

**MICROSPHERE SYNTACTIC MATERIALS**
**Premium Performance**

BZ Grade premium syntactic foams safely operate in the oceans Bathypelagic Zone, at depths ranging from 1,000 down to 3,400 meters. These specially formulated composites utilize a variety of hollow glass spheres to attain the lowest density in the industry. Hydrostatic performance is assured with crush depths at a minimum of 1.5 times the operation depth.

**Product Availability**

BZ Grade syntactic foams are available in block form and may be readily used for customer assembly or cut to fit application requirements. Blocks or trimmed parts may also be bonded together to form larger structures.

**Standard Block Sizes:**

For BZ-24: 5.5" x 12" x 24" (140 x 305 x 610 mm)

For BZ-26 and BZ-28: 4.0" x 12" x 24" (102 x 305 x 610 mm)

Custom sizes and shapes are available upon request.

**Industry Applications**

Designed to minimize compressive loss at operation depth and improve long-term weight gain resistance, these foams are the ideal buoyancy system for ROVs, AUVs and traditional floatation applications.

# BZ GRADE

**HIGHLIGHTS**

- ▶ Operational Depth Range: Surface - 3,400 Meters
- ▶ Lowest Density Available in the Entire Industry
- ▶ Resistant to Long Term Weight Gain
- ▶ High Compressive and Hydrostatic Strength
- ▶ Standard Forms and Customization Options
- ▶ Low Water Absorption


**PROPERTIES**

Product	Density lb/ft <sup>3</sup> (g/cc)	Service		Weight Gain 24h @ depth	Hydrostatic Crush psi (Bar)	Uniaxial Compressive	
		Pressure psi (Bar)	Depth feet (meters)			Strength at 0.2% Offset psi (MPa)	Modulus ksi (GPa)
BZ-24	24 ± 2 (0.39 ± .03)	3,000 (204)	6,560 (2,000)	1% Max	4,640 (320)	3,340 (23)	220 (1)
BZ-26	26 ± 2 (0.42 ± .03)	4,330 (296)	9,840 (3,000)	1% Max	7,165 (494)	5,050 (35)	290 (1)
BZ-28	28 ± 2 (0.45 ± .03)	5,530 (379)	11,150 (3,400)	1% Max	9,270 (639)	6,055 (42)	355 (1)