type RS

Rigid Alloy Foam for Automotive Interior Applications

Voltek has developed a series of rigid alloy foam (RAF) grades that are specifically designed for low pressure molding applications.

These new high performance RAF grades are based on a proprietary formulation and specific process improvements.

The Volara RS grades exhibit a fine, uniform, cell structure and a precisely controlled degree of crosslinking which makes them the optimum choice for low pressure molding applications. The physical properties of Volara RS illustrate the high strength, elongation, and low thermal shrinkage necessary to withstand the excessive heat and pressure exerted during a typical LPM process.

In addition, Voltek has adopted new process technology for Volara RS which has resulted in consistent, high quality foams. Density and thickness tolerances have been improved to provide better lamination to PVC film or fabrics. Volara RS also has a consistent surface-free energy or dyne level and both sides exhibit similar surface and adhesion characteristics. Therefore, the corona treating and adhesive coating steps prior to lamination are predictable and controllable.

Volara RS can be produced to specific requirements in the following range of densities and thicknesses:

Density *(lbs/cu.ft.)*	Thickness *(0.000")*						
2				100	118	125	157	196
2.5			80	100	118	125	157	196
3, 3.5, 4			80	100	118	125	157	
5		60	80	100	118	125		
6	50	60	80	100	118	125		

The standard color is off-white or natural. Charcoal and silver grey are also available.

Voltek is committed to supplying the optimum RAF grades for LPM applications. We work closely with our customers to develop new and improved products for the automotive industry.

SEKISUI Voltek www.SekisuiVoltek.com

100 Shepard Street, Lawrence, MA 01843-1089 800.225.0668 ~ 978.685.2557 ~ 978.685.9861

Preliminary Volara RS Properties

Property	3.5 RS .118" Na	4.2 RS .118" Na
Nominal Density, pcf	3.50	4.20
Nominal Thickness, inches	0.118	0.118
Tensile Strength, psi (room temperature)		
Machine	169	225
X-machine	135	167
Tensile Strength, psi (@ 248°F)		
Machine	50	68
X-machine	37	48
Elongation To Break, % (room temperature)		
Machine	264	290
X-machine	263	269
Elongation To Break, % (@ 248°F)		
Machine	442	477
X-Machine	364	430
Tear Resistance, lbs/inch		
Machine	30.5	35.7
X-machine	38.0	43.9
Compression Strength, psi		
@ 25% deflection	17.7	20.6
@ 50% deflection	29.9	33.2
Compression Set		
% of original thickness	30.9	29.1
Thermal Shrinkage, %		
3 hours @ 250°F		
Machine	1.9	1.6
X-machine	1.3	1.3
Thickness	0.3	0.6
3 hours @ 275°F		
Machine	2.9	2.8
X-machine	2.2	2.4
Thickness	0.6	0.3

Note: This information on Volara irradiation crosslinked polyolefin foam is presented to our best knowledge. These physical properties are representative of limited production runs and will be subject to change.