

# Advantic™ -40 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-40 Features & Benefits:

- High compressive strength
- Durability
- Machinability
- Resistance to water absorption

## Cured Materials Properties:

Property	Metric Value	U.S. Customary Value	Test Method
Compressive elastic modulus	2.1 GPa	303.3 kpsi	ASTM D695
Compressive strength	87.9 MPa	12,750 psi	ASTM D695
Density	0.64 g/cm <sup>3</sup>	40 lb/ft <sup>3</sup>	helium pycnometer
Maximum service temperature	90 °C	194 °F	

## 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 toll-free at 866-341-2744 or email [huelskampsr@crg-industries.com](mailto:huelskampsr@crg-industries.com)

Any suggestion or information contained in CRG Industries literature is based solely on limited data available to CRG Industries, LLC and our experience with the general properties of any specified product. Accordingly, no express or implied representation or warranty is made either as to the accuracy of any such suggestion or information or as to the results which may be obtained from, or the consequences of the use or application of, any product or of any such suggestion or information. In no event is any such suggestion or information to be considered or represented to be a recommendation or a final or preliminary engineering or other design. EXCEPT FOR SUCH EXPRESS WRITTEN WARRANTY, IF ANY, AS CRG INDUSTRIES LLC OR THE MANUFACTURER OR SUPPLIER MAY ISSUE TO THE PURCHASER, CRG INDUSTRIES LLC MAKES NO WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO ANY PRODUCT, INCLUDING, BUT NOT BY WAY OF LIMITATION, THE MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF SUCH PRODUCT. The purchaser assumes sole and full responsibility for being familiar with all characteristics of all products and for determining and satisfying itself as to the content of all products and the suitability of all products for the uses and applications contemplated by the purchaser and others, as well as for complying with all laws, regulations and standards applicable to the possession, handling, processing, and use of all products. The purchaser also assumes all risks and liabilities arising out of or in connection with the use of all products, and of the results obtained by the use of all products, whether used alone or in combination with other material, including, without limitation, all risks and liabilities with respect to patent and proprietary rights of third parties. Patent pending. Copyright © 2007 CRG Industries, LLC. All rights reserved. CRGIPDV10907