



# EPS GEOFOAM DATA SHEET

EPS Geofoam is a cellular plastic material that is strong but has very low density (1% of traditional earth materials). It is manufactured in block form and meets ASTM D6817, “Standard Specification for Rigid, Cellular Polystyrene Geofoam”. EPS Geofoam is available in a range of densities to provide control of structural integrity and cost effectiveness.

The information given is deemed to be timely, accurate, and reliable for the use of EPS Geofoam. Each project using EPS Geofoam should be designed by a professional engineer. The engineer of project specifications should be consulted to determine the ASTM D6817 Type required for your project loading conditions.

EPS Geofoam Properties								
Property		ASTM D6817						
		EPS12 Type XI	EPS15 Type I	EPS19 Type VIII	EPS22 Type II	EPS29 Type IX	EPS39 Type XIV	EPS46
Minimum Density <sup>1</sup>	lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	0.70 (11.2)	0.90 (14.4)	1.15 (18.4)	1.35 (21.6)	1.80 (28.8)	2.40 (38.4)	2.85 (45.7)
Compressive Resistance <sup>1</sup> @10% deformation, min.	psi	5.8	10.2	16.0	19.6	29.0	40.0	50.0
	psf	840	1470	2300	2820	4180	5760	7200
	(kPa)	(40)	(70)	(110)	(135)	(200)	(276)	(345)
Compressive Resistance <sup>1</sup> @5% deformation, min.	psi	5.1	8.0	13.1	16.7	24.7	35.0	43.5
	psf	730	1150	1890	2400	3560	5040	6260
	(kPa)	(35)	(55)	(90)	(115)	(170)	(241)	(300)
Compressive Resistance <sup>1</sup> @1% deformation, min.	psi	2.2	3.6	5.8	7.3	10.9	15	18.6
	psf	320	520	840	1050	1570	2160	2680
	(kPa)	(15)	(25)	(40)	(50)	(75)	(103)	(128)
Elastic Modulus <sup>1</sup> , min.	psi (kPa)	220 (1500)	360 (2500)	580 (4000)	730 (5000)	1090 (7500)	1500 (10300)	1860 (12800)
Flexural Strength <sup>1</sup> , min.	psi (kPa)	10.0 (69)	25.0 (172)	30.0 (207)	40.0 (276)	50.0 (345)	60.0 (414)	75.0 (517)
Water Absorption <sup>1</sup> by total immersion, max.	volume %	4.0	4.0	3.0	3.0	2.0	2.0	2.0
Oxygen Index <sup>1</sup> , min.	volume %	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Buoyancy Force	lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	61.7 (990)	61.5 (980)	61.3 (980)	61.1 (980)	60.6 (970)	60.0 (960)	59.5 (950)

<sup>1</sup> See ASTM D6817 Standard for test methods and complete information.