



# PRODUCT NEWS

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## VOLARA TYPE A - CROSSLINKED POLYETHYLENE FOAM

### Product Definition

Volara Type A is a flexible closed cell polyethylene foam which is crosslinked by means of a unique electron irradiation process. This results in a continuous smooth surface foam material with a fine cell structure, and excellent mechanical properties. Volara Type A can be produced in pure white or a variety of colors. Standard colors are white, black, charcoal and ocean blue.

### Product Form

Volara Type A is produced in both roll and sheet form.  
Standard width is 60" (other widths are available)  
Standard thicknesses are as follows:

<u>Density</u>	<u>Thickness Range</u>
2 pcf	3/32" to 5/8" Roll 1/2" to 1-1/2" Sheet
4 pcf	1/16" to 1/2" Roll
6 pcf	1/32" to 3/8" Roll

### Product Characteristics

- \* Good mechanical properties at low densities
- \* Low water absorption and vapor transmission
- \* Excellent thermal insulation
- \* Excellent chemical resistance
- \* smooth aesthetically pleasing surface

Volara Type A can be laminated, embossed, thermoformed, die cut, sewn, printed and pressure sensitive adhesive coated.

## TYPICAL PROPERTIES OF VOLARA TYPE A

<u>Specification</u>	<u>Units</u>	<u>Direction</u>	<u>2 pcf</u>	<u>4 pcf</u>	<u>6 pcf</u>
Density	pcf	--	1.80-2.20	3.60-4.40	5.40-6.60
Compression Strength (ASTM D3575)	psi @ 25% psi @ 50%	--	6 15	11 22	17 32
Tensile Strength (ASTM D3575)	psi	M CM	58 41	116 85	182 133
Elongation to Break (ASTM D3575)	%	M CM	123 91	173 131	227 157
Tear Resistance (ASTM D3575)	lbs/in	M CM	16 10	31 23	50 39
Compression Set (ASTM D3575)	% of Org. Thickness	--	21	13	8
Shore Hardness (ASTM D2240)	AA Scale OO Scale	-- --	7 51	15 64	23 71
Thermal Stability 3 hrs @ 180 deg. F	% Maximum	M CM Thick.	-2.5 -1.7 +4.5	-1.8 -1.2 +4.9	-1.4 -1.2 +3.1
Thermal Conductivity K Factor @ 70 deg. F BTU/(hr) (ft <sup>2</sup> ) (deg. F/in) R Factor = Thickness/K Factor			0.25	0.30	0.32
Water Absorption (ASTM D1667)	lbs/sq. ft. of cut surface		0.04	0.04	0.04
Buoyancy (USCG 164.013)	pcf		55.0 min.	--	--

M: Machine Direction  
CM: Cross-Machine Direction

--: Indicates Shrinkage  
+: Indicates Expansion

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This information on Volara irradiation crosslinked polyethylene foam is presented to our best knowledge. All test data are average values unless stated and should be considered as guidelines to the performance of this product and should not be used as specifications.