



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS
 INSULATING COMPONENTS FOR
 POWER SYSTEMS EQUIPMENT

TheGundCompany, Inc
 St. Louis, Missouri—USA
 TEL-314.423.5200
 FAX-314.423.9009

MATERIAL DATA SHEET

Item: Calcium Silicate Grades Marinite A, P, & I

Description: Calcium Silicate Grades Marinite A, P, & I insulation boards. These insulation boards are often used in applications requiring minimal hot load insulation in rotary kilns and torpedocars, typically used in high temperature Grade A is typically used for on materials combine relatively high thermal efficiency for these types of refractory applications requiring minimal hot load insulation in rotary kilns and torpedocars, typically used in high temperature Grade A is typically used for

Availability:	Laminate Sheets:	Thickness:	English units 0.25"–2" (3" for Grade A)	SI Units 6.4mm–50mm (75mm for Grade A)
		Sheet Sizes:	48"x96"	122cmx244cm
	Fabricated Parts:	TheGundCompany custom fabricates insulation materials to the exact specifications and drawings of our customers.		

Key Characteristics:	Units - English (SI)	Typical Values		
		Grade A	Grade P	Grade I
Density	lbs/in ³ (g/cc)	.037(1.02)	.035(.97)	.027(.75)
Flexural Strength	psi(MPa)	1,400(9.7)	1,400(9.7)	800(5.5)
Compressive Strength(ultimate)	psi(MPa)	3,000(20.7)	N/A	N/A
Compressive Strength(5% deformation)	psi(MPa)	2,400(16.5)	3,050(21)	1,000(6.9)
Moisture Content	% of DW	2.5	3.0	3.0
Thermal Conductivity(400 °F)	BTU/in/hr/ft ² °F	N/A	1.13	.81
Thermal Conductivity(600 °F)	BTU/in/hr/ft ² °F	N/A	1.15	.79
Thermal Conductivity(800 °F)	BTU/in/hr/ft ² °F	1.92	1.16	.81
Thermal Conductivity(1,000 °F)	BTU/in/hr/ft ² °F	1.95	1.17	.86
Shrinkage(24 hours 1350 °F, linear)	%	.1	---	---
Shrinkage(24 hours 1350 °F, thickness)	%	.8	---	---
Shrinkage(24 hours 1200 °F, linear)	%	---	.6	.4
Shrinkage(24 hours 1200 °F, thickness)	%	---	2.1	1.4
Volume Resistivity	Ohm x cm	N/A	5.0x10 ⁸	9.8x10 ⁷
Dielectric Strength	V/mil(kV/mm)	N/A	46(1.79)	45(1.75)

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