

# TECHNICAL DATA SHEET

<b>Product:</b>	Alpha-Core® SC
<b>Product Description:</b>	Alpha-Core® SC is a self-cure resin based composite for core build ups. The material exhibits ideal mechanical properties with high compressive and tensile strength yet maintains a dentin-like feel when cutting. Its ideal handling characteristics allow the materials to be placed with a syringe and, depending on the shade on the base paste, it can be used to match or contrast the color.
<b>Indications for Use:</b>	Alpha-Core® SC is a self-cure resin based hybrid composite specifically designed for core build ups and cementations of posts and pins.
<b>Appearance:</b>	2-paste system, 1:1 ration Catalyst: White Base: Natural, white or blue
<b>Curing Mechanism:</b>	Chemically cured by mixing base and catalyst together.
<b>Shelf-Life:</b>	36 months
<b>Filler Type:</b>	Barium alumino-borosilicate glass, quartz and silica.
	Filler % by volume 55
	Particle size range (μ) 0.02 – 5.00
	Filler average particle size (μ) 3.3
<b>Main Composition (%w/w):</b>	
	<b>Catalyst</b>
	Inorganic filler 65 – 75
	Methacrylate and bisacrylate monomers 25 – 35
	Initiator <1
	Inhibitor <1
	Colorants <1
	<b>Base</b>
	Inorganic filler 65 – 75
	Methacrylate and bisacrylate monomers 22 – 32
	Accelerator <1
	Colorants <1
<b>Physical /Mechanical Properties: (Typical Values)</b>	
	Working time 3 minutes at 23 °C
	Setting time 3 minutes at 37 °C
	Diametral tensile strength 43 MPa
	Flexural strength 113 MPa
	Compressive strength 218MPa
	Water absorption 17.3 μg/mm <sup>3</sup>
	Water solubility 1.6 μg/mm <sup>3</sup>