

## DC-40

### Ceramic Core Material Properties Typical Analysis

**Applications:**  
For equiaxed castings, optimized for aluminum castings where core removal is done by grit/water-blasting.

Choosing the correct blend of material is a critical component to ensuring the successful performance of your ceramic cores in the investment casting process. The materials we use in our ceramic cores feature excellent alloy compatibility and consistent quality.

<b>Method:</b>	Injection Molded Core	
<b>Major Chemistry (Wt %):</b>	Silica	92
	Zircon	6
	Alumina	2
<b>Trace Elements (PPM):</b>	Pb - Lead	<25
	Bi - Bismuth	1
	Ag - Silver	<10
	Sb - Antimony	<10
	Zn - Zinc	<50
	Sn - Tin	<10
	Fe - Iron	2000
<b>Physical Properties:</b>	Apparent Porosity	40%
	Water Absorption	28%
	Apparent Specific Gravity	2.3
	Bulk Density (g/cm <sup>3</sup> )	1.4
	Modulus of Rupture (MOR) (psi)	900
	Thermal Expansion RT to 2100° F	0.1%
	Cristobalite	13%