

# ZIRCONITE™

Novel dual cured permanent adhesive resin cement  
specially formulated for Zirconia cementation



## Indications

- Permanent cementation of Ceramic and Zirconia restorations.

## Properties

- Dual-cured, radiopaque, permanent resin cement in a convenient Automix syringe
- Self-etch, self-adhering resin cement does not require etching, priming or bonding of tooth surface, prior to cementation
- No pre-treatment of the intaglio surface of the restoration is necessary when using this self-adhering resin cement
- Superior retention and total margin integrity
- Forms an excellent bond with Zirconium, porcelain, metal alloys and tooth structure
- Does not affect the shade of translucent crowns
- Self-cured cement which you can light-cure for an immediate set and extra strength at the margins
- Radiopaque—Easily seen in radiograph
- 2 Shades: Dentin & Translucent
- Virtually neither taste nor odor – Increased patient comfort

## Technical Data

Compressive strength	> 150 MPa
Flexural strength	> 100 MPa
Shear Bond Strength to UnEtched Dentin	> 10 MPa
Shear Bond Strength to Zirconia	> 15 MPa
Shear Bond Strength to Lithium diSilicate	> 20 MPa
Hardness by Barcol	80
Water sorption	8 $\mu\text{g}/\text{mm}^2$
Solubility	1 $\mu\text{g}/\text{mm}^3$
Film thickness	10 $\mu\text{m}$
Radiopacity, % Aluminium	250
pH	~ 7
Dimensional Change on Polymerization	3 - 4 %
Working Time (in ambient light & temperature)	1.5-3.5 min
Setting Time (in oral temperature)	2.5-4.5 min
Compatible with halogen light	Yes
Compatible with Plasma ark light lamp	Yes
Compatible with LED	Yes
Shelf Life	2 Years

## Scientific Papers

1. Testing of crowns retention to various abutments utilizing different cements, K. Lizenboim, B. Zalsman, I. Suvorov and A. Suvorov, Program Number 79, PEF-IADR Congress, London, UK, 2008.
2. The effect of preparation order on the crystal structure of yttria-stabilized tetragonal zirconia polycrystal and the shear bond strength of dental resin cements, J. Moon, A. Kim, J. Lee, S. Ha, Y. Choi, Dental Materials, p. 651-663, Volume 27, 2011.
3. Comparing of Color Stability of Adhesive Resin Cements, A. Suvorov, B. Zalsman, K. Kizenboim, A. Valdman and I. Suvorov, Program Number 0120, PER-IADR Congress, Jerusalem, Israel, 2016.
4. Clinical evaluation by the Dental Advisor, October 2016.
5. The effect of monolithic zirconia thickness on the degree of conversion of dental resin cements: ATR-FTIR spectroscopic analysis, Banu Çukurluöz Bayındıra, Secil Karakoca Nemlia, Sevgi Haman Bayarib, Bilge Turhan Bala, Vibrational Spectroscopy, Volume 86, September 2016, Pages 212-217.

## Packaging & Order Information

- **Item # 400050**
  - 1 Automix Syringe 5 ml of Zirconite Dentin
  - 1 Mixing Pad
  - 10 Automix Syringe Mix Tips
  - 10 Intra-Oral Angular Tips, Size Fine
  - 10 Intra-Oral Angular Tips, Size Long XX-Fine
- **Item # 400050TR**
  - 1 Automix Syringe 5 ml of Zirconite Translucent
  - 1 Mixing Pad
  - 10 Automix Syringe Mix Tips
  - 10 Intra-Oral Angular Tips, Size Fine
  - 10 Intra-Oral Angular Tips, Size Long XX-Fine

**BJM Laboratories, Ltd.**

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93%  
overall  
rating

**Description**

**Zirconite** is a dual-cured, radiopaque self-adhesive resin cement formulated for the cementation of zirconia restorations. It offers a working time of up to 2 minutes, and a setting time of 3 minutes at intraoral temperature. A gel state can be achieved with a 2-second light cure or 1.5 to 2 minutes self-cure, at which time excess cement is easy to remove with a scaler or explorer before light-curing all surfaces for 20 seconds. **Zirconite** includes a 5 mL syringe of the adhesive resin cement, 10 auto-mix tips, 10 large and 10 small intra-oral tips and a mixing pad. For maximum shelf life, Zirconite should be refrigerated.

**Indications**

- Adhesion of zirconia restorations

**Unique Features**

**Zirconite** is specially formulated for zirconia restorations to offer superior retention and marginal integrity. No pre-treatment of the intaglio surface of the restoration is necessary when using this self-adhesive resin cement.

**Consultants' Comments**

- "A perfect cement."
- "Does not affect the shade of translucent crowns."
- "BJM lab has developed some very specific products that are perfect for their individual uses."
- "The gel state clean-up prior to light curing was easier than a total self-cure, but the overall time spent due to the extra light-cure step was longer."
- "A quicker setting/self-curing time would be helpful, and an initiator so that light-curing is not needed."
- "I prefer letting it set undisturbed for 1.5 minutes rather a quick cure prior to excess removal."

**Clinical Tips**

- Clean-up is much easier if you don't let it get too hard.
- Floss through contact points before the gel phase.
- Floss interproximally and leave the floss in place until the cement is fully cured.
- Use the intraoral tip for accurate placement of the material into the intaglio of the crowns.
- If you are using it for the first time, check the setting every 15 seconds as the material becomes very hard if left beyond the ideal time for clean-up.
- The mixing tip is small. We extruded the product onto a mixing pad and then mixed, reducing the amount of wasted product.

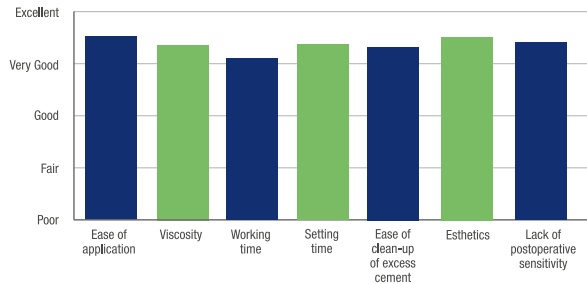


**Evaluation Highlights**

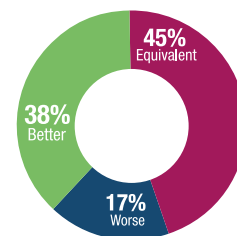
**Zirconite** was evaluated by 29 consultants.

- Easy to use and fast, easy clean-up.
- Good viscosity and handling properties.
- No need to pre-treat the inner surface of the restoration or the tooth preparation before bonding.
- Very straightforward to use - no learning curve.
- Mixing and application tips are high quality.
- Patients had no post-operative sensitivity.

Key Features:



Compared to Competitive Products:



Percentage of Consultants Who Would:

