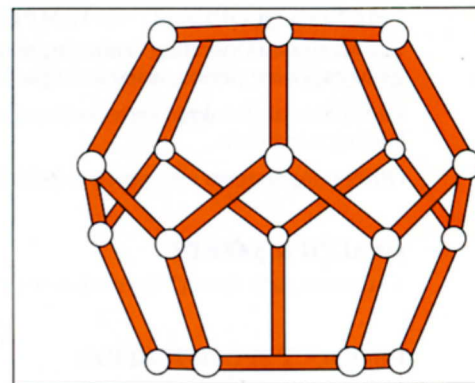


Plastazote®

Low density
polyethylene foam
33 kg/m³, 45 kg/m³, 60 kg/m³



ZOTEGRAM

Plastazote foam is a closed cell, cross-linked polyethylene foam available in sheet form. This data characterises LDPE foam grades LD33 (33 kg/m³), LD45 (45 kg/m³) and LD60 (60 kg/m³) density. The material will thermoform into simple and complex shapes.

Property	Test Method	Units	Typical Value STD : LC		
Density Skin/Skin (s/s)	ISO 845 1988 BS 4443 Pt1 : 2 1988 DIN 53420 1978	kg/m ³	33 (nominal)	45 (nominal)	60 (nominal)
Recommended operating temperature range*	Internal	°C	+105 max -70 min	+110 max -70 min	+110 max -70 min
Compression stress – strain characteristics	ISO 3386/1 1986 BS 4443 Pt1 : 5a 1988 DIN 53577 1988				
25% compression		kPa	40	50	70
40% compression		kPa	75	90	115
50% compression		kPa	115	135	170
60% compression		kPa	175	210	255
Compression set s/s thickness					
72 hrs 50% compression	ISO 3386/1 1986				
23°C, ½ hr recovery	BS 4443 Pt1 : 6b 1988 DIN 53572 1986	% set	27	22	19
48 hrs 20% compression	ISO 1856 : C 1980	% set	7	7	6
23°C, ½ hr recovery					
Tear strength	ISO 8067 1991 BS 4443 Pt6 : 15 1991	N/m	690	770	1030
Tensile strength	ISO 1798 1983 BS 4443 Pt1 : 3a 1988 DIN 53571 1986	kPa	455	375	600
Elongation at break		%	135	120	150
Water vapour transmission Temperature = 38°C Relative humidity gradient = 0 / 88.5%	ISO 1663 1981 BS 4370 Pt2 : 8 1993 DIN 53429 1971	µg/m ² /sec	30	47	24
Permeability Sample = 25mm thick		ng/Pa/s/m	0.13	0.19	0.1
Water absorption	DIN 53428 1986				
1 Day		% vol	< 0.1	< 0.1	< 0.1
7 Days		% vol	< 0.3	< 0.3	< 0.3
14 Days		% vol	< 0.4	< 0.4	< 0.4
28 Days		% vol	< 0.5	< 0.5	< 0.5
Thermal conductivity Tested at mean temp of 10°C	ISO 8302 BS 874 Pt2 : 2.1 1986	W/m.K	0.040	0.043	0.048
Horizontal burning characteristics	ISO 3582 1978 BS 4735 1974				
Thickness 5mm		mm/sec	1.5	1.3	1.1
Thickness 13mm		mm/sec	1.1	0.8	0.7
	FMVSS.302		Pass at 7mm thickness and above	Pass at 5mm thickness and above	Pass at 4mm thickness and above
Shore hardness 00 scale (min 10mm c/c thickness)	BS 2782 : Pt3 Method 365B : 1992		54	62	65



ZOTE FOAMS

July 1997

MAXIMUM OPERATING TEMPERATURE

The Maximum Operating Temperature is defined as that temperature which will typically cause a linear shrinkage of 5% after a 24 hr exposure period, using a sample 100 × 100 × 25mm.

The degree of shrinkage varies with material type and density, temperature, exposure period, sample dimensions, cell size and loading conditions.

Other temperatures may prove to be limiting depending on the particular application requirements.

HEALTH & SAFETY

A separate data sheet (T5) entitled "Health and Safety Information" should be consulted.

PRODUCT SPECIFICATION

This Zotegram provides typical properties on representative samples of material. For a product specification please refer to data sheet T7.

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