

## TECHNICAL NOTE #101

### GEOFOAM EPS TECHNICAL DATA

**Physical Properties of GEOFOAM EPS**  
**Specification Reference: ASTM D6817**

Cellofoam<sup>®</sup> GEOFOAM expanded polystyrene (EPS) is a rigid, foamed plastic with resilient closed cells molded in a range of densities and block sizes to meet your application and specification requirements. Our GEOFOAM EPS is produced with modified bead containing fire retardant and manufactured to the same high standards as our Cellofoam<sup>®</sup> brand Insulation to provide the highest quality and long-term performance for your project. Contains No CFC, HCFC or HFC.

Cellofoam<sup>®</sup> GEOFOAM EPS is an inert, stable product that can provide a low cost, lightweight fill solution, when compared to earthen fill material, making it an excellent choice for: soil / slope stabilization, reducing overburden or lateral earth pressures behind retaining structures, stadium seating, landscaping areas. Formulations with insect/termite resistance are also available. Our EPS does not support mold or fungal growth.

#### Cellofoam<sup>®</sup> GEOFOAM EPS Properties<sup>1,2,3</sup>

EPS TYPE - ASTM D6817	Units	EPS15 <sup>4</sup>	EPS19 <sup>4</sup>	EPS22 <sup>4</sup>	EPS29 <sup>4</sup>	EPS39	EPS46
Density, min.	lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	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 @ 1% deformation, min.	psi (kPa)	3.6 (25)	5.8 (40)	7.3 (50)	10.9 (75)	15.0 (103)	18.6 (128)
Compressive Resistance @ 10% deformation, min. <sup>3</sup>	psi (kPa)	10.2 (70)	16.0 (110)	19.6 (135)	29.0 (200)	40.0 (276)	50.0 (345)
Flexural Strength, min.	psi (kPa)	25 (172)	30 (207)	35 (240)	50 (345)	60 (414)	75 (517)
Elastic Modulus, min.	psi (kPa)	360 (2500)	580 (4000)	730 (5000)	1090 (7500)	1500 (10300)	1860 (12800)
Oxygen Index, min.	volume %	24.0	24.0	24.0	24.0	24.0	24.0
Water Absorption by total immersion, max.	volume %	4.0	3.0	3.0	2.0	2.0	2.0

1. When tested in accordance with ASTM D6817 Standard Test Methods
2. All Geofoam EPS manufactured by Cellofoam North America Inc. meet ASTM D6817 standard specifications
3. Design load stresses should not exceed the compressive resistance @ 1% strain
4. UL Certified - See UL ER7260-01

**WARNING:** This product is combustible and if exposed to a fire of sufficient heat and intensity may burn rapidly. It should not be left exposed or inadequately protected. Consult specific instructions and applicable building codes for use of this product.

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