

Material Technical Data Sheet



Material: Dense Mullite Porcelain Ceramic
 Apogee No.: BLACK COAL
 Product: BBQ Inserts

Property	Designation	COAL Material
Colour		Black
Water Absorption	%	10.56
Bulk Density	(g/cc)	2.17
Specific Gravity		2.81
Apparent Porosity	%	22.84
Fired M.O.R (3 point flexure)	PSI	4303
Dielectric Strength	(V/0.001in)	N/A
Maximum Operating Temperature Under Non Loading Conditions	°C	1,300
	°F	2,350
Linear Coefficient of Thermal Expansion	(@25°C - 1000°C) x 10 ⁻⁶ /°C	5.36
Chemical Analysis	Designation	COAL Material
Al ₂ O ₃	%	35.27
SiO ₂	%	47.95
CaO	%	0.18
MgO	%	1.53
Na ₂ O	%	0.6
Fe ₂ O ₃	%	3.55
TiO ₂	%	0.82
K ₂ O	%	1.81
MnO	%	0.02
P ₂ O ₅	%	0.00
Cr ₂ O ₃	%	6.64
ZrO ₂	%	0.00
SUM	%	98.37

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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