# SynFoam HP High Performance Syntactic Foam

## **TYPICAL PROPERTIES for HP Grades**

Property	Units	HP-24	HP-26	HP-28	HP-32	HP-42
Density	PCF(± 2)	24	26	28	32	42
Compressive Strength	psi	3,000	4,000	5,000	6,000	9,500
Compressive Modulus	psi	200,000	215,000	230,000	240,000	300,000
Depth Rating	feet	6,200	8,100	10,400	12,200	19,000
Service Pressure	psi	3,100	4,180	5,250	6,000	9,800
Sound Velocity	m/s	2,250	2,325	2,400	2,500	2,840

# **DESCRIPTION**

SynFoam HP products provide high strength and low density for a number of marine and aerospace applications. The high strength values allow SynFoam HP to be effectively used for most underwater vehicles and has been used in naval submarines. SynFoam HP is available as 6" x 12" x 24" fully cured blocks. A team of experienced molders ensures the highest possible performance of syntactic foams at densities above 20 pcf. The blocks may be further machined into different sizes and shapes by the end user to meet the necessary specific tolerances and requirements. Our syntactic foam is easily bonded together with the use of our syntactic adhesive to form large structures.

### APPLICATION SUGGESTIONS

Synfoam HP-24 is qualified for use under specification Mil-S-24154A. It is ideal for use in applications that require weight reduction and little reduction of strength such as being used as a core for sandwich structures. SynFoam HP is designed to resist water absorption and provide excellent performance for deep water submersion in both manned and unmanned vehicles. Densities can be customized to the user's specifications.

### **QUALITY STATEMENT**

SynFoam has a full testing lab for both new product R&D and Quality Assurance to measure our foam's structural properties. We work hard to exceed each customers' performance and delivery requirements. Adherence to production SOPs enable each product to be made with batch to batch reproducibility. We can machine our products to customer specifications and provide a marine quality finish as needed. We work closely with customers to select the proper grade for a successful and reliable implementation in each end use application. Customer references are available upon request.

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