

C900MHT/PLUS – Board for Thermal and Electric Insulation

APPLICATIONS:

C900MHT/PLUS is used as a replacement for asbestos and other insulating boards for a variety of application.

A few examples:

-due to its resistance to pressure at high temperatures, a piece of C900MHT/PLUS is placed between the die in the plate and the die in forging presses to minimize the heat spreading through the press mechanism.

-in the construction of induction furnace and arc furnace, C900MHT/PLUS is used for its thermal and electric insulation properties, as well as its permeability to high frequency waves.

COMPOSITION:

C900MHT is consisted of 90% Muscovite and 10% of bonding material.

C900MHT/PLUS has the highest resistance to pressure and is most recommended for complicated cut pieces. C900MHT/PLUS is recommended for service temperature higher than 500°C.

Mechanical Properties

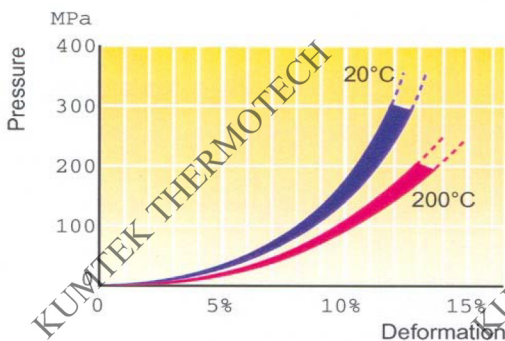
Density: 2.15 g/cm³

Compressive Strength: 330MPa (20 °C.)
240MPa (200 °C.)

Tensile Strength: 110Mpa

Bending Strength: 170Mpa

Deformation Under Load



	Unit	
Heat Resistance	°C	
Continuous		700
Peak		900
Resistance to Thermal Shocks	°C.	
Up to 6mmt		400
Above 6mmt		200
Weight Loss	%	
500 °C.		<1
700 °C.		<2
Thermal Conductivity	W/m.k.	0.3
Specific Heat	J/Kg	866
Thermal Expansion	10 ⁻⁶ /K	100
Water Absorption	%	<1
Fire Resistance		
UL 94	V-O	
BS 476	Class 1	
Fume Toxicity		
CEI 2037/85	Index	
	0.16	

Electric Properties

Dielectric Strength (IEC 243)	KV/mm	
20 °C		25
400 °C/1hr. tested at 20 °C		13
600 °C/1hr. tested at 20 °C		10
Volume Resistivity (IEC 93)	Ω.cm	
20 °C		>10 ¹⁶
400 °C		>10 ¹²
500 °C		>10 ⁹
Arc Resistance (ASTM D495)	Sec.	≥420
Dielectric Loss 160 °C (IEC 250)	%	<1