



SF Grade

Microsphere Syntactic Foam

Technical Data Sheet

Highlights

- **Operational Depth Range (down to 6,000 meters)**
- **Provided in economically -designed density range**
- **Can be easily machined to shape & drilled for inserts or attachments**
- **Standard forms and customization options**

Suitable Performance

The SF Grade of syntactic material was designed as a cost-effective option for applications where the absolute lowest density is not critical. With a higher allowable density, SF can provide excellent long-term performance at depths where volume is not limited. This family of products may also be cast into finished configurations and geometries to improve material usage and reduce expensive yield losses due to machining.

Product Availability

SF Grade is manufactured as 6.0" x 12 x 24 blocks and is generally available for customer installation. Custom sizes and coatings are available upon request. In some applications the material may be cast directly to final shape.



Typical Properties

Grade	Density lb/ft ³ (kg/m ³)	Depth Rating ft (m)	Hydrostatic Crush psi (Bar)	24hr Hydrostatic Performance @1.1 x depth rating % weight gain	Uniaxial Compressive		Flex	
					Strength psi (MPa)	Modulus ksi (GPa)	Strength psi (MPa)	Modulus ksi (GPa)
SF 1500	35.0 (560)	4,920 (1500)	4770 (329)	< 1%	2685 (19.8)	115 (0.79)	4390 (30.3)	412 (2.84)
SF 2000	36.0 (580)	6,560 (2000)	5425 (374)	< 1%	3150 (21.7)	138 (0.95)	4525 (31.2)	419 (2.89)
SF 3000	39.0 (630)	9,840 (3000)	7750 (534)	< 1%	4320 (29.8)	261 (1.80)	4920 (33.9)	441 (3.04)
SF 4000	43.0 (690)	13,120 (4000)	9880 (681)	< 1%	5275 (36.4)	310 (2.14)	5455 (37.6)	469 (3.23)
SF 5000	46.0 (735)	19,680 (6000)	13,125 (905)	< 1%	6700 (46.2)	498 (3.43)	5860 (40.4)	490 (3.38)