

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

MZ Grade premium syntactic foams safely operate in the oceans Mesopelagic Zone, at depths ranging from the surface down to 1,000 meters. Fabricated with advanced microsphere technology, these homogenous materials offer both low density and lower cost considerations. Hydrostatic performance is assured with crush depths at a minimum of 1.5 times the operation depth.

**Product Availability**

MZ 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:**

5.5" x 12" x 24" (140 x 305 x 610 mm)

Custom sizes and shapes are available upon request.

**Industry Applications**

These workhorse foams have been thoroughly tested and have a proven track record throughout their long service history. MZ Grade foams are safe, reliable, cost-effective buoyancy for the relatively shallow requirements of oceanographic applications such as mammal tags for whale tracking.

# MZ GRADE

**HIGHLIGHTS**

- ▶ Operational Depth Range: Surface - 1,000 Meters
- ▶ Lowest Density Available in the Entire Industry
- ▶ Reliable, Cost-effective Performance
- ▶ 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)
MZ-22	22 ± 2 (0.35 ± .03)	1,450 (100)	3,280 (1,000)	1% Max	3,875 (267)	3,600 (22)	190 (1)
MZ-38	38 ± 2 (0.61 ± .03)	1,450 (100)	3,280 (1,000)	1% Max	8,145 (562)	4,320 (30)	195 (1)