

TECHNICAL DATA SHEET

Product: Alpha-Dent® One-Step Bracket Adhesive and Primer

Product Description: Alpha-Dent® One-Step Bracket Adhesive is a Paste-Primer orthodontic adhesive designed to bond metal, ceramic and plastic brackets. The unique filler and primer combination used produces an ideal bond and a smooth tacky viscosity minimizing bracket flotation.

Indications for Use: Alpha-Dent® One-Step Bracket Adhesive is a Paste-Primer orthodontic adhesive designed to bond metal, ceramic and plastic brackets to enamel.

Appearance: Medium-viscosity white paste and straw-colored liquid primer.

Curing Mechanism: Self cured with a paste and a primer.

Shelf-Life: 30 months.

Filler Type:

Paste:	
Quartz and silica	
Filler % by Volume	56
Filler Particle Range, microns	0.01– 5
Average Filler Particle Size, microns	4.65
Primer	
No filler	

Main Composition:

Paste:	% w/w
Inorganic filler	60 – 80
Bis-GMA	10 – 30
Comonomer Diluent	< 10
Colorant	< 1
Inhibitor	< 1
Initiator	< 1
Primer:	% w/w
Methacrylate & bisacrylate monomers	60 – 80
Acrylic Polymer	10 – 20
Bis-GMA	5 – 15
Accelerator	< 5
Inhibitor	< 1

Physical /Mechanical Properties: (Typical Values)

Working Time, seconds at 23 °C	60
Setting Time, seconds at 37 °C	75
Bond Strength, Bracket - Enamel, MPa	12.5

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
Code of Federal Regulations, 21 CFR Part 820 – Medical Device Quality System Regulation