



Expanded Polyethylene

Product Characteristics/Uses:

- Cushion Packaging
- Transportation Applications
- Water Sports Equipment
- Sporting and Recreation Goods
- Electronic Products
- Shock Absorption
- Vibration Dampening
- Insulation
- Padding Material for Toys and Games
- Safety Equipment

Merryweather is a distributor of both **Nomaco** extruded products and **Pactiv** packaging and cushioning products. Expanded polyethylene products are polymer based closed cell foams. They have a polymer chemistry that results in exceptional performance and resiliency.

Nomapak Low G Foam™; Mid G Foam™; and Mid G Flame Retardant Foam™; are custom engineered, polymer based closed cell foams that are easily fabricated, release easily from dies, and have superior bonding and welding characteristics. They have superior cushioning properties from 6" to 48" multiple drop environments. Complete protection of products and components within:

- production process
- assembly process
- storage process
- shipping process

Physical Characteristics	Units	LG Foam	MG Foam	MGFR Foam	Testing Methods
Density	lbs/ft ³	1.0	1.6	Range 1.6-1.8	ASTM D 3575
Color		White*	White*	Tan*	
Cell Size, average	mm	2	1	1	ASTM D 3576
Compressive Strength	lbs Force/in ²				ASTM D 3575 (Suffix D)
@10% cross extrusion		3	9		
@25% cross extrusion		7	16	9	
@50% cross extrusion		16	26	18	



MERRYWEATHER FOAM, INC.

An ISO9002 Certified Company

Physical Characteristics	Units	LG Foam	MG Foam	MGFR Foam	Testing Methods
Compression Set (50% deflection, cross extrusion)	%	17	19	21	ASTM D 3575 (Suffix B)
Compressive Creep	%				
@1.0 psi (extrusion direction)		<10			ASTM D 2221 ASTM D 3575
@2.0 psi (extrusion direction)			<10	<10	ASTM D 3575 (Suffix BB)
Tensile Strength	lbs Force/in ²	56	41	35	ASTM D 3575 (Suffix T)
Elongation	%	75	118	72	ASTM D 3575 (Suffix T)
Temperature Range	°F	-40° to 180° (intermittent)	-40° to 180° (intermittent)	-40° to 180° (intermittent)	ASTM C 411 (max only)
Tear Resistance (extrusion direction)	lbs/in	2.03			ASTM D 3575 (Suffix BB)
Thermal Conductivity	Btu-in/hr-°F-ft ²			0.35	ASTM C 518
Bouyancy	lbs/cuFt	56.8 lb/ft ³		59	ASTM D 3575 Suffix AA)
Water Absorption	lbs/ft ²			0.1	ASTM D 3575 L
Flammability				Pass	FAR 25.853 (a)



Nomapak Soft Foam™ is an ultra fine cell, flexible engineered polymer foam. Unique polymers combines with profile geometry yield soft, resilient dependable material performance. Features include:

- vibrant color options
- reusable/recyclable
- heat sealable
- easily fabricated
- energy absorbing
- chemical resistant
- durable

Physical Characteristics	Units	SSN-1 Foam	Testing Methods
Density (PCF)	lbs./ft ³	1.8	ASTM D 3575
Compression Strength	psi		ASTM D 3575 (Suffix D)
@25%		12	
@50%		25	
Tensile Strength	psi	40	ASTM D 3575 (Suffix T)
Elongation	%	69	ASTM D 3575 (Suffix T)
Compression Set	%	18	ASTM D 1667 @ 50% Deflection
Thermal Stability	%	@ 158 F° <2	ASTM D 3575 (Suffix S)
Water Absorption	lbs./ft ²	0.06	ASTM D 3575 (Suffix L)



Pactiv Polyplank™ polyethylene foam is a versatile design material that gives a combination of excellent physical and chemical properties, easy fabrication, cost-effectiveness and suitability for a wide range of applications. Features include:

- laminates to a wide range of materials
- bonds easily to itself or adhesives
- made from raw and recycled materials
- easily fabricated into desired shapes and configurations

Physical Characteristics	Units	0.7 PCF	1.6 PCF	2.2 PCF	4.0 PCF	6.0 PCF	9.0 PCF	Testing Methods
Density	lbs/ft ³	Nominal .75	1.5-1.85	2.1-2.3	4.3-5.1	5.4-6.2	8.8-9.6	ASTM D 3575 (Suffix W)
Cell Size, average	Cells/inch	18-22	24	24	24	26	26	ASTM D 3576 (Pactiv modified)
Compressive Strength	PSI @ 25% Deflection	4.0-5.4	4-6	5-9	16-19	24-32	55-70	ASTM D 3575 (Suffix D)
Compression Set (50% deflection, cross extrusion)	% of Original Thickness Not Recovered	16-22	16-22	16-	16-19	14-16	15-18	ASTM D 3575 (Suffix B)
Compressive Creep	% Deflection @ 1000 Hours	Less than 30% @ .5 psi	9-13 @2.0 psi	9-13 @2.0 psi	1.4 @3.0 psi	1.7 @5.0 psi	2.2 @10 psi	ASTM D2221
Buoyancy	lbs/cuFt	55-60	55-60	54-59	53-58	50-55	50-55	ASTM D 3575 (Suffix AA)
Water Absorption	lbs/ft ³ @ 48 hours	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ASTM D 3575 L
Thermal Conductivity	Btu-in/hr-°F-ft ² F	0.52	0.33	0.31	0.29	0.27	0.25	ASTM C518-91
Thermal Resistance	Hr. Ft. ² F/Btu/in.	1.93	3.05	3.21	3.46	3.7	4.0	ASTM C518-91