

TECHNICAL DATA SHEET

- Product:** Alpha-Dent® Zinc Phosphate Cement
- Product Description:** Alpha-dent® Zinc Phosphate Cement is specially formulated for superior strength, resistance to dissolution, and oral retention. It is impervious to oral fluids, and thus permanent under oral conditions.
- Indications for Use:** Cementation of inlays, onlays, crowns, bridges, and fixed orthodontics. Cavity lining under all restorative materials.
- Appearance:** Fine grit uniform powder; available in white or light yellow. Liquid is a clear colorless solution.
- Curing Mechanism:** Self cured by mixing powder and liquid together.
- Shelf-Life:** 30 months for liquid and 36 months for powder

Main Composition (%w/w):

Powder:	
Zinc Oxide	> 90
Magnesium Oxide	< 10
Liquid:	
Phosphoric Acid	55 – 85
Deionized water	15 - 30
Hydrated alumina	5 - 10
Zinc Oxide	5 - 10

Physical /Mechanical Properties:

Film Thickness, μm	< 25
Net Setting Time @ 37 °C, minutes	5.5 - 6.0
Compressive Strength, MPa, minimum	70
Acid-soluble Arsenic, mg/kg	< 2
Acid-soluble Lead, mg/kg	< 100