



# BZ Grade

## Microsphere Syntactic Foam

## Technical Data Sheet

### Highlights

- **Operational Depth Range (Surface - 4 000 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**

### Premium Performance

BZ Grade premium syntactic foams safely operate in the ocean's Bathypelagic Zone, at depths ranging from 1 000 down to 4 000 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.

### 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.

### 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 are 5.5" x 12" x 12" or 5.5" x 12" x 24". Custom sizes and shapes are available upon request.



### Typical Properties

Product	Density	Service		Weight Gain	Hydrostatic Crush	Compressive	
		Pressure	Depth			Strength	Modulus
	lb/ft <sup>3</sup> (g/cc)	psi (Bar)	feet (meters)	24 hrs @ depth	psi (Bar)	psi (MPa)	ksi (GPa)
<b>BZ - 24</b>	24 ± 2 (0.39 ± .03)	3 000 (204)	6 560 (2 000)	2% Max	4 500 (310)	3 500 (24.1)	163 (1.12)
<b>BZ - 26</b>	26 ± 2 (0.42 ± .03)	4 330 (296)	9 840 (3 000)	2% Max	6 600 (450)	3 950 (27.2)	180 (1.24)
<b>BZ - 28</b>	28 ± 2 (0.45 ± .03)	5 530 (379)	12 460 (3 800)	2% Max	8 000 (550)	4 880 (33.6)	210 (1.45)