

For smaller EPE Anti-Static jobs we recommend White EPE19 or White EPE23 and Staticide #2002 with a pink additive (If Color Red) in the spray applied to finished manufactured parts.

Use a staticide that meets or exceeds the static decay criteria as outlined in Military Specifications B-81705. Federal Test Standard 101B, Method 4046.

Minimum EPE- AS (White or Black) requirements-
 EPE19 – 144 Planks (9 Skids of 16)
 EPE23 – 96 Planks (6 Skids of 16)

*** EPE-AS Longevity - 10 12t ohms/sq. for ~ 2 years.**

Expanded Polyethene Design Advantages over Extruded Polyethene Foam A-A 59136, Type III, Grade B

Physical Properties	Test Method	Units	ArPlank		Extruded PE
			EPE19	EPE23	PE 4.0
Density (Grade)	ASTM-D3575	pcf	1.9	2.3	4.0
Density	ASTM-D3575	g/l	30	37	n/a
Compressive Strength @ 10%	ASTM-D3575	psi	10.2	13.2	17.0
Compressive Strength @ 25%		psi	12.8	16.5	19.0
Compressive Strength @ 50%		psi	22.0	27.6	32.0
Compressive Strength @ 75%		psi	55.6	64.3	n/a
Tensile Strength	ASTM-D3575	psi	52	62	50
Tensile Elongation	ASTM-D3575	%	32	31	70
Tear Strength	ASTM-D3575	lbs./in	17	19	19
Compressive Set @ 25%	ASTM-D3575	%	4	4	5
Compressive Set @ 50%	ASTM D3575	%	12	12	15
Buoyancy	ASTM-D3575	lbs./ft ³	59.5	59.3	58.0
Thermal Conductivity	ASTM-C177	(K) BTU-in/ft ² -hr-°F	0.24	0.24	
Thermal Resistance	ASTM-C177	(R) @70°F	4.2	4.2	
Coeff. of Lin. Thermal Expansion	ASTM-D696	in/in/°F x 10 ⁻⁵	6.2	5.5	
Service Temperature	ASTM-D3575	°F (Max.)	160	160	
Water Absorption	ASTM-D3575/C272	% (vol)/lb./ft ²	<5.0/< 0.02	<5.0/< 0.02	<5.0/< 0.02
Compressive Creep	ASTM-D3575	1000hr, % (psi)	3.3 (1)	3.5 (1.5)	
Flammability	FMVSS-302	<4.0 in/min	Pass	Pass	Pass
Chemical Resistance	Various	1 hr. exposure (solvents, acids, and alkalines)	Pass	Pass	
Fuel Immersion	Coast Guard; Fuel B per 33 CFR §183.114	<5% (chg. in vol)	Pass	Pass	
Blowing Agent Content			0	0	<10% LEL

- ✓ Both EPE #1.9 and EPE #2.3 meet CID- A-A 59136, Type III allowing precision cushion performance.
- ✓ 6" thick planks allows for less laminations in fabricated parts over 2" thick.
- ✓ All EPE products are chemically inert having (0% LEL). Extruded PE is blown with ISO Butane having (<10% LEL), after being pinned and aged.
- ✓ EPE is isotropic in nature having the same compression and impact absorbing properties in all directions unlike extruded PE foams that requiring designs using the 2" extruded direction only.
- ✓ EPE has 30% - 40% better CLTE than extruded PE for much better dimensional stability on cut parts.
- ✓ ArPlank 1.9pcf and 2.3pcf is 45% - 55% lighter with the same performance vs #4.0 extruded PE.

Common Color Question

When designing in Anti-Stat EPE in White or Black that meets CID-A-A 59136 Type III, Grade B (See Note Below).

Reference: A-A59136 Superseding PPP-C-1752D(3)

3.8 Color. For visual identification purposes only.

CNC tolerances - based on controlled cuts:

.0" to 3" = +/- .03"
 3" to 9" = +/- .06"
 9" to 15" = +/- .09"
 15" to 24" = +/- .12"
 24" to 30" = +/- .15"

*** Manufactured tolerances may vary per manufacture.**