



## GENERAL PLASTICS MANUFACTURING COMPANY

Exclusive manufacturers of LAST-A-FOAM polyurethane foams

### Nominal Physical Property Data for LAST-A-FOAM® FR-3700 Rigid Foam at 15 pounds per cubic foot density

<u>Property</u>	<u>English</u>	<u>Metric</u>	<u>Test Method</u>
Density (pcf) (kg/m <sup>3</sup> )	15	240	ASTM D-1623
Compressive Strength (psi) (kPa) Parallel to Rise			ASTM-D-1621
@ -65° F	1113	7675	
@ 75° F	728	5017	
@ 200° F	413	2850	
@ 250° F	267	1838	
Perpendicular to Rise			
@ -65° F	1097	7563	
@ 75° F	696	4800	
@ 200° F	415	2860	
@ 250° F	275	1898	
Compressive Modulus (psi) (kPa) Parallel to Rise			ASTM-D-1621
@ -65° F	21923	151159	
@ 75° F	20371	140459	
@ 200° F	14930	102945	
@ 250° F	10959	75564	
Perpendicular to Rise			
@ -65° F	21612	149014	
@ 75° F	18771	129425	
@ 200° F	14067	96994	
@ 250° F	10959	75564	
Tensile Strength (psi) (kPa)			ASTM D-1623 Type A Specimens
Parallel to Rise	601	4143	
Perpendicular to Rise	594	4097	

<b>Tensile Modulus (psi) (kPa)</b>			ASTM D-1623 Type B specimens
Parallel to Rise	21826	150492	
Perpendicular to Rise	22694	156473	
<b>Shear Strength (psi) (kPa)</b>			ASTM C-273 Compression Shear
Rise Parallel to Specimen Width	490	3379	
Rise Parallel to Specimen Thick	479	3306	
<b>Shear Modulus (psi) (kPa)</b>			ASTM C-273 Compression Shear
Rise Parallel to Specimen Width	4941	34071	
Rise Parallel to Specimen Thick	5141	35447	
<b>Flexural Strength (psi) (kPa)</b>			ASTM D-790 Method 1-A
Rise Parallel to Test Span	851	5868	
Rise Parallel to Beam Thick	813	5605	
<b>Flexural Modulus (psi) (kPa)</b>			ASTM D-790 Method 1-A
Rise Parallel to Test Span	25991	179207	
Rise Parallel to Beam Thick	20247	139605	
<b>CTE: (in/in/°F) (K<sup>-1</sup>)</b>	-3.4x10 <sup>-5</sup>	-6.1x10 <sup>-5</sup>	From -50° to +200° F
<b>Closed Cell Content (%)</b>	96.7	96.7	ASTM D-2856 Procedure B
<b>Thermal Conductivity "k" (BTU*in/ft<sup>2</sup>*°F*h) [(W/m*K)]</b>	0.284	0.041	ASTM C-518 at 75°F (24°C) mean temp
<b>Poisson's Ratio</b>	-0.3	-0.3	Literature (Gibson and Ashby)
<b>Hardness, Shore-D (cut foam surface)</b>	27	27	ASTM D-2240
<b>Tumbling Friability - weight loss (%)</b>	2	2	ASTM C-421 (20 minutes @ 60 rpm)
<b>Water Absorption (lbs/ft<sup>2</sup>) (kg/m<sup>2</sup>)</b>	0.011	0.056	ASTM D-2842
<b>Glass Transition (°F) (°C)</b>	279	137	TMA
<b>Specific Heat @ 25°C (BTU/lb-°F) (J/g°C)</b>	0.353	1.477	ASTM E-1269
<b>Heat of Combustion (BTU/lb) (MJ/Kg)</b>	11706	27.17	ASTM D-240
<b>Fire Safety (FAR 25.853 12 &amp; 60s vertical)</b>	Pass	Pass	<15s extinguish time, <6 in burn length

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CAUTION: The flammability characteristics indicated for LAST-A-FOAM® are obtained from comparative tests, conducted under specific laboratory conditions. The sole purpose of these tests is to establish relative burning characteristics of foam materials. Terms such as "self extinguishing" or "flame spread" used in test data are not intended to reflect the fire hazard of LAST-A-FOAM® under actual use conditions. The test results are not accurate indicators of the flammability of LAST-A-FOAM® in actual fire environments.

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