

# Brandonite<sup>®</sup> 4210-d30

(US Patents Pending)

## Product Description

**Brandonite<sup>®</sup> 4210-d30** is an environmentally-friendly, non-toxic epoxy-based composite with a high specific gravity. The Brandonite<sup>®</sup> 4210 series of materials is available in a wide variety of colors and can be modified to yield varying densities and durometers. This material offers a balance of excellent mechanical, thermal and electrical properties and has a broad service temperature range of -60°C to 150°C. Brandonite<sup>®</sup> 4210 is 100% lead-free, so parts can be safely manufactured, transported and disposed without special permitting or safety precautions.

## Applications

**Brandonite<sup>®</sup> 4210-d30** 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, subsea, marine, security and defense related applications. Brandonite<sup>®</sup> 4210-d30 provides the following physical, mechanical, and electrical properties:

PROPERTIES	TEST METHOD	UNIT OF MEASURE	RESULT
<b>General</b>			
<b>Specific Gravity</b>	ASTM D 792	sp gr 23/23°C	3.000
<b>Shore Hardness</b>	ASTM D 2240	D Scale	89D
<b>Mechanical</b>			
<b>Notched Izod Impact Strength</b>	ASTM D 256	Ft-lb/in	0.44
<b>Tensile Strength</b>	ASTM D 638	psi	4,780
<b>Elongation</b>	ASTM D 638	%	1.0
<b>Flexural Strength</b>	ASTM D 790	psi	11,700
<b>Flexural Modulus</b>	ASTM D 790	kpsi	1,190
<b>Electrical</b>			
<b>Volume Resistivity</b>	ASTM D 257	Ohm-cm	7.05E15
<b>Dielectric Constant</b>	ASTM D 150-98	N/A	7.94
<b>Dissipation Factor</b>	ASTM D 150-98	N/A	0.010
<b>Dielectric Strength</b>	ASTM D 149-97a	V/mil	130
<b>Thermal</b>			
<b>Thermal Conductivity</b>	ASTM E-1530 & ASTM C-518	W/m/k	0.535

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