

SYNFOAM® ELG Castable Lightweight Syntactic Foam for Electronic Applications

Typical Properties:

Property	Units	ELG-5	ELG-10	ELG-15	ELG-25	ELG-35
Density	pcf (± 2)	5	10	15	25	35
Compressive Strength	psi	85	250	1,280	2,800	5,800
Flex Strength	psi	105	325	900	2,600	5,100
Service Temp.	°F	300	300	300	300	300
Dielectric Constant		1.05	1.15	1.32	1.45	1.75
Dissipation Factor		0.001	0.003	0.004	0.005	0.008

Product Description:

SynFoam ELG is a two part closed cell resin system that is based on epoxy rather than polyurethane chemistry. ELG can withstand continuous exposure up to 300°F and remain rigid. SynFoam ELG has low dielectric loss and dielectric properties. The weight is significantly lower than most low loss materials used for electronic applications. The system is suitable for both electronic potting and encapsulation as well as structural support. SynFoam ELG is shipped as two components which when mixed together can be poured and cast into various shapes and sizes.

Application Suggestions:

SynFoam ELG can be used for any application where a rigid structure at high temperature is needed. It is an excellent choice for encapsulation applications and has been used to encapsulate antennas, satellite components and various electronic modules. SynFoam ELG has excellent sound dampening properties making it useful where sound reduction is desired.

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.

DISCLAIMER: The information and data contained herein are believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of use. Since SynFoam cannot know all of the uses to which its products may be put, or the conditions of use, it makes no warranties concerning the fitness or suitability of its products for a particular use or purpose. You should thoroughly test any proposed use of our products and independently conclude satisfactory performance in your application. Likewise, if the manner in which our products are used requires government approval or clearance you must obtain it. SynFoam warrants only that its products will meet its specifications. There is no warranty of merchantability or fitness for use, nor any other express or implied warranty. The user's exclusive remedy and SynFoam's sole liability is limited to refund of the purchase price or replacement of any product shown to be otherwise than as warranted. SynFoam will not be liable for incidental or consequential damages of any kind. Suggestions of uses should not be taken as inducements to infringe any patents