

# Brandonite<sup>®</sup> 4210-d47

(US Patents Pending)

## Product Description

**Brandonite<sup>®</sup> 4210-d47** 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-d47** 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-d47 provides the following physical, mechanical, and electrical properties:

PROPERTIES	TEST METHOD	UNIT OF MEASURE	RESULT
<b>General</b>			
Specific Gravity	ASTM D 792	sp gr 23/23°C	4.700
Shore Hardness	ASTM D 2240	D Scale	95D
<b>Mechanical</b>			
Notched Izod Impact Strength	ASTM D 256	Ft-lb/in	0.66
Tensile Strength	ASTM D 638	psi	11,300
Elongation	ASTM D 638	%	1.0
Flexural Strength	ASTM D 790	psi	14,900
Flexural Modulus	ASTM D 790	kpsi	855
<b>Electrical</b>			
Volume Resistivity	ASTM D 257	Ohm-cm	0.457E15
Dielectric Constant	ASTM D 150-98	N/A	29.5
Dissipation Factor	ASTM D 150-98	N/A	0.033
Dielectric Strength	ASTM D 149-97a	V/mil	2
<b>Thermal</b>			
Thermal Conductivity	ASTM E-1530 & ASTM C-518	W/m/k	1.003

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