SYNFOAM® AD Low Density Closed Cell Acoustic Insulator

Product Description:
SynFoam AD series products are two component castable syntactics designed for casting lightweight complex shapes. Synfoam AD series are extremely effective in a number of acoustic applications. These materials have repeatedly shown high levels of echo reduction both at high and very low frequencies.

Synfoam AD can be cured at room temperature to achieve the lowest density, maximum strength with desired acoustic velocity and offers high adhesion to most substrates. SynFoam AD is ideal for acoustically transparent sonar domes, sonar transducer array for underwater detection and navigation, sonar windows. Densities and sound velocity are customized to the users’ specifications.

Product Benefits:
- Controlled acoustic properties
- Underwater buoyancy
- Pourable two component system
- Excellent surface finish
- Excellent mechanical properties
- Toughness and impact resistance
- UV resistance
- Water resistance
- Oil, fuel and grease resistance
- Solvent resistance
- Dimensionally stable

Availability:
SynFoam AD is available in 1, 2 and 5 gallon two component kits. Drum quantities are available upon request. SynFoam also provides casting services to fabricate the final part for a customer. Please contact us for more information on custom fabrication services.

Typical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Units</th>
<th>AD-50</th>
<th>AD-40</th>
<th>AD-30</th>
<th>AD-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>PCF (kg/m³)</td>
<td>50 (800)</td>
<td>40 (650)</td>
<td>30 (560)</td>
<td>20 (320)</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>psi</td>
<td>3800</td>
<td>2,300</td>
<td>1,200</td>
<td>500</td>
</tr>
<tr>
<td>Longitudinal wave speed @1-20MHz</td>
<td>m/s</td>
<td>1,690</td>
<td>1,420</td>
<td>1,150</td>
<td>950</td>
</tr>
<tr>
<td>Acoustic impedance</td>
<td>MRayls</td>
<td>1.35</td>
<td>0.923</td>
<td>0.645</td>
<td>0.304</td>
</tr>
</tbody>
</table>

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