

DATASHEET: SILICON CARBIDE						
PROPERTIES	Units	EC70P	EC90P	EC100P		
		SiC	SiC	Recrystallised SiC	Nitride Bonded SiC	Reaction Bonded SiC
Physical Properties						
% SiC	% wt	70	90	>99.5	65	78-92
% Mullite	% wt	30	10	0	0	0
Density	g/cm ³	2.1	2.2	2.7	2.85	3.02-3.15
Open Porosity	%	25	25	15	1	0
Thermal Properties						
Max Operating Temp	°C	1400	1450	1610	1550	1380
Max Operating Temp	°F	2550	2645	2930		
Thermal Conductivity (20 - 100oC)	W/m ² K	7	25	-	12	25
Coefficient Thermal Expansion	x10 ⁻⁶ K ⁻¹	5	5	5	4.6	5
Mechanical Properties						
Flexural Strength	psi	-	-	-	-	-
Hardness- Mohs	Mohs	-	-	-	-	-
Tensile Strength	psi	-	-	-	-	-
Electrical Properties						
Volume Resistivity at 20°C	ohm - cm	-	-	-	-	-
Volume Resistivity at 600°C	ohm - cm	-	-	-	-	-
Dielectric Constant	25°C & 1 mhz	-	-	-	-	-

** - Full Chemical Analysis Available On Request

Additional material properties are available - please ask at machine.ceramic@made-parts.com

The values given on this data sheet were established on test pieces and identify the characteristic data of our products. These values should be used for guidance only as actual values will depend on individual geometry and application of each part.

For Further Information contact us at: machine.ceramic@made-parts.com