



PRODUCT INFORMATION LDPE 15 / LDPE24 / LDPE45

LDPE15, LDPE24 & LDPE45 are fire retardent, closed cell, cross-linked foams with low density. The foams meet transportation fire, smoke and toxic gas requirements. They are available in sheet form and can be thermoformed into simple and complex shapes.

Property	TEST PROCEDURE	UNITS	TYPICAL VALUE LDPE15	TYPICAL VALUE LDPE24	TYPICAL VALUE LDPE45	
Nominal Density	BS ISO 7214 1988*	Kg m ⁻³	15 (ISO 845)	24	45	
Cell Size - Typical Diameter	Internal	mm	-	0.3	0.4	
Compression Stress-Strain						
10% compression	BS ISO 7214 1998	kPa	-	32	69	
25% compression		kPa	22	51	86	
40% compression		kPa	50	83	121	
50% compression		kPa	80	115	159	
60% compression		kPa	130	-	-	
Compression Set						
25% comp., 22hr, 23°C	BS ISO 7214 1998* 25 mm cell-cell					
½ hr recovery		% set	-	13	8.5	
24hr recovery		% set	-	5.5	2.5	
50% comp., 22hr, 23°C						
½ hr recovery	BS EN ISO 1856 25 mm cell-cell	% set	-	27	20	
24hr recovery		% set	25 (BS EN ISO 1856)	19	11	
50% comp., 72hr, 23°C	BS EN ISO 1856 25 mm cell-cell	% set	45	-	-	
½ hr recovery		% set				
Tensile Strength	ISO 7214 1998*	kPa	235 (ISO 1798)	240	435	
Tensile Elongation		%	125 (ISO 1798)	115	180	
Tear Strength	BS EN ISO 8067 1995	N/m	545	475	1200	
Shore Hardness OO Scale 10mm cell/cell thickness	ISO 868 1985	OO	26	49	60	
Recommended operating temperature range	Internal	°C	+95 max -70 min	+100 max -70 min	+105 max -70 min	
Thermal conductivity mean temperature of 10°C	ISO 8302 1991	W /m.K	0.046	0.0351	0.043	
Flammability						
Aviation	FAR-25.853 F 1a. 1ii JAR-25.853 F 1a. 1ii CAA 8 / 2 - 2.2b ABD 0031 FAR 25.856(a)	<100mm/ min.	Complies Complies Complies Complies Complies Pass: 12mm w/ adhesive	Complies Complies Complies -	Complies Complies Complies -	
Automotive	FMVSS 302 - Burn Rate		-	-	Pass: 2 mm and thicker	Pass: 2 mm and thicker
Construction	DIN 4102 pt14 - B1 UL94 HF1 + HF2		-	-	Pass: 6 to 20 mm thick Pass: 3 to 13 mm thick	Pass 6 to 20 mm thick Pass: 3 to 13 mm thick
Horizontal Burn Rate 5 mm thick 13 mm thick	ISO 7214 1998		mm/sec mm/sec	- -	Extinguishes and melts from flame	Extinguishes and melts from flame

* Other test method used shown in bracket

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