

# Brandonite® 4910-90D HD

## Product Description

**Brandonite® 4910-90D HD** is an epoxy-based, lead-filled composite with a high specific gravity. The Brandonite® 4910 series of materials offers a balance of excellent mechanical, thermal and electrical properties and has a broad service temperature range of -60°C to 150°C.

## Applications

**Brandonite® 4910-90D HD** is fully castable which allows engineers and product managers greater design and manufacturing flexibility. It is ideally suited for industries where radiation-shielding, radiation-channeling or sound deadening is necessary, such as medical diagnostic and imaging equipment, power generation, security and defense related applications. Brandonite® 4910-90D HD provides the following physical, mechanical, and electrical properties:

PROPERTIES	TEST METHOD	UNIT OF MEASURE	RESULT
<b>General</b>			
<b>Specific Gravity</b>	<b>ASTM D 792</b>	<b>sp gr 23/23°C</b>	<b>4.20</b>
<b>Shore Hardness</b>	<b>ASTM D 2240</b>	<b>D Scale</b>	<b>90D</b>
<b>Mechanical</b>			
<b>Notched Izod Impact Strength</b>	<b>ASTM D 256</b>	<b>Ft-lb/in</b>	<b>0.46</b>
<b>Tensile Strength</b>	<b>ASTM D 638</b>	<b>psi</b>	<b>4,500</b>
<b>Elongation</b>	<b>ASTM D 638</b>	<b>%</b>	<b>1.0</b>
<b>Flexural Strength</b>	<b>ASTM D 790</b>	<b>psi</b>	<b>8,510</b>
<b>Flexural Modulus</b>	<b>ASTM D 790</b>	<b>kpsi</b>	<b>784</b>
<b>Electrical</b>			
<b>Volume Resistivity</b>	<b>ASTM D 257</b>	<b>Ohm-cm</b>	<b>1.0E15</b>
<b>Dielectric Constant</b>	<b>ASTM D 150-98</b>	<b>N/A</b>	<b>6.40</b>
<b>Dissipation Factor</b>	<b>ASTM D 150-98</b>	<b>N/A</b>	<b>0.007</b>
<b>Dielectric Strength</b>	<b>ASTM D 149-97a</b>	<b>V/mil</b>	<b>215</b>
<b>Thermal</b>			
<b>Thermal Conductivity</b>	<b>ASTM E-1530 &amp; ASTM C-518</b>	<b>W/m/k</b>	<b>0.5567</b>

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