

# TECHNICAL DATA SHEET

<b>Product:</b>	Alpha-Dent® Light Cure Bracket Adhesive
<b>Product Description:</b>	Light Cure Bracket Adhesive is a single paste resin-based, fluoride containing bracket adhesive. The single paste adhesive requires no mixing; resulting in reduced adhesive waste, consistent adhesive performance and no working time constraints.
<b>Indications for Use:</b>	Light Cured Bracket Adhesive is an orthodontic adhesive designed to bond metal, ceramic, and plastic brackets to enamel.
<b>Appearance:</b>	Low-viscosity paste, ivory to pale-yellow in color.
<b>Curing Mechanism:</b>	Light cured by applying an external energy activated Dental Blue Light with minimum output 600 mW/cm <sup>2</sup> and wavelength 400 to 500 nanometers.
<b>Shelf-Life:</b>	30 months
<b>Filler Type:</b>	Blend of barium-borosilicate glass, silica, and quartz
	Filler % by Volume 56
	Filler Particle Range, in micron (μ) 0.02 - 11
	Average Filler Particle Size, in micron (μ) 11
<b>Main Composition (%w/w):</b>	
	Inorganic filler 65 – 85
	Bis-GMA 15 – 25
	Blend of multifunctional methacrylates < 10
	Sodium fluoride 1 – 3
	Adhesive monomer < 1
	Photoinitiator < 1
	Inhibitor < 1
	Colorant < 1
<b>Physical /Mechanical Properties:</b>	
	Depth of cure, mm (actual) 5.6
	Bond Strength, Bracket-Enamel, MPa 13

## Regulatory Classification:

This product is in conformity with the following standard(s) or other normative documents:

International Standard ISO/TS 11405:2015 Dental Materials – Testing of Adhesion to Tooth Structure  
European Standard EN 1641:2009 – Medical Devices for Dentistry – Materials  
Code of Federal Regulations 21CFR Part 820 – Medical Device Quality System Regulation