



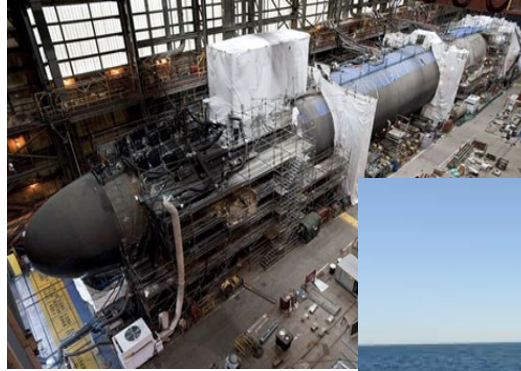
PSF - 42

Microsphere Syntactic Void Filler Kit

Technical Data Sheet

Highlights

- **Operational Depth Range (Surface - 450 Meters)**
- **Fast Cure Void Filler**
- **Lowest Density Available in the Entire Industry**
- **Valuable in Difficult-to-Fill Cavities**
- **Cures at Room Temperature**
- **Simple Shipyard-Based Install**



Proven Performance

PSF - 42 is a fast-cure, multi-component syntactic kit designed to serve as a void filler for subsea applications. This easily cast, low viscosity system cures at room temperature to form a solid syntactic material that will easily perform at depths of 450 meters. The cured material provides an average of 20 lbs of buoyancy per ft³ and high compressive and hydrostatic strength.

Industry Applications

PSF - 42 was developed for simple shipyard-based cavity pours of Naval vessels. This system may be used in any free-flood cavity or void, but is especially valuable in difficult-to-fill cavities and in circumstances where quick working time is required.

Product Installation

The system is installed at the shipyard by trained technicians, using ESS developed equipment and following industry standard procedures (SSP 11.21). The defined void spaces are filled using a stepwise process to assure material performance. Initial cure of the system takes place in a matter of hours, with full cure occurring over 5 - 7 days. Shrinkage, exotherm and cracking are easily controlled by experienced technicians.

Product Storage

Store PSF - 42 components in a dry area. Storage temperatures should be between 45°F - 100°F. Do not allow the resins to freeze or the glass filler to absorb moisture. Always close the containers after use.

Typical Properties

Properties provided below are typical for the cast form.

Color	Density	Compressive Strength	Compressive Modulus	Weight Gain	Hydrostatic Crush	Shelf Life
	lb/ft ³ (g/cc)	psi (MPa)	ksi (GPa)	24 hrs @ depth	psi (Bar)	
White/ Tan	44 (.71)	4 000 (27.5)	250 (1.72)	2% Max	1 400 (96.5)	2 years