



**Microsphere Syntactic Foam**

**Technical Data Sheet**



**Highlights**

- Operational Depth Range (Surface - 6 000 Meters)
- Lowest Density Available in the Entire Industry
- Premium Performance for Deep-Water Apps.
- High Compressive and Hydrostatic Strength
- Standard Forms and Customization Options
- Low Water Absorption

**Typical Properties**

Product	Density	Service		Weight Gain	Hydrostatic Crush	Compressive	
	lb/ft <sup>3</sup>	Pressure	Depth	24 hrs @	psi	Strength	Modulus
	(g/cc)	psi (Bar)	feet (meters)	depth	(Bar)	psi (Mpa)	ksi (Gpa)
<b>AZ - 29</b>	29 ± 2 (0.46 ± .03)	5 775 (398)	13 100 (4 000)	1% Max	8 700 (600)	7 900 (54.4)	290 (2.00)
<b>AZ - 30</b>	30 ± 2 (0.46 ± .03)	656 (450)	14 750 (4 500)	1% Max	9 840 (750)	8 500 (58.0)	310 (2.15)
<b>AZ - 31</b>	31 ± 2 (0.50 ± .03)	7 300 (503)	16 400 (5 000)	1% Max	13 000 (896)	9 000 (62.0)	328 (2.26)
<b>AZ - 34</b>	34 ± 2 (0.55 ± .03)	9 000 (620)	19 680 (6 000)	1% Max	15 000 (793)	9 200 (63.4)	400 (2.75)

**Premium Performance**

AZ Grade premium syntactic foams are engineered to operate in the deep-water regions of the ocean's Abyssopelagic Zone, at depths ranging from 4 000 down to 6 000 meters. These specially formulated systems utilize advanced hollow glass spheres to attain the lowest possible density in the industry.

**Industry Applications**

Ranging in density from 29 to 34 lbs/ft<sup>3</sup>, these homogenous materials are designed to meet the depth, buoyancy, safety and cost requirements for applications such as: 4K, 5K and 6K ROVs and AUVs.

**Product Availability**

AZ 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 or 4" x 12" x 24" (100 x 305 x 610 mm) or 5.5" x 12" x 24" (140 x 305 x 610 mm) for AZ-34 only. Custom sizes and shapes are available upon request.