



Protective Packaging

Ivex Protective Packaging
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Technical Information

9-24-20 Revised

Polyethylene Foams (Rollstock)

Typical Physical Properties* Pkg Grades

Nominal Thickness	Test Method	PACKAGING GRADE					ENGINEERED DENSITIES			
		1/32"	1/16"	3/32"	1/8"	3/16"	1/4"	3/8"	1/2"	1/2"
Compressive Strength	ASTM D3575-93	2,6	2,4	2,5	2,7	2,7	2,8	3,8	4,2	5,0
Vertical Direction (psi)	Suffix D @ 25% / 50%	9,0	9,4	9,8	10,0	10,4	10,6	11,4	12,5	14,0
Compression Set (%)	ASTM D3575-93 Suffix B	16,0	25,0	30,0	29,6	29,4	29,8	28,5	18,0	15,0
Tensile Stress (psi)	ASTM D3575-93	110,0	84,0	66,0	63,0	44,0	40,0	48,0	44,0	48,0
(@ Each Thickness)	Suffix T MD / CMD	35,0	29,0	26,0	25,0	24,0	22,0	25,0	24,0	30,0
Elongation (%)	ASTM D3575-93	7,9	8,1	11,8	16,0	13,1	19,0	68,0	76,0	77,0
	Suffix T MD / CMD	3,0	3,0	3,0	8,0	5,0	8,0	14,0	13,0	16,0
Tear Resistance (lb/ft ³)	ASTM D3575-93	12,1	9,8	9,0	8,4	8,2	8,0	10,0	9,0	13,0
(@ Each Thickness)	Suffix T MD / CMD	18,4	15,0	14,0	13,6	11,5	11,9	15,0	14,0	17,0
Density Range (lb/ft ³)	ASTM D3575-93	1.2-1.5	1.1-1.4	1.1-1.3	1.1-1.3	1.0-1.2	1.0-1.2	1.5-1.7	1.5-1.7	2.0 - 2.3
Water Absortion (lb/ft ²)	ASTM D3575-93 Suffix L	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1
Thermal Stability MD / CMD	ASTM D3575-93 Suffix S	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**
** Except Thickness Direction										
Water Vapor Transmission Rate	ASTM F-1249	0,210	0,177	0,115	0,090	0,089	0,050	0,050	0,050	0,050
GM / 100 in ² / 24 hr.	Method 3005 FED STD 101	0,210	0,177	0,115	0,090	0,089	0,050	0,050	0,050	0,050
Thermal Resistance R-Value	ASTM C518-91	6 Layers	5 Layers	1 Layers	1 Layers	1 Layers	1 Layers	1 Layers	1 Layers	1 Layers
(HR-FT ² -°F/BTU)		0,88	0,99	0,44	0,51	0,68	0,80	0,80	0,80	0,80
Thermal Conductivity K-Value	ASTM C518-91									
(BTU-IN/HR-FT ² -°F/BTU)		0,26	0,25	0,18	0,20	0,23	0,22	0,22	0,22	0,22
Static Decay	EIA STD. 541	< 2 sec.	< 2 sec.	< 2 sec.	< 2 sec.	< 2 sec.	< 2 sec.	< 2 sec.	< 2 sec.	< 2 sec.
(Anti-Static Grade)	Appendix F									
Surface Resistivity	EIA STD. 541	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -	1,0 x 10 ⁹ -
(Anti-Static Grade)	Section 4.3	1,0 x 10 ¹²	1,0 x 10 ¹²	1,0 x 10 ¹²	1,0 x 10 ¹²	1,0 x 10 ¹²	1,0 x 10 ¹²	1,0 x 10 ¹²	1,0 x 10 ¹²	1,0 x 10 ¹²
Flexibility +71°F - 65°F	PPP-C-1752 D	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Contact Corrositivity	Method 3005 FED STD 101	None	None	None	None	None	None	None	None	None
(Alum Plate)										
Recycle Grade		80-100% Content								
Flame Retardent Grade		Meets FR Requirements in UL94 HF 1 & 2								
		IAW ASTM E 162-09 Surface Flammability Inde <25								
		IAW ASTM E 662 Spacific Optical Density of Smoke with Radiant Heat is 56 DM Time at 13 Min.								
		IAW ASTM E 662 Spacific Optical Density of Smoke with Radiant Heat and Flame is 42 DM time at 9.5 Min.								

* The data presented for these products are for unconverted ProtecPac inc. polyethylene foam products.
 While values shown are typical of these products, they should not be construed as specification limits.