



Syntactic foams

Eccofloat®

Trelleborg Applied Technologies manufactures a range of high performance, low density syntactic foam for deep sea buoyancy applications.

These composite foams provide ultra low densities by selecting only the highest specification hollow glass microspheres, and combining them within a rigid, high strength resin system. The syntactic foam is typically cast into blocks or machined in-house to custom shapes and then is used to prepare large buoyancy modules that can be readily shaped to conform to hull contours.

Oceanographers also depend on syntactic foams to suspend instrumentation in deep ocean studies. For these applications, the syntactic foam is used in either block form or custom shapes for installation in manned and unmanned submersibles such as the Triton 36000/2 Full Ocean Depth (FOD) manned submersible used on The Five Deeps Expedition.

Trelleborg Applied Technologies produces various grades of syntactic foams, called Eccofloat®, to meet our customers broadrange of requirements.

TG Range syntactic foams are lightweight and economical for building manned and remote operating vehicles. The foams are also used to manufacture mine neutralization systems because of their zero magnetic and sea-water comparable acoustic signatures.

DG and EL Range epoxy syntactic foams are the materials of choice for manufacturing manned and unmanned submersibles because of their density ranges and their ability to withstand exposure to diesel fuels and hydraulic fluids.

DS Range syntactic foams, combine lightweight glass microballoons with multi-functional epoxy resin to produce ultra-high strength-to-weight materials for high-performance, deep sea applications including unmanned and manned submersibles.



Eccofoat® Syntactic Foam Typical Properties - US only materials

ECCOFLOAT®	SERVICE DEPTH (FSW)	DENSITY lbs/ft³	SERVICE PRESSURE (psi)	IMPERIAL BLOCK SIZE (Inches)
TG-24	6,560	24	3,000	6 x 12 x 24
TG-26	9,843	26	4,444	6 x 12 x 24
TG-28	11,811	28	5,846	6 x 12 x 24
TG-30	16,430	30	7,307	6 x 12 x 24
TG-32	19,716	32	8,768	6 x 12 x 24
TG-34	22,900	34	10,164	6 x 12 x 24
TG-39	38,000	39	16,872	6 x 12 x 24
EL-30	6,750	30	3,000	6 x 12 x 24
EL-34	20,000	34	9,000	6 x 12 x 24
EL-36	24,000	36	11,000	6 x 12 x 24
DS-35	26,700	35	11,888	4 x 12 x 18
DS-39	38,000	39	16,872	4 x 12 x 18

Eccofoat® Syntactic Foam Typical Properties - Rest of the world (not available in the US)

ECCOFLOAT®	MAX OP DEPTH (MSW)	DENSITY kg/m³	MAX OP PRESSURE (Bar)	METRIC BLOCK SIZE (mm)	BLOCK UPTHRUST PER LITRE (kg)*
TG-2000	2,000	385	200	750 x 500 x 150	0.64
TG-3000	3,000	416	300	750 x 500 x 150	0.61
TG-4000	4,000	468	400	750 x 500 x 150	0.56
TG-5000	5,000	490	500	750 x 500 x 150	0.54
TG-6000	6,000	512	600	750 x 500 x 150	0.51
TG-7000	7,000	544	700	750 x 500 x 150	0.48
TG-11500	11,500	660	1,150	750 x 500 x 150	0.37
DG-1000	1,000	390	100	750 x 500 x 150	0.64
DG-2000	2,000	435	200	750 x 500 x 150	0.59
DG-3000	3,000	490	300	750 x 500 x 150	0.54
DG-5000	5,000	540	500	750 x 500 x 150	0.49

*based on seawater density of 1,025kg/m³

Certifications

Trelleborg Applied Technologies is ISO 9001 certified.

Contact Us

Trelleborg's Applied Technologies division is an industry expert in delivering innovative and reliable solutions that maximize performance for our customers. Our vast range of specialized, customizable materials ensure peace of mind at every stage of your project. With reliable and efficient project management and manufacturing we endeavor to take performance to new levels by achieving your goals safely, on time and within scope.



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