	kPa	121	BS ISO 7214 1998
50% compression	kPa	159	BS ISO 7214 1998
Thermal Conductivity (mean temp 10 °C)	W/m.k	0.043	ISO 8302 1991
Recommended working temperature (recommended operating temp range)	°C	-70/+150	Internal
Compression Set, 25% 22h 23 °C, 25 mm cell-cell			
0.5 h recovery	% (set)	8.5	BS ISO 7214 1998
25h recovery	% (set)	2.5	BS ISO 7214 1998
Compression set, 50% 22h 23 °C			
0.5h recovery	%	20	
24h recovery	%	11	
Flammability	<100mm/min	5mm and above	FMVSS302
Aviation	Complies		FAR – 25.853 F 1a- 1ii
	Complies		JAR – 25.853 F 1a- 1ii
	Complies		CAA8/2 – 2.2b
Automotive	<100mm/min	Pass: 2mm and thicker	FMVSS.302 – Burn rate
Construction		Pass: 6-20 mm thick	DIN 4102 pt14-B1
		Pass: 3-13mm thick	UL94 HF1 + HF2
Horizontal Burn Rate			
5mm thick	mm/sec	1.3	ISO 7214 1998
13mm thick	mm/sec	0.7	ISO 7214 1998
Shore hardness OO Scale, 10mm cell/cell thickness	OO	60	ISO 868 1985

This specification is given by our best knowledge and might be submitted to changes.