

# Material Technical Data Sheet



Material: Cordierite  
 Density: MP Material  
 Product: Ceramic Infrared Emitter

Property	Designation	MP Material
Colour		Off White
Water Absorption	%	53.05
Bulk Density	(g/cc)	1.1
Specific Gravity		2.64
Apparent Porosity	%	58.35
Fired M.O.R (3 point flexure)	PSI	390
Dielectric Strength	(V/0.001in)	34
Maximum Operating Temperature Under Non Loading Conditions	°C	1,300
	°F	2,350
Linear Coefficient of Thermal Expansion	(@25°C - 1000°C) x 10 <sup>-6</sup> /°C	3.12
Chemical Analysis	Designation	MP Material
Al <sub>2</sub> O <sub>3</sub>	%	32.15
SiO <sub>2</sub>	%	50.47
CaO	%	0.30
MgO	%	14.11
Na <sub>2</sub> O	%	0.10
Fe <sub>2</sub> O <sub>3</sub>	%	1.73
TiO <sub>2</sub>	%	0.94
K <sub>2</sub> O	%	0.19
MnO	%	0.00
P <sub>2</sub> O <sub>5</sub>	%	0.00
Cr <sub>2</sub> O <sub>3</sub>	%	0.00
ZrO <sub>2</sub>	%	0.00
SUM	%	<b>99.99</b>

NOTE: THE INFORMATION IN THIS DATA SHEET IS FOR DESIGN GUIDANCE ONLY. APOGEE CERAMICS INC. DOES NOT WARRANTY THIS DATA AS ABSOLUTE VALUES. FORMING METHODS AND SPECIFIC GEOMETRY COULD AFFECT PROPERTIES. SLIGHT ADJUSTMENTS CAN BE MADE TO SOME OF THE PROPERTIES TO ACCOMMODATE SPECIFIC CUSTOMER REQUIREMENTS. MOST OF THE MATERIALS IN THE TABLE ARE RESISTANT TO MECHANICAL EROSION AND CHEMICAL ATTACK.

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