

PSF - 42

Polyester Syntactic Void Filler



Subsea Void Filler – Navy Applications

107 Frank Mossberg Drive
Attleboro, MA 02703
TEL (508) 226 - 3907 FAX (508) 226 – 3902
tech@esyntactic.com www.esyntactic.com



Overview

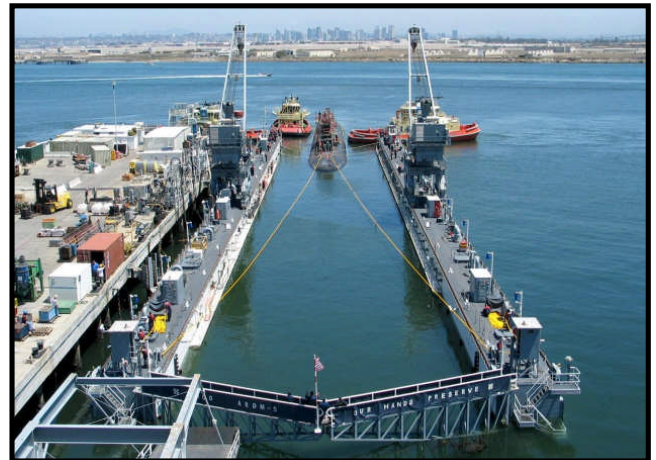
PSF-42 was developed by Navy subcontractors for simple shipyard-based cavity pours of Naval vessels. This system may be used in any free-flood cavity or void, but is especially valuable in difficult-to-fill cavities and in circumstances where quick working time is required. The mix is a low viscosity, multi-component, fast cure system that cures at room temperature to form a solid syntactic material that will easily perform at depths of 1,500 feet.

The system is installed by trained technicians working directly at the shipyard using ESS developed equipment. Following industry established procedures, (SSP 11.21), the defined void spaces are filled and sealed. Each cavity is filled using a stepwise process to assure material performance, maximizing strength with the lowest density possible. Shrinkage, exotherm, and cracking are controlled by the experienced technician crews. Initial cure of the system takes place in a matter of hours, with full cure occurring over 5 – 7 days. The cured material will provide an average of 20 pounds of buoyancy per cubic foot in seawater.

Properties

Properties provided below are typical for the cast foam:

Color	White/Tan
Density (lb/ft ³)	44 max
Compressive Strength (psi)	4,000 min
Compressive Modulus (ksi)	250 ksi min
Weight gain 24 hours	3 % max
Hydrostatic Crush Strength	1,400 psi (3,200 feet)



Storage

Store the 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.