

Advantic®-30 Syntactic Foam

Description:

Advantic is a series of lightweight, engineered foams consisting of manufactured glass, polymer, or ceramic hollow spheres embedded in a resin matrix, such as epoxy or cyanate ester. CRG Industries' proprietary mixing process produces foams with low densities, high uniformity, and minimum voids. Advantic also exhibits high compressive strength. Typical applications include underwater buoyancy, structural core for aerospace components, dielectric applications, blast mitigation, and sporting equipment.

Advantic-30 Features & Benefits:

- Low density
- Mid-range compressive strength
- Low thermal conductivity
- Machinability
- Resistance to water absorption

Cured Materials Properties:

Property	Metric Value	U.S. Customary Value	Test Method
Compressive elastic modulus	1.1 GPa	179.2 kpsi	ASTM D695
Compressive strength	27.6 MPa	4250 psi	ASTM D695
Density	0.50 g/cm ³	31.2 lb/ft ³	helium pycnometer
Thermal conductivity	0.084 W/m • K	0.049 BTU/hr • ft • F	ASTM D5930
Maximum service temperature	90 °C	194 °F	
Water absorption (after 213 days)	<2%		ASTM D570

Machining:

Advantic can be easily machined using standard carbide-tipped tools.

Handling & Safety Precautions:

This material can be safely handled without taking any special ventilation, personal hygiene, or flammability precautions. However, machining, sanding, or grinding Advantic generates a nuisance dust that in large amounts may be irritating to the eyes and respiratory tract. When machining this material, always wear nuisance particle masks and safety goggles with side shields, and establish good local ventilation. Please consult the MSDS for more safety information.

For quotes, orders and product information please call 937-458-0210 or e-mail info@crgrp.com