

state of the art dental materials



**B.J.M.** Laboratories Ltd. (B.J.M.) was established in 1992 for the purpose of developing and manufacturing innovative state of the art dental materials.

B.J.M. produces a complete line of Dental Adhesives, Surface Treatment materials, Permanent and Temporary Resin Cements, Composites, Bulk Fill and Core Build Up materials, Temporary Crown and Bridge materials, Implant Cements, Endodontic Sealers and a wide range of Orthodontic materials.

Our R&D group is in a constant search for new knowledge and is pioneering the way by incorporating tomorrow's science into today's work. Numerous patents have been registered and our research results are being published and shared with the scientific community.

All of which is oriented to make the dentist life easier and more efficient.

B.J.M. is committed to the quality of its products. ISO 9001:2015, ISO 13485:2016, and MDD 93/42/EEC certification were awarded to our quality assurance system since 1997. Such an approval enables us to market our products within the EU bearing the CE mark.

Our Products are distributed extensively in the United States, Europe, Asia and South America.

B.J.M. also supplies its products under private label for multinational manufacturers and distributors throughout the world.

Sincerely,

Dr. Barry Zalsman

General Manager







# Bonding Agents and Surface Treatment









- Direct composite restorations.
- · Core Build-Up.
- · Adhesive cementation of posts, crowns and bridges, including inlays and onlays.

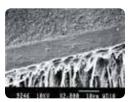
#### **Properties**

- 5th generation dentin/enamel-bonding agent.
- Combines Primer and Adhesive into a single component for ease of application.
- Compatible with all common dental etching materials and forms an excellent bond with dentin and enamel, any self-cured, visible light-cured or dual-cured.
- Composite, Compomer restorative material and with Composite Resin Cements.
- The colloidal dispersed, spherical, sub-micron glass particles increase adhesion and enhances
- Forms the essential hybrid zone with dentin.

- 1. An Evaluation of Adhesive Dentin Interface of a Prototype Primer / Adhesive Using Scanning Electron Microscopy, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 1997.
- 2. A Laboratory Evaluation of the Shear Bond Strength of BJM Primer/Adhesive and Prime and Bond 2.1 to Dentin, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 1997.

- 3. Clinical Evaluation of Prima Bond by the Prep Panel, F.J.T. Burke, R.J. Crisp, Restorative Dentistry, University Dental Hospital of Manchester, 1996.
- 4. MDT PrimaBond Report, 1995.
- 5. ADAPT Report, 1996.
- 6. Core Build-Up and Adhesive Incompatibility, Volume 24, Issue 6, June 2000, CRA.
- 7. Enamel-Dentin Adhesives, Self-Etching Primers, Volume 24, Issue 11, November 2000, CRA.
- 8. Dual-Cure Core Compatibility to DBA using Self-Cured and Self-Etching Activators, B. Zalsman, A. Valdman, K. Lizenboim, I. Suvorov, A. Suvorov, W.A. McHale, H. Dodiuk-Kenig, IADR Poster, Program Number 1116, 2006.
- 9. Clinical evaluation by Dental Advisor, July-August
- 10. Core Build-Up and Adhesive Compatibility, Volume 27, Issue 4, April 2003, CRA.
- 11. Adhesive Bonding of a Novel Dual-Cure Composite Material, Contemporary Esthetics and Restorative Practice, p. 2-4, July 2003.
- 12. Adhesive System Testing in a Clinically Relevant in Vitro Test, Prof. F. Lutz, Zurich University, 2007.
- 13. Clinical evaluation by Dental Advisor, September





Hybridisation of dentin and resin / dentin interface with Prima 2000 , SEM. Internal communication.

#### **Technical Data**

Shear Bond Strength to etched enamel > 20 MPa
Shear Bond Strength to etched dentin > 14 MPa
pH 6.5
Shelf Life 2 Years

Excellent wettabilityww and penetration into the dentin tubules

Forms the essential Hybrid Zone

#### **Packaging & Order Information**

- Item # 100222 1 Bottle 2ml of Prima 2000
- Item # 100224 1 Bottle 4ml of Prima 2000
- Item # 100225 1 Bottle 5ml of Prima 2000
- Item # 100225 1 Bottle 5ml of Prima 2000 • Item # 100227 - 1 Bottle 7ml of Prima 2000
- Item # 100230 1 Bottle 10ml of Prima 2000



















- Direct composite restorations.
- · Adhesive cementation of crowns & bridges, including inlays and onlays.
- Uniquely formulated hydrophilic self-etch Primer & Single Step Bonding Agent.

#### **Properties**

- Prima Quick SE is a 6th generation self-etching bonding system, which delivers high bonding values to both, dentin and enamel.
- Prima Quick SE consists of an acidic water base self-etching Primer and a light-cured Adhesive.
- It is used to bond composite resin filling material, to tooth structure, any self-cure or visible light-cured Composite, Compomer restorative material and with Composite Resin Cements.
- Prima Quick SE is utilizing a moderately acidic Primer. Unlike total-etch, total-bond techniques, the self-etching primer does not open the dentinal tubules completely. The smear layer is solubilized, and due to the high hydrophilic properties of the Primer, it is then able to penetrate into the tubules and peritubular dentin, forming resin tags. In the case of enamel, the Primer produces a significant pattern with enhanced surface area, leading to improved enamel bonding.

- 1. BJM Primer/Adhesive Report, Prof. M. Degrange, University of Paris, 2005.
- 2. Report on file: G6 and G7 (BJM), Prof. M. Degrange, Dr. W. Aranda, University of Paris, 2006.
- 3. A Laboratory Evaluation of the Shear Bond Strength of Composite Resin to Dentin and Enamel Using "Self-Etching" Adhesive Systems, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2006.
- 4. Dual-Cure Core Compatibility to DBA using Self-Cured and Self-Etching Activators, B. Zalsman, A. Valdman, K. Lizenboim, I. Suvorov, A. Suvorov, W.A. McHale, H. Dodiuk-Kenig, IADR Poster, Program Number 1116, 2006.
- 5. Clinical research by Dental Advisor, October 2007.
- 6. Influence of Co-initiators on the Degree of Conversion of Self-Etching Adhesives, A. Suvorov, B. Zalsman, K. Lizenboim, I. Suvorov, A. Valdman, A. Khaskin and N. Zaltsman, PER-IADR Poster, 2012.
- 7. Bond Strength of a New Bonding Agent, The Dental Advisor Report, April 2013.
- 8. Clinical evaluation by the Dental Advisor, September 2016.



#### **Technical Data**

Shear Bond Strength to etched enamel > 25 MPa
Shear Bond Strength to etched dentin > 20 MPa
pH of Primer / Bond 1.9 / 6.5
Shelf Life 2 Years

Excellent wettability and penetration into the dentin tubules

Forms the essential Hybrid Zone

#### **Packaging & Order Information**

- Item # 100260 Prima Quick SEKit
- 1 Bottle 7ml of Prima Quick SE Prime
- 1 Bottle 7ml of Prima Quick SE Bond
- 50 Prima Quick SE Prime Green Applicators
- 50 Prima Quick SE Bond Orange Applicators
- 1 Dappen Dish

#### Prima Quick SE Prime Refill

- Item # 100270
  - 1 Bottle 7ml of Prima Quick SE Prime

#### Prima Quick SE Bond Refill

- Item # 100280
  - 1 Bottle 7ml of Prima Quick SE Bond













• Direct composite restorations.

#### **Properties**

- 7th generation, self-etch, 1 component bonding agent.
- Combines Etch, Primer and Adhesive into a single component for ease of application.
- Delivers high bonding values to dentin and enamel.
- Utilizes the latest advancements in nanotechnology and dendritic polymer incorporated chemistry to form an excellent bond with dentin and enamel and visible light-cured Composite.
- Forms the essential hybrid zone on dentin.

#### **Scientific Papers**

 Report on file: G6 and G7 (BJM), Prof. M. Degrange, Dr. W. Aranda, University of Paris, 2006.

#### **Packaging & Order Information**

- Item # 100240
- 1 Bottle 4ml of Prima 1
- Item # 100241
- 1 Bottle 4ml of Prima 1, 50 Applicators



#### **Related Products**

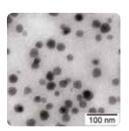


#### **Technical Data**

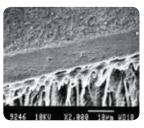
Shear Bond Strength to un-etched dentin > 25 MPa Shear Bond Strength to un-etched enamel> 30 MPa Excellent wettability and penetration into the dentin tubules

Forms the essential Hybrid Zone

3.0
Light Cured
3.0%
No
3
60 sec
2 Years



Nano fillers, hanse chemie AG, dispersion in Prima 1, BJM. TEM. Internal communication.



Hybridization of dentin and resin / dentin interface with Prima 1, SEM. Internal communication.

## **Auto-Cure** Activator.

#### CHEMICAL ACTIVATOR FOR USE WITH **PRIMA 2000**



#### **Related Products**



Prima 2000

#### **Indications**

Self-curing of Prima 2000 in:

- Light-inaccessible procedures.
- Adhesive cementation of crown & bridge including inlays and onlays.

#### **Properties**

• Chemical activator for use with Prima 2000.

#### **Scientific Papers**

- 1. An Evaluation of Adhesive / Dentin Interface of a Prototype Primer / Adhesive Using Scanning Electron Microscopy, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 1997.
- 2. A Laboratory Evaluation of the Shear Bond Strength of BJM Primer/Adhesive and Prime and Bond 2.1 to Dentin, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 1997.
- 3. Clinical Evaluation of PrimaBond by the Prep Panel, F.J.T. Burke, R.J. Crisp, Restorative Dentistry, University Dental Hospital of Manchester, 1996.
- 4. MDT PrimaBond Report, 1995.

- 5. Adhesive Bonding of a Novel Dual-Cure Composite Material, Contemporary Esthetics and Restorative Practice, p. 2-4, July 2003.
- 6. Dual-Cure Core Compatibility to DBA using Self-Cured and Self-Etching Activators, B. Zalsman, A. Valdman, K. Lizenboim, I. Suvorov, A. Suvorov, W.A. McHale, H. Dodiuk-Kenig, IADR Poster, Program Number 1116, 2006.

#### **Technical Data**

Shear Bond Strength to dentin when used with Prima 2000 > 18 MPa Shelf Life 2 Years

- Item #100061 1 Bottle 2ml of Auto-Cure Activator
- Item #100064 1 Bottle 4ml of Auto-Cure Activator
- Item #100060 1 Bottle 7ml of Auto-Cure Activator
- Item #100069 1 Bottle 10ml of Auto-Cure Activator

## Q-Etch... Q-Etch UF **ETCHING GEL - PHOSPHORIC ACID 37%**







#### **Indications**

• Any procedure that requires etching.

#### **Properties**

- 37% Phosphoric Acid Etch Gel with excellent viscosity for precise application.
- Stays put and does not run.
- Washes off easily & Quickly.
- Has excellent water solubility.
- Easy to use.
- Available in 1.2 ml or 12 g syringes.
- · Applicators tips are angled to facilitate easy and accurate placement of the geleven in distal & lingual composite preparations.
- Blue Visible color.
- Disposable tips save time and are more sanitary.
- Available in 2 consistencies:
  - Regular viscosity
  - Unfilled (UF) viscosity

#### **Scientific Papers**

1. Clinical evaluation of Q-Etch / Q-Etch UF by the Dental Advisor, September 2015.

2. Clinical problem solver award by the Dental Advisor for Q-Etch UF, July 2016.

#### **Technical Data**

Excellent water solubility	
рН	1.8
Viscosity	Regular / Unfilled
Shelf Life	2 Years

#### **Packaging & Order Information**

- Item # 100090
- 1 Syringe 10ml of Q-Etch, 20 Dispensing Tips
- Item # 100091
- 1 Syringe 10ml of Q-Etch UF, 20 Dispensing Tips
- Item # 100097
- 4 Syringes 1.2ml of Q-Etch, 8 Dispensing Tips
- Item # 100098
- 4 Syringes 1.2ml of Q-Etch UF, 8 Dispensing Tips
- Item # 100095-5
- 5 Syringes 3ml of Q-Etch, 20 Dispensing Tips
- Item # 100091-5
- 5 Syringes 3ml of Q-Etch UF, 20 Dispensing Tips

















### Porcelain Fix...

#### PORCELAIN PREPARATION KIT



#### **Related Products**



High-Q-Bond



High-Q-Bond SE



Prima 2000 Prima Quick SE **Bond** 

#### **Indications**

Any time resin bonding to porcelain is required.

#### **Properties**

- Complete kit for preparing porcelain veneers, inlays and fractured porcelain teeth for bonding. It consists of Porcelain Etch and Porcelain Silane.
- Porcelain Etch is a specially buffered, viscous, hydrofluoric acid gel that will etch porcelains of all types to produce a microscopic porous surface, which will provide strong mechanical interlocking with composite resin materials.
- Porcelain Silane is a single component silane that enhances bonding values and durability when applied to etched porcelain surfaces.
- Available in bottles and in convenient 1.2 ml syringes with dispensing tips.

#### **Scientific Papers**

- 1. An advanced multipurpose dental adhesive system, I. Eppelbaum, H. Dodiuk, S. Kenig, B. Zalsman and A. Valdman, J. Adhesion Sci. Technol., Volume 10, No. 10, pp. 1075-1087 (1996).
- 2. A Laboratory Evaluation of Adhesive Resin Cement, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 1997.
- 3. New dual cure multipurpose adhesive resin cement, B. Zalsman, H. Dodiuk, A. Valdman and I. Eppelbaum, 76th General Session of IADR, 1998.
- 4. The effect of different porcelain conditioning techniques on shear bond strength of stainless steel brackets, I. Gillis, M. Redlich, American Journal of Orthodontics and Dentofacial Orthopedics, p. 387-392, October 1998.

5. Laboratory Evaluation of 24 hours Shear Bond Strength of Ceramic to Dentin Using Three Cement Systems, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2006.

#### **Technical Data**

Porcelain Etch containing Hydrofluoric acid, water, thickening agent

Porcelain Silane containing

Glycidoxypropyltrimethoxysilane, ethyl alcohol

Shelf Life 2 Years

- Item # 100080 1 Bottle 5ml of Porcelain Etch, 1 bottle 5ml of Porcelain Silane
- Item # 400080 1 Bottle 5ml of Porcelain Silane
- Item # 400081 1 Bottle 5ml of Porcelain Etch
- Item # 400084
- 2 Syringes 1.2ml of Porcelain Etch
- 2 Bottles 2ml Porcelain Silane
- 2 Empty Syringes 1.2m for Porcelain Silane
- 4 Delivery Tips
- 4 Micro Brush Tips
- Item # 400082 2 Syringes 1.2ml of Porcelain Etch, 4 Delivery Tips
- Item # 400083
- 2 Bottles 2ml Porcelain Silane
- 2 Empty Syringes 1.2 ml for Porcelain Silane
- 4 Micro Brush tips



DENTAL ADVISOR AWARDED PREFERRED PRODUCT IN 2017, 2018 & 2019





**Related Products** 



High-Q-Bond

 B.J.M. Q-Ceram is a surface conditioner for ceramic materials such as porcelain and zirconia restorations.
 This primer dramatically improves adhesion between ceramic surfaces and resin materials.

#### It is used for:

- Preparation of ceramic crowns, veneers and inlays prior to cementation.
- Preparation of fractured ceramic crowns for repair with resin materials.

#### **Properties**

 B.J.M. Q-Ceram is a one bottle primer material, for surface preparation of ceramic crowns, prior to bonding with resin cements. This primer improves cementation of zirconia crowns and does not require additional conditioning such as sandblasting. Its low viscosity and excellent wetting properties promote ideal surface coverage.

#### **Scientific Papers**

High-Q-Bond SE

 Variables of Experimental Primer that Affect Adhesion Strength to Zirconia, N. Zaltsman, B. Zalsman, K. Lizenboim, A. Khaskin, A. Suvorov, I. Suvorov, A. Valdman, PEF-IADR Congress, Helsinki, Finland, 2012.



Zirconite

- 2. In-vitro Evaluation of shear bond strength RelyX Unicem 2 cement to zirconia comparing 2 primers, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2012.
- Cements adhesion to ceramic as a function of surface treatment, K. Lizenboim, I. Suvorov, B. Zalsman, H. Dodiuk, Program Number 402, PER-IADR Congress, Dubrovnik, Croatia, 2014.
- Clinical evaluation by the Dental Advisor, September 2016.
- Various primers effect on resin-cement adhesion to zirconia and lithium-disilicate, A. Iv, B. Zalsman, K. Lizenboim, A. Valdman and I. Suvorov, Program Number 0119, PER-IADR Congress, Jerusalem, Israel, 2016.
- **6.** The Dental Advisor 2017 Preferred Product Award, January 2017.
- The Dental Advisor 2018 Preferred Product Award, January 2018.
- 8. 8. The Dental Advisor 2019 Preferred Product Award, January 2019.

#### **Technical Data**

Various tested cements demonstrated good adhesion to ceramic surfaces treated with Q-Ceram.

Q-Ceram is preferable for Zirconia treatment.

Shelf Life 2 Years

- Item # 400055
- 1 Bottle 5ml of Q-Ceram
- 50 Q-Ceram Grey Applicators
- 1 Dappen Dish





#### **Related Products**

Perfect can be used with all B.J.M. adhesives and restoration materials and in every treatment case.

#### **Indications**

• B.J.M. Perfect is a desensitizer used for treatment of dentin hypersensitivity. This desensitizer quickly and effectively reduce pain associated with dentin hypersensitivity.

#### It is used for:

- Prevent pain in exposed dentin areas not requiring restorations.
- Prevent hypersensitivity in dentin after preparation of teeth for following indirect restoration.

#### **Properties**

• B.J.M. Perfect is a one bottle liquid material for dentin hypersensitivity treatment. This desensitizer prevents intra-tubular fluid movement and reduces dental permeability by occlusion of the peripheral dentinal tubules. The effect occurs immediately, effectively, simply and fast with no need for mixing or curing.

#### **Scientific Papers**

1. Clinical evaluation by the Dental Advisor, September 2017.

#### **Technical Data**

Perfect containing purified water, organic aldehyde compound, methacrylate based monomer Shelf Life 2 Years

- Item # 400150 1 Bottle 5ml of Perfect Desensitizer.
- Item # 400151 1 Syringe 1.2 ml of Perfect Desensitizer, 4 Delivery Tips.



## Resin Cements

FOR ZIRCONIA LUTING
AUTOMIX I DUAL CURE
Sharias Darring





- Permanent cementation of crowns and bridges, inlays and onlays, posts andcores, ceramic crowns and Maryland bridges.
- Porcelain repair Used as metal adhesive opaquer.

#### **Properties**

- Multi-purpose, dual-cured, radiopaque, permanent cement.
- Forms an excellent bond with tooth structure, Metal alloys, Amalgams, Porcelains and Ceramics.
- Self-cured cement which you can light-cure for an immediate set and extra strength at the margins.
- Light curing of High-Q-Bond Resin Cement gives your restorations immediate stability, plus easy cleanup of excess cement before the final set.
- Superior retention and total margin integrity.
- Virtually neither taste nor odor Increased patient comfort

- The role of anaerobic accelerator in dental adhesives, I. Eppelbaum, H. Dodiuk, S. Kenig, B. Zalsman, A. Valdman and R. Pilo, J. Adhesion Sci. Technol, Volume 10, No.10, pp. 1075-1087 (1996).
- An advanced multipurpose dental adhesive system, I. Eppelbaum, H. Dodiuk, S. Kenig, B. Zalsman and A. Valdman, J. Adhesion Sci. Technol., Volume 9, No. 10, pp. 1357-1368 (1995).
- Gingival response to a new multipurpose dental adhesive: A histologic study in dogs, M. Redlich, D. Harari and S. Shoshan, The Journal of Prosthetic Dentistry, Volume 76, No. 4, pp. 379-385 (1996).
- Long-term durability of adhesive systems bonded to fresh amalgam, R. Pilo, T. Brosh, E. Shapinko and H. Dodiuk, The Journal of Prosthetic Dentistry, Volume 76, No. 4, pp. 431-436 (1996).

- A Laboratory Evaluation of Adhesive Resin Cement, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 1997.
- New dual cure multipurpose adhesive resin cement, B. Zalsman, H. Dodiuk, A. Valdman and I. Eppelbaum, 76th General Session of IADR, 1998.
- Advanced metal free endodontic post system: a case report, K. Krasteva, Varna, Bulgaria, 1998.
- 8. Comparative Evaluation of Bond Strengths of Panavia and Primabond 97 to posts cemented in the root dentin: final report, D. H. Pashley, School of Dentistry, Medical College of Georgia, 1998.
- Evaluation of four adhesive systems on a metallic structure, not noble for dental porcelain, A. Paz, 1999.
- A new multipurpose dental adhesive for orthodontic use: an in-vitro bond strength study, D. Harari, E. Aunni, I. Gillis and M. Redlich, American Journal of Orthodontics and Dentofacial Orthopedics, September 2000.
- 11. Research report: Shear Bond Strength of Total Etch Two-Step Primer / Adhesive Systems with Dual and Chemical-Cure Resin Cements, M. Pasciuta, D. Cobb, College of Dentistry, Iowa, 2001.
- 12. Laboratory Evaluation of 24 hours Shear Bond Strength of Ceramic to Dentin Using Three Cement Systems, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2006.
- **13.** Tooth restoration by ceramic inlays: a tutorial, Ryakhovsky, A. Karapetyan, Moscow, 2008.
- Testing of crowns retention to various abutments utilizing different cements, K. Lizenboim, A. Suvorov, B. Zalsman, and I. Suvorov, PEF-IADR 2008.
- 15. Cements adhesion to ceramic as a function of surface treatment, K. Lizenboim, I. Suvorov, B. Zalsman, H. Dodiuk, Program Number 402, PER-IADR Congress, Dubrovnik, Croatia, 2014.



#### **Technical Data**

Compressive strength	180 MPa
Flexural strength	170 MPa
Hardness by Barcol	80
Water sorption	8 µg/mm³
Solubility	1 µg/mm <sup>3</sup>
Adhesive bonding to un-etched enamel	> 20 MPa
Adhesive bonding to un-etched dentin	> 15 MPa
Adhesive bonding to Rexillium	> 10 MPa
Film thickness	10 µm
Radiopacity, % Aluminium	250
Working Time (in ambient light & temp)	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

#### **Packaging & Order Information**

- Item # 100050 Hand Mix
  - 1 Syringe 3ml of High-Q-Bond Base
  - 1 Syringe 3ml of High-Q-Bond Catalyst
  - 1 Mixing Pad
  - 10 Mixing Spatulas
- Item # 100050AM Automix
- 1 Automix Syringe 5ml of High-Q-Bond
- 10 Automix Syringe Mix Tips
- 10 Intraoral Angular Tips, Size Fine
- 10 Intraoral Angular Tips, Size Long XX-Fine
- 1 Mixing Pad





















## High-Q-Bond SE... SELF-ETCH / SELF-ADHESIVE DUAL CURED PERMANENT RESIN CEMENT





#### **Indications**

 Permanent cementation of crowns and bridges, inlays and onlays, posts and cores and ceramic crowns.

#### **Properties**

- Self-etch, self-adhering resin cement.
- does not require etching, priming or bonding before cementing the permanent restoration.
- Self-cured cement which you can light-cure for an immediate set and extra strength at the margins.
- Radiopaque Easily seen in radiograph.
- Fluoride Known to reduce the possibility of secondary caries and considered to be cariostatic.
- Automix Syringe Saves application time, guarantees consistent mix.
- 3 Shades: A2, White & Translucent.
- Virtually neither taste nor odor Increased patient comfort.

#### **Scientific Papers**

- Laboratory Evaluation of 24 hours Shear Bond Strength of Ceramic to Dentin Using Three Cement Systems, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2006. Dr. Wladimir Aranda, Test of self-adhering luting cements to human dentin, 2006.
- Test of self-adhering luting cements to human dentin, Dr. W. Aranda, 2006.
- 3. Tooth restoration by ceramic inlays: a tutorial, Ryakhovsky, A. Karapetyan, Moscow, 2008.

- Testing of crowns retention to various abutments utilizing different cements K. Lizenboim, A. Suvorov, B. Zalsman, and I. Suvorov, PEF-IADR 2008.
- Cements adhesion to ceramic as a function of surface treatment, K. Lizenboim, I. Suvorov, B. Zalsman, H. Dodiuk, Program Number 402, PER-IADR Congress, Dubrovnik, Croatia, 2014.
- Clinical evaluation by the Dental Advisor, September 2017.

#### **Technical Data**

Compressive strength	180 MPa
Flexural strength	170 MPa
Hardness by Barcol	80
Water sorption	8 µg/mm³
Solubility	1 µg/mm³
Adhesive bonding to un-etched enamel	> 20 MPa
Adhesive bonding to un-etched dentin	> 15 MPa
Adhesive bonding to Rexillium	> 10 MPa
Film thickness	10 µm
Radiopacity, % Aluminium	250
1-week Cumulative F-release (ng/cm²):	40
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



#### **Packaging & Order Information**

#### • Item # 100050SE

- 1 Automix Syringe 5ml of HQB SE A2
- 10 Automix Syringe Mix Tips
- 10 Intraoral Angular Tips, Size Long XX-Fine
- 1 Mixing Pad

#### • Item # 100051SE

- 1 Automix Syringe 5ml of HQB SE White
- 10 Automix Syringe Mix Tips
- 10 Intraoral Angular Tips, Size Long XX-Fine
- 1 Mixing Pad

#### Item # 100052SE

- 1 Automix Syringe 5ml of HQB SE Translucent
- 10 Automix Syringe Mix Tips
- 10 Intraoral Angular Tips, Size Long XX-Fine
- 1 Mixing Pad











## 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 selfadhering 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.

- 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.
- 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.
- 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.
- 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 Bayarıb, Bilge Turhan Bala, Vibrational Spectroscopy, Volume 86, September 2016, Pages 212-217.



#### **Technical Data**

Compressive strength	> 150 MPa
Flexural strength	> 100 MPa
Hardness by Barcol	80
Water sorption	8 µg/mm³
Solubility	1 µg/mm³
Shear Bond Strength to Zirconia	> 15 MPa
Shear Bond Strength to UnEtched Dent	in > 10 MPa
Shear Bond Strength to Lithium DiSilicat	e > 20 MPa
Film thickness	10 µm
Radiopacity, % Aluminium	250
рН	~ 7
Dimensional Change on Polymerization	3 - 4 %
Working Time (in ambient light & temp):	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

#### **Packaging & Order Information**

- Item # 400050
  - 1 Automix Syringe 5ml of Zirconite Dentin
- 1 Mixing Pad
- 10 Automix Syringe Mix Tips
- 10 Intraoral Angular Tips, Size Fine
- 10 Intraoral Angular Tips, Size Long XX-Fine

#### Item # 400050TR

- 1 Automix Syringe 5ml of Zirconite Translucent
- 1 Mixing Pad
- 10 Automix Syringe Mix Tips
- 10 Intraoral Angular Tips, Size Fine
- 10 Intraoral Angular Tips, Size Long XX-Fine















TOP AWARD

CEMENT:
IMPLANT



#### **Indications**

 Long-term cementation for permanent implantretained restorations and long-term provisionals.

#### **Properties**

- Secure retention Long-term cementation.
- Retrievability Off when you need it.
- Radiopaque Improves detection of excess cement.
- Low solubility Good marginal seal.
- Easy handling Two-stage cure features initial gelphase in 2-2.5 minutes for easy removal of excess cement. Rigid final set ensures marginal seal and firm retention.
- Automix dual-barrel syringe and disposable mix tips Consistent product mix and controlled dispensing save time.
- Esthetic gingival shading Natural appearance
- Virtually neither taste nor odor Increased patient comfort.

- CRA Buying Guide Outstanding Products 2004, December 2004.
- CRA Buying Guide Outstanding Products 2004, December 2005.
- 3. Dental Advisor Clinical report, February 2005.
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- Physical Properties of Temporary Cements Indicated for Cementing Implant-retained Abutments, K. Lizenboim, W.A. Mchale, A. Khaskin, A. Valdman, H. Dodiuk-Kenig, and B. Zalsman, PEF-IADR Congress, Thessaloniki, Greece, 2007.
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- 7. Cement Selection for Cement retained Crown Technique with Dental Implants, J. L. Sheets, C. Wilcox, T. Wilwerding, Journal of Prosthodontics, Volume 17, Number 2, and February 2008.
- 3. Dental Advisor Clinical report (PPL 2008), February 2008.
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- Ask Dr. Cristensen, Dental Economics, p. 50 58, May 2011.
- 11. The Dental Advisor Clinical report, December 2015.
- **12.** The Dental Advisor 2016 Top Product Award, January 2016.
- **13.** The Dental Advisor 2017 Top Product Award, January 2017.
- **14.** The Dental Advisor 2018 Top Product Award, January 2018.
- **15.** 15. The Dental Advisor 2019 Top Product Award, January 2019.





#### **Related Products**



#### **Technical Data** Flexural Strength < 60 MPa Film Thickness 10 µm Solubility 2 μg/mm<sup>3</sup> $12 \, \mu g/mm^3$ Water Sorption Linear Shrinkage 2.5 % Working Time @ 23°C 1.5-3.5 min Initial Setting Time @ 37°C 2.0-2.5 min Final Setting Time @ 37°C 4.5-5.0 min Shelf Life 2 Years

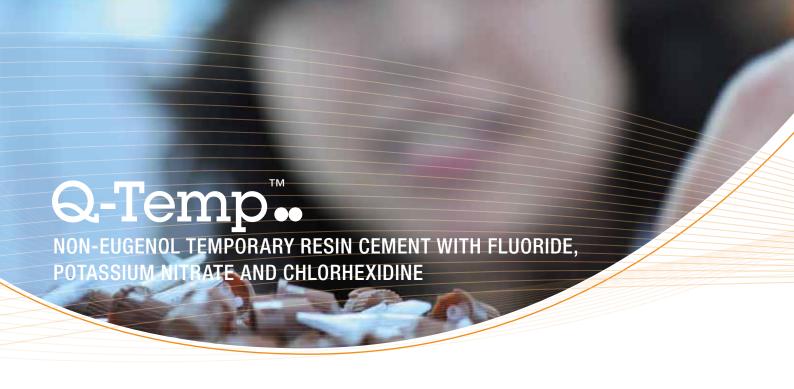
#### **Packaging & Order Information**

#### • Item # 100110 - Hand Mix

- 1 Syringe 10ml of Cem-Implant Base
- 1 Syringe 10ml of Cem-Implant Catalyst
- 1 Mixing Pad
- 25 Mixing Spatulas

#### • Item # 100115 - Automix

- 2 Automix Syringes 5ml each of Cem-Implant
- 20 Mix Tips











Temporary cementation of crowns and bridges.

#### **Properties**

- Firm Retention / Easy Removal No re-cementing temporaries.
- Eugenol-Free Non irritating to soft tissue / will not inhibit permanent cementation.
- Fluoride Release.
- Potassium Nitrate Known to reduce sensitivity and act as a sedative to the pulp.
- Chlorhexidine A proven anti-bacterial agent.
- Resin-Matrix Formulation.
- Good marginal seal with no wash-out.
- Two-Stage Curing Initial gel-set stabilizes temporary, allowing easy removal of excess.
- Automix Syringe Saves application time; guarantees consistent mix.
- Neutral Shade Blends esthetically with temporary restoration / No show-through.

- 1. Dental Advisor Clinical report, November 2006.
- 2. Crown retention and flexural strength with nine provisional cements, N. Lawson, J. O. Burgess, D.

- Mercante, Louisiana State University, New Orleans, USA, IADR Congress, 2006.
- 3. CRA Buying Guide Outstanding Products 2004, December 2006.
- 4. CRA Buying Guide Outstanding Products 2004, December 2007.
- 5. Resin and Zinc-Oxide Temporary Cements, a Comparative Study, A. Valdman, K. Lizenboim, A. Khaskin, W.A. Mchale, H. Dodiuk-Kenig, and B. Zalsman, PEF-IADR Congress, Thessaloniki, Greece, 2007.
- 6. Testing of crowns retention to various abutments utilizing different cements, K. Lizenboim, A. Suvorov, B. Zalsman, and I. Suvorov, PEF-IADR, London, UK, 2008.
- 7. Provisional Cements: The Optimal One for Your Clinical Needs, Clinicians Report, Volume 4, Issue 5, May 2011.
- 8. The Dental Advisor Clinical report, December 2015.
- 9. The Dental Advisor 2016 Award Winner, January 2016.



#### **Technical Data**

Flexural Strength	< 30 MPa
Film Thickness	10 µm
Solubility	7 μg/mm³
Water Sorption	22 μg/mm <sup>3</sup>
Linear Shrinkage	4.5 %
Exothermal Polymerization Temp	perature, Texo 31°C
Working Time @ 23°C	1.5 - 3.5 min
Initial Setting Time @ 37°C	1.5 - 2.0 min
Final Setting Time @ 37°C	3.0 - 4.0 min
Shelf Life	2 Years

#### **Packaging & Order Information**

- Item # 100014 Automix Intro
- 1 Automix Syringe 5ml of Q-Temp
- 10 Mix Tips
- Item #100015 Automix Bulk
  - 4 Automix Syringes 5ml Each of Q-Temp
- Item # 100010 Hand Mix
- 1 Syringe 10ml of Q-Temp Base
- 1 Syringe 10ml of Q-Temp Catalyst
- 1 Mixing Pad
- 25 Mixing Spatulas













- Mixes easily.
- High strength.
- High radiopacity.
- Snap set.
- Excess material is easy to remove.
- Can be used also as a liner and base.

#### **Scientific Papers**

Report on file: GIC, A. Akinmade, 1999.

Setting Time @ 37°C 1.5 - 3.5 min 250 %AI Radiopacity Shelf Life 2 Years

#### **Packaging & Order Information**

- Item # 100030 Shade A2
  - 1 Bottle 16g Q-Glass Powder
  - 1 Bottle 10 ml Q-Glass Liquid
  - 1 Measuring Spoon
  - 1 Mixing Pad





















• Core build-ups in vital and non-vital teeth.

#### **Properties**

- Advanced Dual-Cure Formula 30 second cure to a depth of 8mm! If light-curing is not an option – allow Q-Core to self-cure in 4.5 minutes intraorally!
- Improved natural appearance.
- The greater translucency of the enhanced Q-Core presents a more natural tooth appearance, which minimizes the chance of shadows under ceramic crowns- yet provides good contrast and excellent radiopacity.
- Outstanding handling for ease of use.
- Q-Core will stay put even in difficult maxillary core build-ups, yet flows under pressure for excellent adaptation.
- Preps like dentin without ditching.
- Superior durability for peace of mind
- Q-Core composite core build-up material utilizes exclusive Hyperbranched.
- Technology<sup>TM</sup>1 and nano-fillers for superior mechanical properties and long term clinical success - available in automix SyringeMix<sup>TM</sup> and cartridge dispensers.
- Depth of cure: A3 shade 8mm. White and blue shade 6mm.

- A Laboratory Evaluation of a Novel Self- Cured Core Build-Up Material, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2001.
- Adhesive Bonding of a Novel Dual-Cure Composite Material, Contemporary Esthetics and Restorative Practice, p. 2-4, July 2003.
- The effect of hyper-branched polymers on the properties of dental composites and adhesives, K. Lizenboim, H. Dodiuk-Kenig, I. Eppelbaum, B. Zalsman and S. Kenig, Program Number 1489, IADR Congress, Gothenburg, Sweden, 2003.
- **4.** The effect of hyper-branched polymers on the properties of dental composites and adhesives,

- H. Dodiuk-Kenig, K. Lizenboim, I. Eppelbaum, B. Zalsman and S. Kenig, J. Adhesion Sci. Technol., Vol. 18, No. 15-16, pp. 1723–1737, 2004.
- Dental Advisor Clinical report, Cartridge, October 2003.
- Keynote Address: Novel Dental Composites and Adhesives Based on Nanotechnology. H. Dodiuk-Kenig, IADR/AADR/CADR 83rd General Session, March 2005.
- Cement Expansion in Saline, K. Simmons, J.O. Burgess, and M.M. Winkler, IADR/AADR/CADR 83rd General Session, Baltimore, USA, March 2005.
- 8. Dual-Cure Core Compatibility to DBA using Self-Cured and Self-Etching Activators, B. Zalsman, A. Valdman, K. Lizenboim, I. Suvorov, A. Suvorov, W.A. McHale, H. Dodiuk-Kenig, IADR Poster, Program Number 1116, 2006.
- The effect of grafted caged silica (polyhedral oligomeric silsesquioxanes) on the properties of dental composites and adhesives, H. Dodiuk-Kenig, Y. Maoz, K. Lizenboim, I. Eppelbaum, B. Zalsman and S. Kenig, J. Adhesion Sci. Technol., Vol. 20, No. 12, pp. 1401–1412 (2006).
- Performance Enhancement of Dental Composites Using Electrospun Nanofibers, H. Dodiuk-Kenig, K. Lizenboim, S. Roth, B. Zalsman, W. A. McHale, M. Jaffe, and K. Griswold, J. of Nanomaterials, Volume 2008.
- Rheology of Dental Restorative Cements that Includes Fumed Silica Nanoparticles, N. Zalsman, A. Valdman, B. Zalsman, K. Lizenboim, A. Khaskin, A. Suvorov, and I. Suvorov, Program Number 208, PEF-IADR Congress, London, UK, 2008.
- **12.** Dental Advisor Clinical report, Cartridge, October November 2008.
- Dental Advisor Clinical report, SyringeMix, October
   November 2008.
- **14.** A dual-cure composite core for teeth to be restored with full crowns, H. E. Strassler, L. C. Bare, Inside Dentistry, 2009.
- Monomer conversion analysis of Bis-GMA / TEGDMA based dental restorative material, N.



Zaltsman, B. Zlasman, K. Lizenboim, A. Suvorov, I. Suvorov, Program Number 4076, PEF-IADR Congress, Barcelona, Spain, 2009.

- **16.** The ratings: core materials dual-cured, Reality Online, September 2011.
- 17. The Dental Advisor Clinical report, April 2017.

#### **Technical Data**

iccillical Data	
Compressive Strength	250 MPa
Linear Shrinkage	1.2 %
Flexural strength	200 MPa
Diametral Tensile Strength	40 MPa
Solubility	2 µg/mm³
Water Sorption	14 μg/mm <sup>3</sup>
Hardness by Techlock Durometer GS-	-709N,
Type A	90
Compatible with halogen light	Yes
Compatible with Plasma ark light lamp	Yes
Compatible with LED	Yes
Depth of Cure Irradiation by LED – for	30 sec
	8.0 mm
Depth of Cure Irradiation by Halogen I	ight – for 30
sec	8.0 mm
Working Time @ 23°C	1.5 - 3.5 min
Setting Time @ 37°C	2.5 - 4.5 min
Exotherm Temperature	26 °C
Radiopacity	400 %AI
Average Filler Concentration (by weigh	nt) 60 wt%
Shelf Life	2 Years

#### **Packaging & Order Information**

#### Q-Core Cartridge\*

- Item # 100100 Shade White 25ml
- Item # 100101 Shade A3 25ml
- Item # 100103 Shade Blue 25ml
- Item # 100105 Shade White 50mlItem # 100106 Shade A3 50ml
- Item # 100107 Shade Blue 50ml

#### \*Q-Core Cartridge Kit

- 1 Automix Cartridge of Q-Core
- 25 Mix Tips
- 25 Intraoral Syringe Tips

#### Q-CORE Syringable\*\*

- Item # 100900 Shade White
- Item # 100901 Shade A3
- Item # 100902 Shade Blue

#### \*\*Q-Core Syringable Kit

- 2 Automix Syringes of Q-Core 5ml each
- 15 Mix Tips
- 10 Intraoral Angular Tips, Size Fine
- 10 Intraoral Angular Tips, Size Long XX- Fine













• Direct chairside Temporization Material.

#### **Properties**

- Automix Syringe Saves application time; guarantees consistent mix.
- Offers exceptionally tight marginal seal with precision fit.
- High biocompatibility.
- Suitable for long-term temporary crowns and bridges due to its high mechanical strength and precision fitting.
- Excellent esthetics due to great color stability, high polishability, choice of three Vita shades: A1, A2 and A3 and translucent Glaze Varnish.

#### **Scientific Papers**

- The role of halogen ion in initiating system comprising barbituric acid derivative and metal ion, A. Suvorov, B. Zalsman, K. Lizenboim, I. Suvorov, A. Valdman, A. Khaskin, N. Zalsman, IADR Congress, 2010.
- 2. The Dental Advisor Clinical report, April 2017.

#### **Packaging & Order Information**

#### • Item # 400230

- 1 Automix Syringe 5ml of Q-Crown, Shade A1
- 1 Automix Syringe 5ml of Q-Crown, Shade A2
- 1 Automix Syringe 5ml of Q-Crown, Shade A3
- 1 Bottle 5ml of Q-Crown Glaze
- 25 Automix Syringe Mix Tips
- 25 Micro brush applicators

#### Item #400231

- 1 Automix Syringe 5ml of Q-Crown, Shade A1

#### • Item #400232

- 1 Automix Syringe 5ml of Q-Crown, Shade A2

#### • Item #400233

- 1 Automix Syringe 5ml of Q-Crown, Shade A3

#### • Item #400234

- 1 Bottle 5ml of Q-Crown Glaze

## Q-Seal™.

## LIGHT CURED, PIT & FISSURE SEALANT WITH FLUORIDE RELEASE





#### **Indications**

Pediatric sealant applications.

#### **Properties**

- Designed to seal pits and fissures of caries susceptible teeth.
- Bonds to enamel by applying the acid-etch technique.
- Easy and precise application by using the direct syringe technique.
- Light-cured / LED light compatible.
- Low viscosity Flows easily into pits and fissures.
- Contains and releases fluoride.

#### **Scientific Papers**

- A laboratory evaluation of the shear bond strength of resin sealants to intact enamel using self-etching and total-etch sealant systems, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2006.
- 2. The Dental Advisor Clinical report, April 2017.

#### **Technical Data**

Compr	ressive strength		150 MPa
Flexura	al strength		250 MPa
Barcol	Hardness		80
Water	sorption		18 μg/mm <sup>3</sup>
Solubil	ity		2 µg/mm <sup>3</sup>
Fluorid	le release	3 µgF/c	m² x 3 years
Bond S	Strength to etched too	th enamel	34-40 MPa
Sensiti	vity to ambient light		75 sec
Depth	of cure		4.5 mm
Compa	atible with halogen ligh	nt	Yes
Compa	atible with Plasma ark	light lamp	Yes
Compa	atible with LED		Yes
Shelf L	ife		2 Years

#### **Packaging & Order Information**

- Item # 100120
- 2 Syringes 1.2ml each of Q-Seal
- 2 Syringes 1.2ml each of Q-Etch
- 8 Delivery Tips





#### **Properties**

- Designed to seal pits and fissures of caries susceptible teeth.
- Self-Etching Bonds to enamel without acid-etch.
- NO ETCH / NO RINSE / NO DRY simplifies and shortens the clinical procedure.
- Easy and precise application by using the direct syringe technique.
- Light-cured / LED light compatible.
- Low viscosity Flows easily into pits and fissures.
- Contains and releases fluoride.
- Ideal for non cooperating children.

#### **Scientific Papers**

- A laboratory evaluation of the shear bond strength of resin sealants to intact enamel using self-etching and total-etch sealant systems, Prof. M. Latta, Creighton University School of Dentistry, Omaha, Nebraska, 2006.
- Evaluation of novel Bisphenol-A Free self-etching sealant, A. Suvorov, B. Zalsman, K. Lizenboim, N. Zaltsman, I. Suvorov, PEF-IADR Congress, Barcelona, Spain, 2009.
- 3. Clinical case report: Опыт применения самопротравливающего силанта «QuickSeal» («ВЈМ Lab») для герметизации фиссур и ямок зубов, А. Butvilovsky, D. Volodkevich, A. Volodkevich, November 2018.

#### **Technical Data**

Compressive strength	150 MPa
Flexural strength	250 MPa
Hardness by Barcol	80
Water sorption	18 μg/mm <sup>3</sup>
Solubility	2 μg/mm³
Fluoride release	3 µgF/cm <sup>2</sup> x 3 years
Bond Strength to un-etched to	ooth enamel 20-25
MPa	
Bond Strength to etched tooth	enamel 34 – 40 MPa
рН	3.2
Sensitivity to ambient light	75 sec
Depth of cure	4.5 mm
Compatible with halogen light	Yes
Compatible with Plasma ark lig	ght lamp Yes
Compatible with LED	Yes
Shelf Life	2 Years

#### **Packaging & Order Information**

- Item # 100130
- 2 Syringes 1.2ml each of Quick Seal
- 4 Delivery Tips

















#### **Indications**

• Bracket Adhesive - Bonds metal and ceramic brackets to tooth surfaces.

#### **Properties**

- · Compatible with LED lights as well as traditional curing lights.
- Convenience of a light cure, plus a paste that has the bonding characteristics and viscosity that are optimal for today's mesh bases.
- Bonds chemically and mechanically for a superior bond, while flowing into the tightest mesh without bracket drift.
- Small particle glass filled material designed specifically for orthodontic use that allows maximum penetration of filler into the finest screen mesh base.
- · Fluoride releasing and recharging.
- Available in either 4g Syringe or 0.4g Compule delivery system.
- Each Syringe can be applied to 40 60 brackets.
- Each Compule can be applied to 4 6 brackets.

#### **Scientific Papers**

- 1. The effect of different porcelain conditioning techniques on shear bond strength of stainless steel brackets, I. Gillis, M. Redlich, American Journal of Orthodontics and Dentofacial Orthopedics, p. 387-392, October 1998.
- 2. A new multipurpose dental adhesive for orthodontic use: an in vitro bond-strength study, D. Harari, E. Aunni, I. Gillis, M. Redlich, American Journal of Orthodontics and Dentofacial Orthopedics, p. 307-310, September 2000.
- 3. Clinical research: Ideal bracket adhesive system, Hadassah School of Dental Medicine, Hebrew University, 2003.

- 4. An in-vitro investigation into the use of a single component self-etching primer adhesive system for orthodontic bonding: a pilot study, K. House, J. Ireland, Journal of Orthodontics, Volume 33, No. 2, p. 116-124, June 2006.
- 5. Antibacterial orthodontic adhesive incorporating polyethyleneimine nanoparticles, N. Zalstman, D. Kesler Shvero, M. Perez Davidi, E. Weiss, N. Beyth, Hadassah School of Dental Medicine, Hebrew University, IADR Israeli Division Meeting, Israel,
- 6. Bond Strength and ARI Evaluation of Anti-Cariogenic Bonding Materials, M.C. King, Y. Fan, J.L. Hagan, P.C. Armbruster, R.W. Ballard, Program Number 1004, AADR Meeting, Tampa, USA, March 2012.
- Bisphenol-A free alternatives for orthodontic adhesive systems, K. Lizenboim, I. Suvorov, H. Dodiuk, B. Zalsman, Program Number 118, PER-IADR Congress, Helsinki, Finland, 2012.
- 8. Bisphenol-A free dental polymeric materials, K. Lizenboim, H. Dodiuk, N. luster, T. Kidan, I. Suvorov, S. Kenig, B. Zalsman, Journal of Adhesion Science and Technology, Taylor & Francis, p. 1-17, iFirst article, September 2012.
- Dr. Álvaro Bedoya Quintero, Orthodontics Specialist, Professor of the Orthodontics European Masters, Universidad Alfonso X el Sabio, Madrid, Clinical report for composite test material for High-Q-Bond Bracket, October 2015.
- 10. Dr. César Ventureira, Professor at the Masters in Orthodontics and Dentomaxilar Orthopaedics at Universidad CEU-San Pablo in Madrid, Clinical evaluation report for High-Q-Bond Bracket, October 2015.



#### **Technical Data**

Adhesive bonding to etched enamel > 30 M	
Adhesive bonding to bracket	> 40 MPa
Water sorption	30 μg/mm <sup>3</sup>
Solubility	7 μg/mm³
Film thickness	15 µm
Dimensional Change on Polymerization	2 %
Working Time (in ambient light & temp)	2-3 min
Setting Time	10 - 20 sec
Compatible with halogen light	Yes
Compatible with Plasma ark light lamp	Yes
Compatible with LED	Yes
Shelf Life	2 Years

#### **Packaging & Order Information**

• Item # 400060 -

#### High-Q-Bond Bracket Light Cure Adhesive Kit

- 2 Syringes 1.2ml each of Q-Etch Ortho
- 1 Bottle 6ml of HQB Bracket Primer
- 4 Syringes 2ml each of HQB Bracket Adhesive
- 20 Dispensing Tips
- 25 Micro Brushes
- 1 Mixing Pad

### Item # 400061 – High-Q-Bond Bracket Light Cure Adhesive Compule Kit

- 2 Syringes 1.2ml each of Q-Etch Ortho
- 1 Bottle 6ml of HQB Bracket Primer
- 40 Compules 0.4g each of HQB Bracket Adhesive
- 1 Compule Gun Syringe
- 20 Dispensing Tips
- 25 Micro Brushes
- 1 Mixing Pad
- Item # 400064 –

### High-Q-Bond Bracket Light Cure Adhesive Compules Refill

- 40 Compules 0.4g each of HQB Bracket Adhesive
- Item # 400063
- 1 Syringe 4g of High-Q-Bond Bracket Light Cure Adhesive
- Item # 400065
- 1 Bottle 6ml of High-Q-Bond Bracket Light Cure Primer







#### **Indications**

- · Cementation of orthodontic bands.
- Occlusion adjustments to prevent deep bite and occlusal interference with a particular orthodontic device.

#### **Properties**

- Compatible with LED lights as well as traditional curing lights.
- Uses light cure adhesive technology to provide you with additional working time to ensure accurate band placement.
- Bonds chemically and mechanically to the band and to the tooth enamel.
- Excellent flow for filling the gap between the band and the tooth
- Fluoride releasing and recharging.
- Easy to identify (visible blue color).
- Strong reliable chemical bonding with tooth, metal and porcelain surfaces.

#### **Scientific Papers**

1. Dr. Álvaro Bedoya Quintero, Orthodontics Specialist, Professor of the Orthodontics European Masters, Universidad Alfonso X el Sabio, Madrid, Clinical report for composite test material for High-Q-Bond Band Cement, October 2015.

2. Dr. César Ventureira, Professor at the Masters in Orthodontics and Dentomaxilar Orthopaedics at Universidad CEU-San Pablo in Madrid, Clinical evaluation report for High-Q-Bond Band Cement, October 2015.

#### **Technical Data**

Adhesive bonding to etched enamel	> 30 MPa
Adhesive bonding to Rexillium	> 40 MPa
Water sorption	30 μg/mm <sup>3</sup>
Solubility	7 µg/mm³
Film thickness	15 µm
Dimensional Change on Polymerization	2 %
Working Time (in ambient light & temp)	2 - 3 min
Setting Time	10 - 20 sec
Compatible with halogen light	Yes
Compatible with Plasma ark light lamp	Yes
Compatible with LED	Yes
Shelf Life	2 Years

#### **Packaging & Order Information**

Item # 400062 –

High-Q-Bond Band Light Cure Band Cement Kit

- 4 Syringes 2ml each of HQB Band Cement
- Item # 400066
- 1 Syringe 2ml of High-Q-Bond Band Cement



## High-Q-Bond Retainer...

LIGHT CURE RETAINER





#### **Indications**

Adhesive bonding of orthodontic lingual retainers.

- · Compatible with LED lights as well as traditional curing lights.
- Uses light cure adhesive technology to provide you with additional working time to ensure accurate retainer placement.
- Ideal viscosity No drift.
- · Easy to identify (visible orange color).
- Photo chromatic technology After light curing, color changes from orange to white.
- · Contains the adhesive promoter 4-Meta, for strong and durable chemical bonding.
- · Fluoride releasing and recharging.

#### **Scientific Papers**

- 1. Adhesive fixing technique lingual retainers, M. Redlich, Y. Abed, I. Gillis, U. Baumert, I. Golan, D. Mussig, Kieferarthop 19, p. 43-44, 2005.
- 2. Adhesive fixing technique lingual retainers, M. Redlich, Y. Abed, I. Gillis, U. Baumert, I. Golan, D. Mussig, Cathedra, No. 41, p.52-55, 2012.

3. Clinical Case Report: Опыт применения High-Q-Bond Light Cure Retainer (BJM LAB) для временного шинирования зубов, A. Butvilovsky and A. Khotait, November 2018.

#### **Technical Data**

recinited Data	
Adhesive bonding to etched enamel	> 30 MPa
Adhesive bonding to Rexillium	> 40 MPa
Film thickness	15 µm
Dimensional Change on Polymerization	2 %
Working Time (in ambient light & temp)	2 - 3 min
Setting Time	10 - 20 sec
Compatible with halogen light	Yes
Compatible with Plasma ark light lamp	Yes
Compatible with LED	Yes
Shelf Life	2 Years

#### **Packaging & Order Information**

Item # 100320 –

#### High-Q-Bond Light Cure Retainer Kit

- 2 Syringes 1.2ml each of Q-Etch Ortho
- 2 Syringes 1.2ml each of HQB Light Cure Retainer
- 8 Delivery Tips







### **Indications**

• Any procedure that requires etching.

#### **Properties**

- 37% Phosphoric Acid Etch Gel with excellent viscosity for precise application.
- Stays put and does not run.
- Washes off easily & Quickly.
- Has excellent water solubility.
- Easy to use. Available in 1.2 ml syringes.
- · Applicators tips are angled to facilitate easy and accurate placement of the gel.
- Disposable tips save time and are more sanitary.
- Green Visible color.

#### **Technical Data**

Excellent water solubility	
рН	1.8
Viscosity	Unfilled
Shelf Life	2 Years

#### **Packaging & Order Information**

- Item # 400067
- 4 Syringes 1.2ml each of Q-Etch Ortho
- 8 Dispensing Tips



High-Q-Bond Bracket



High-Q-Bond Band



**Cure Retainer** 

## Q-Glass Ortho

#### **GLASS IONOMER BAND CEMENT**



#### **Indications**

Cementation of orthodontic bands.

#### **Properties**

- Strong chemical adhesion.
- Fluoride release.
- Low sensitivity to moisture.
- Blue color for good visibility.

#### **Technical Data**

Adhesive bonding to enamel	> 10 MPa
24 Hours Compressive strength	> 70 MPa
Working Time @ 23°C	2 - 3 min
Setting Time @ 37°C	3 - 4 min
Shelf Life	2 Years

#### **Packaging & Order Information**

• Item # 100340

Q-Glass Ortho Glass Ionomer Band Cement Kit

- 1 bottle 16g Q-Glass Ortho Powder
- 1 bottle 10ml Q-Glass Ortho Liquid
- 1 Measuring Spoon
- 1 Mixing Pad





# Endodontic Products



# **BJM** Root Canal Sealer.

TWO-PASTE EPOXY-AMINE **RESIN ROOT CANAL SEALER** 





#### **Indications**

· Obturation of root canals together with guttapercha points.

#### **Properties**

- Extremely high radiopacity.
- Excellent wettability and flow properties.
- Outstanding sealing ability.
- IABT Antibacterial technology.
- Non-cytotoxic.
- · Long-term stability.
- Moderate flexibility that prevents cracking of fully cured material.
- Low shrinkage.
- Automix Syringe Saves application time; guarantees consistent mix.

#### **Scientific Papers**

- 1. Antibacterial mechanism of novel endodontic sealer, D. Kesler Shvero, N. Zaltsman, E. Weiss, N. Beyth, Hadassah School of Dental Medicine, Hebrew University, IADR Israeli Division Meeting, Tel-Aviv, June 2013.
- 2. Root canal sealers as Biofilm prevention: facts and speculations, M. Solomonov, Эндодонтия, Том VII, No. 1-2, 2014.
- 3. Antibiofilm Activity of Epoxy Sealer with Quaternary Ammonium Macromolecule, T. Becker, M. Solomonov, N. Sterer, R. Bar-Ness, A. Levin, A. Shemesh, The Maurice and Gabriela Goldschleger School of Dental Medicine Tel Aviv University, Program Number 0219, PER-IADR Congress, Jerusalem, Israel, 2016.

- Dr. Michael Solomonov, Clinical Cases Report, March 2017.
- 5. Evaluating the physical properties of one novel and two well-established epoxy resin-based root canal sealers, M. Solomonov, J.B. Itzhak, Quintessence Publishing Endo 2017; 11 (4): 285-290.
- 6. Antibiofilm activity of epoxy sealer incorporated with quaternary ammonium macromolecule, T. Becker, N. Sterer, R. Bar-Ness, T. Toledano and M. Solomonov Evidence-Based Endodontics 2019; 4 (1): 1-6.
- 7. Dr. Gabriel Kaplan, Clinical Cases Report, March 2019.
- 8. Dr. Alexander Butvilovsky, et all. Clinical Cases Report: Опыт использования новых силеров при лечении апикальных периодонтитов постоянных зубов, November 2018.
- 9. Dr. Alexander Butvilovsky, et all. Clinical Cases Report: Клинический опыт сохранения постоянного зуба с большим периапикальным очагом путем ортоградного эндодонтического лечения, Modern Stomatology, June 2019.

#### **Technical Data**

BJM RCS will set within 48 hours at 37°C Shelf Life 2 Years

#### **Packaging & Order Information**

- Item # 400200
- 1 Automix Syringe 5ml of BJM RCS
- 10 Automix Syringe Mix Tips and Intraoral Tips
- 1 Mixing Pad



IABT incorporation into dental polymers prevents bacterial growth and biofilm formation.











### Order Information

100222	Prima 2000, 2ml
100224	Prima 2000, 4ml
100225	Prima 2000, 5ml
100227	Prima 2000, 7ml
100230	Prima 2000, 10ml
100260	Prima Quick SE Kit, comprising Prima Quick SE Prime, 7ml and Prima Quick SE Bond, 7ml
100270	Prima Quick SE Prime, 7ml
100280	Prima Quick SE Bond, 7ml
100240	Prima 1, 4ml
100241	Prima 1, 4ml & 50 Applicators
100061	Auto-Cure Activator, 2ml
100064	Auto-Cure Activator, 4ml
100060	Auto-Cure Activator, 7ml
100069	Auto-Cure Activator, 10ml
100090	Q-Etch, 10ml & 20 Dispensing Tips
100091	Q-Etch UF, 10ml & 20 Dispensing Tips
100097	Q-Etch, 4x1.2ml & 8 Dispensing Tips
100098	Q-Etch UF, 4x1.2ml & 8 Dispensing Tips
100095-5	Q-Etch, 5x3ml & 20 Dispensing Tips
100091-5	Q-Etch UF, 5x3ml & 20 Dispensing Tips
100080	Porcelain Fix, comprising Porcelain Etch, 5ml and Porcelain Silane, 5ml
400080	Porcelain Silane, 5ml
400081	Porcelain Etch, 5ml
400084	Porcelain Fix, comprising Porcelain Etch, 2x1.2ml and Porcelain Silane, 2x2ml
400082	Porcelain Etch, 2x1.2ml
400083	Porcelain Silane, 2x2ml
400055	Q-Ceram, 5ml
400150	Perfect Desensitizer, 5ml
400151	Perfect Desensitizer, 1.2ml & 4 Delivery Tips
100050	High-Q-Bond Adhesive Resin Cement Hand Mix, 2x3ml
100050AM	High-Q-Bond Adhesive Resin Cement, Automix, 5ml
100050SE	High-Q-Bond SE Automix, Shade A2, 5ml
100051SE	High-Q-Bond SE Automix, Shade White, 5ml
100052SE	High-Q-Bond SE Automix, Shade Translucent, 5ml
400050	Zirconite Automix, Shade Dentin, 5ml
400050TR	Zirconite Automix, Shade Translucent, 5ml
100110	Cem-Implant Hand Mix, 2x10ml
100115	Cem-Implant Automix, 2x5ml
100014	Q-Temp Automix - Intro, 5ml
100015	Q-Temp Automix - Bulk, 4x5ml
100010	Q-Temp Hand Mix, 2x10ml
100030	Q-Glass, Shade A2, comprising Powder, 16g and Liquid, 10ml
100100	Q-Core, Shade White, 25ml
100101	Q-Core, Shade A3, 25ml
100103	Q-Core, Shade Blue, 25ml
100105	Q-Core, Shade White, 50ml

100106	Q-Core, Shade A3, 50ml
100107	Q-Core, Shade Blue, 50ml
100900	Q-Core Syringable, Shade White, 2x5ml
100901	Q-Core Syringable, Shade A3, 2x5ml
100902	Q-Core Syringable, Shade Blue, 2x5ml
400230	Q-Crown Kit, comprising Q-Crown Shade A1, 5ml; A2, 5ml; A3; 5ml and Glaze, 5ml
400231	Q-Crown, Shade A1, Automix, 5ml
400232	Q-Crown, Shade A2, Automix, 5ml
400233	Q-Crown, Shade A3, Automix, 5ml
400234	Q-Crown Glaze, 5ml
100120	Q-Seal, comprising Q-Seal, 2x1.2ml and Q-Etch, 2x1.2ml
100130	Quick Seal, 2x1.2ml
400060	High-Q-Bond Bracket Light Cure Adhesive Kit
400061	High-Q-Bond Bracket Light Cure Adhesive Compule Kit
400064	High-Q-Bond Bracket Light Cure Adhesive Compules Refill 40x0.4g
400063	High-Q-Bond Bracket Adhesive Refill, 2ml
400065	High-Q-Bond Bracket Primer Refill, 6ml
400062	High-Q-Bond Band Light Cure Band Cement Blue Kit
400066	High-Q-Bond Band Cement Refill, 2ml
100320	High-Q-Bond Light Cure Retainer Kit
400067	Q-Etch Ortho 37%, 4x1.2ml
100340	Q-Glass Ortho Band Cement Blue, comprising Powder, 16g and Liquid, 10ml
400200	BJM RCS, Automix, 5ml
400091	20 Dispensing Tips 18 Gauge
400094	20 Dispensing Tips, 20 Gauge
400092	20 Dispensing Tips, 22 Gauge
4000925	20 Dispensing Tips, 25 Gauge
400095	20 Micro Brush Applicators, 22 Gauge
400092XL50	50 Dispensing Tips X-Long, 22 Gauge
100992	Endodontic Canal Irrigation Kit
400191YIOT50	50 Yellow Intraoral Dispensing Tips
100092	10 Disposable Syringes, 12ml and 1 Converter
400095XL50	50 Dispensing Tips, X-Long, 25 Gauge
100102	25 Automix Cartridge Mix Tips and 25 Intraoral Yellow Tips
400193	50 Intraoral Angular Tips, Size Fine
400194	50 Intraoral Angular Tips, Size Long XX-Fine
100117	25 Automix Syringe Mix Tips
100903	25 Automix Syringe Mix Tips and 25 Intraoral Fine Tips
100906	25 Automix Syringe Mix Tips and 25 Intraoral Long XX-Fine Tips
100911	25 Automix Syringe Mix Tips and 25 Intraoral Fine Tips and 25 Intraoral Long XX-Fine Tips
100912W	10 Detachable Manual Adapter, White
100912BLW	10 Detachable Manual Adapter, Blue - White
100912B	10 Detachable Manual Adapter, Black
4000970	S25 Dispenser for 25ml Cartridge
400097G	S25 Dispen ser for 25ml Cartridge







state of the art dental materials



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