



10_{LB.} Sign•Foam 3[®] Physical Properties Data Sheet

Property	English	Metric	Test Method
Density (pcf) (kg/m ³)	10	160	ASTM-D-1623
Compressive Strength (psi)(kPa) Parallel to Rise at 75 F	292	2010	ASTM-D-1621
Compressive Modulus (psi)(kPa) Parallel to Rise at 75 F	14459	99697	ASTM-D-1621
Flexural Strength (psi) (kPa) Rise Parallel to Beam Thick	305	2104	ASTM D-790 Method 1-A
Flexural Modulus (psi) (kPa) Rise Parallel to Beam Thick	8070	55644	ASTM D-790 Method 1-A
Tensile Strength (psi) (kPa) Perpendicular to Rise	259	1788	ASTM D-1623 Type A Specimens
Tensile Modulus (psi) (kPa) Perpendicular to Rise	18548	127889	ASTM D-1623 Type A Specimens
Shear Strength (psi) (kPa) Rise Parallel to Specimen Thick	224	1547	ASTM C-273 Compression Shear
Shear Modulus (psi) (kPa) Rise Parallel to Specimen thick	1576	1576	ASTM C-273 Compression Shear
CTE: (in/in/ F) (K ⁻¹)	~2.7x10 ⁻⁵	~4.9x10 ⁻⁵	From -30 to +200 Deg F, Metric in Deg C
Hardness, Shore-D 75 F (cut foam surface)	14	14	ASTM D-2240
Hardness, Shore-D 150 F (cut foam surface)	11	11	ASTM D-2240
Thermal Conductivity "k": (BTU*in/ft ² * F*h)	0.278	0.040	ASTM C-518 at 75 F (24 C) mean temp.
Tumbling Friability -weight loss(%)	1.37	1.37	ASTM C-421 (20 minutes @ 60 rpm)
Fire Safety (FAR 25.853 12 & 60s vertical)	Pass	Pass	<15s extinguishing time, <6 in burn length



15_{lb} Sign•Foam 3[®] Physical Properties Data Sheet

Property	English	Metric	Test Method
Density (pcf) (kg/m ³)	15	240	ASTM-D-1623
Compressive Strength (psi)(kPa) Parallel to Rise at 75 F	617	4258	ASTM-D-1621
Compressive Modulus (psi)(kPa) Parallel to Rise at 75 F	62584	183297	ASTM-D-1621
Flexural Strength (psi) (kPa) Rise Parallel to Beam Thick	657	4529	ASTM D-790 Method 1-A
Flexural Modulus (psi) (kPa) Rise Parallel to Beam Thick	18416	126977	ASTM D-790 Method 1-A
Tensile Strength (psi) (kPa) Perpendicular to Rise	521	3591	ASTM D-1623 Type A Specimens
Tensile Modulus (psi) (kPa) Perpendicular to Rise	40342	278161	ASTM D-1623 Type A Specimens
Shear Strength (psi) (kPa) Rise Parallel to Specimen Thick	409	2818	ASTM C-273 Compression Shear
Shear Modulus (psi) (kPa) Rise Parallel to Specimen thick	4689	6498	ASTM C-273 Compression Shear
CTE: (in/in/ F) (K ^A -1)	~2.7x10 ^A -5	~6.7x10 ^A -5	From -30 to +200 Deg F, Metric in Deg C
Hardness, Shore-D 75 F (cut foam surface)	23	23	ASTM D-2240
Hardness, Shore-D 150 F (cut foam surface)	19	19	ASTM D-2240
Thermal Conductivity "k": (BTU*in/ft ² * F*h)	0.351	0.051	ASTM C-518 at 75 F (24 C) mean temp.
Tumbling Friability -weight loss(%)	0.38	0.38	ASTM C-421 (20 minutes @ 60 rpm)
Fire Safety (FAR 25.853 12 & 60s vertical)	Pass	Pass	<15s extinguishing time, <6 in burn length



18 lb. Sign•Foam 3[®] Physical Properties Data Sheet

Property	English	Metric	Test Method
Density (pcf) (kg/m ³)	18	288	ASTM-D-1623
Compressive Strength (psi)(kPa) Parallel to Rise at 75 F	865	5966	ASTM-D-1621
Compressive Modulus (psi)(kPa) Parallel to Rise at 75 F	34958	241034	ASTM-D-1621
Flexural Strength (psi) (kPa) Rise Parallel to Beam Thick	927	6393	ASTM D-790 Method 1-A
Flexural Modulus (psi) (kPa) Rise Parallel to Beam Thick	26688	184011	ASTM D-790 Method 1-A
Tensile Strength (psi) (kPa) Perpendicular to Rise	713	4914	ASTM D-1623 Type A Specimens
Tensile Modulus (psi) (kPa) Perpendicular to Rise	57214	394493	ASTM D-1623 Type A Specimens
Shear Strength (psi) (kPa) Rise Parallel to Specimen Thick	535	3690	ASTM C-273 Compression Shear
Shear Modulus (psi) (kPa) Rise Parallel to Specimen thick	7679	7679	ASTM C-273 Compression Shear
CTE: (in/in/ F) (K ^A -1)	~2.7x10 ^A -5	~6.6x10 ^A -5	From -30 to +200 Deg F, Metric in Deg C
Hardness, Shore-D 75 F (cut foam surface)	27	27	ASTM D-2240
Hardness, Shore-D 150 F (cut foam surface)	24	24	ASTM D-2240
Thermal Conductivity "k": (BTU*in/ft ² * F*h)	0.395	0.057	ASTM C-518 at 75 F (24 C) mean temp.
Tumbling Friability -weight loss(%)	0.21	0.21	ASTM C-421 (20 minutes @ 60 rpm)
Fire Safety (FAR 25.853 12 & 60s vertical)	Pass	Pass	<15s extinguishing time, <6 in burn length