



Ivex Protective Packaging  
 456 S Stolle  
 Sidney, Ohio  
 45365  
 Tel: 937-498-9298  
 Fax: 937-498-1998

## Technical Information

9-24-20 Revised

Protective Packaging

### 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 <sup>3</sup> )	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 <sup>3</sup> )	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 <sup>2</sup> )	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	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**	<5%**
** Except Thickness Direction	Suffix S									
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 <sup>2</sup> / 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 <sup>2</sup> -°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 <sup>2</sup> -°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 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -	1,0 x 10 <sup>-9</sup> -
( Anti-Static Grade )	Section 4.3	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>	1,0 x 10 <sup>-12</sup>
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.