



LAST-A-FOAM® R-9300 RIGID POLYURETHANE FOAM (Metric Units)

Property	Test Method	R-9320	R-9325	R-9330	R-9335	R-9340	R-9340HP
Density (kg/m <sup>3</sup> )	ASTM D-1622	320	400	481	561	641	641
<b>Compressive Strength (kPa)</b>							
Parallel to Rise, Strength @2% Deflection*							
24°C	ASTM-D-1621	2,400	3,450	6,900	10,350	12,400	14,500
Parallel to Rise, Strength @10% Deflection							
24°C	ASTM-D-1621	7,250	12,150	16,350	23,000	29,100	29,100
<b>Compressive Modulus (kPa)</b>							
Parallel to Rise @10% Deflection							
24°C	ASTM-D-1621	257,000	423,500	624,000	686,000	786,000	786,000
93°C		136,500	225,000	240,500	379,000	379,000	379,000
Perpendicular to Rise @10% Deflection							
24°C	ASTM-D-1621	194,500	325,500	436,000	627,500	800,000	800,000
93°C		109,500	172,500	229,000	293,000	358,500	358,500
<b>Tensile Strength (kPa)</b>							
Parallel to Rise	ASTM D-1623 Type A Specimens	5,150	7,600	9,650	13,100	15,900	15,900
Perpendicular to Rise		4,900	7,250	8,700	13,100	17,200	17,200
<b>Shear Strength (kPa)</b>							
Parallel to Rise	ASTM C-273 in Compression *Modified sample size = 0.64cm x 2.54cm x 7.62cm	4,300	6,550	8,800	10,700	11,900	11,900
<b>Shear Modulus (kPa)</b>							
Parallel to Rise	ASTM C-273 in Compression *Modified sample size = 0.64cm x 2.54cm x 7.62cm	50,000	62,100	73,800	84,100	90,300	90,300
<b>Flexural Strength (kPa)</b>							
Rise Parallel to Test Span	ASTM D-790 Method 1-A	7,050	10,700	13,400	18,600	23,450	23,450
Rise Parallel to Beam Thick.		6,850	10,700	13,450	19,300	24,150	24,150
<b>Flexural Modulus (kPa)</b>							
Rise Parallel to Test Span	ASTM D-790 Method 1-A	229,000	382,000	495,000	710,000	896,500	896,500
Rise Parallel to Beam Thick.		229,000	380,000	487,500	703,500	896,500	896,500
<b>Thermal Conductivity: (W/m-K)</b>	ASTM C-518 at 24°C mean temp.	$5.6 \times 10^{-2}$	$6.5 \times 10^{-2}$	$7.4 \times 10^{-2}$	$8.3 \times 10^{-2}$	$9.2 \times 10^{-2}$	$9.2 \times 10^{-2}$
<b>R-Value [(K-m<sup>2</sup>/W)]</b>		0.45	0.39	0.34	0.31	0.28	0.28
<b>Coefficient of Thermal Expansion: (m/m-K)</b>	From -46 to +93°C, GP Method	$56 \times 10^{-6}$					
<b>Poisson's Ratio:</b>	Literature (Gibson & Ashby)	~ 0.3					
<b>Glass Transition Temperature, Tg (°C)</b>	ASTM E-1824	116					
<b>Max Use Temperature (°C)</b>		104					
<b>Fire Safety</b>	Self-extinguishing via FAR 25.853 (A) App. F (a)(1)(i) & (ii) tested vertically on 1.27cm thick specimen using 12- and 60- second ignition with a Bunsen burner						

7/19/2019

\* Compressive Strength values are certified to exceed shown minimum values, all other values are nominal.

The data is derived from tests and historical usage. The data is averaged data and should be treated as such. These values do not constitute a sales specification, except as noted for the compressive strength values.

GENERAL PLASTICS MANUFACTURING COMPANY

4910 BURLINGTON WAY, TACOMA, WA 98409 | phone (253) 473-5000 | fax (253) 473-5104

e-mail: sales@generalplastics.com | website: www.generalplastics.com