Indirect Pulp Capping Placement

Dentistry courtesy of Dr. Ross Nash

Indirect pulp capping. Infected dentin is removed and affected dentin remains allowing for incremental layers of TheraCal LC to be placed.

TheraCal LC directly applied to preparation in 1mm incremental layers and manipulated into a smooth surface.

Each increment is light-cured for 20 seconds.

Surrounding enamel is etched using BISCO's SELECT HV® ETCH.

BISCO's ALL-BOND SE® is applied and light-cured.

Final prep after core build-up using BISCO's CORE-FLO™ DC.

Ordering Information

4 SYRINGE PACKAGE	**H-33014P**
4 Syringes TheraCal LC (1g ea.), Accessories, Instructions	
REFILLS	
1 Syringe TheraCal LC (1g), Accessories, Instructions	**H-3301P**
50 Black Disposable Syringe Tips (22 Gauge)	**X-80621N**

MC-2334TC

www.biolinkdubai.com

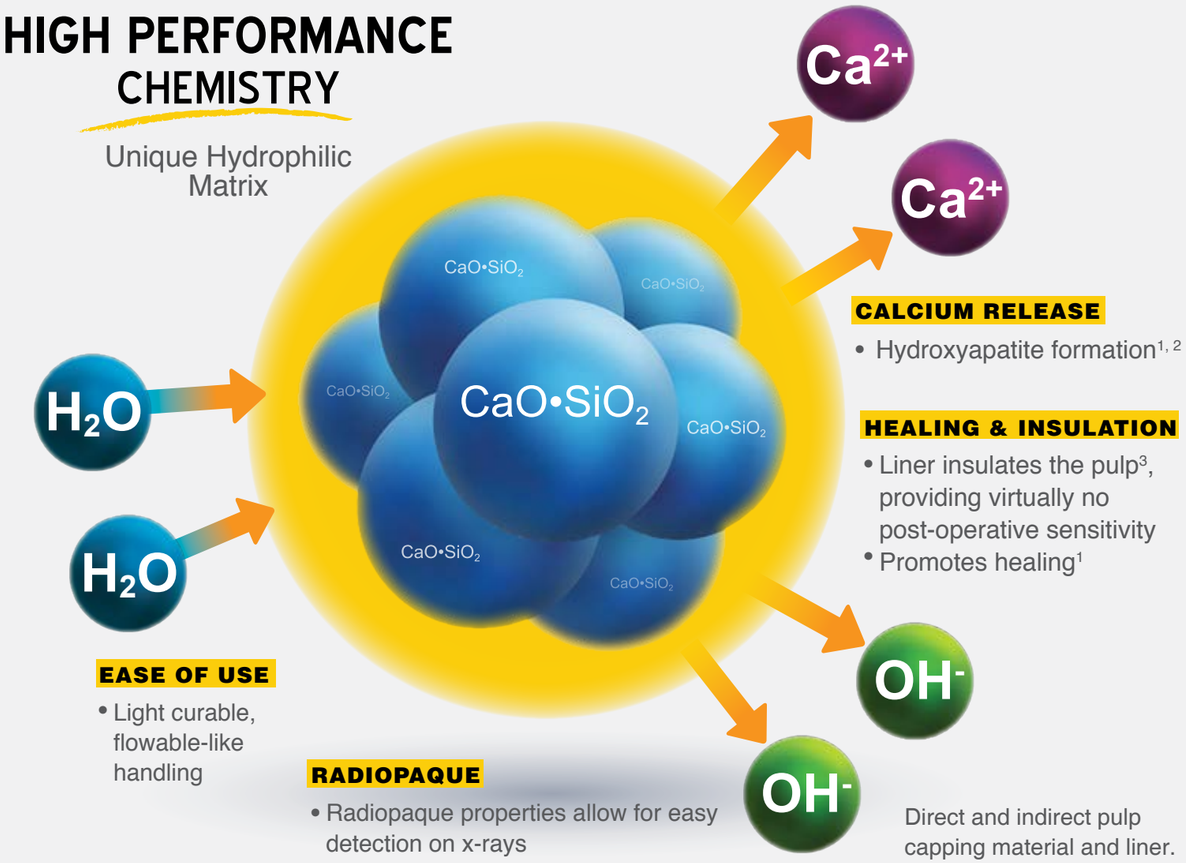
Seal and Protect with TheraCal LC Pulp Capping Material and Liner

Rx Only

www.biolinkdubai.com

HIGH PERFORMANCE CHEMISTRY

Unique Hydrophilic Matrix



CALCIUM RELEASE

- Hydroxyapatite formation[1, 2]

HEALING & INSULATION

- Liner insulates the pulp[3], providing virtually no post-operative sensitivity
- Promotes healing[1]

EASE OF USE

- Light curable, flowable-like handling

RADIOPAQUE

- Radiopaque properties allow for easy detection on x-rays

Direct and indirect pulp capping material and liner.

PHYSICAL PROPERTIES

	Shear Bond Strength* (MPa)	Radiopacity (mm Al)	Calcium Release (24 h)
TheraCal LC	4.4(2.9)	2.6	213 (µg/cm²)
Prisma® VLC Dycal®	0.9(0.9)	0.8	NA

* Visibly moist bonding.

Prisma and Dycal are registered trademarks of Dentsply Caulk.

1 ADA definitions for direct and indirect pulp capping at http://www.ada.org/en/publications/cdt/glossary-of-dental-clinical-and-administrative-ter

2 Apatite-forming Ability of TheraCal Pulp-Capping Material, M.G. GANDOLFI, F. SIBONI, P. TADDEI, E. MODENA, and C. PRATI J Dent Res 90 (Spec Iss A):abstract number 2520, 2011 (www.dentalresearch.org)

3 Selcuk SAVAS, Murat S. BOTSALI, Ebru KUCUKYILMAZ, Tugrul SARI. Evaluation of temperature changes in the pulp chamber during polymerization of light-cured pulp-capping materials by using a VALO LED light curing unit at different curing distances. Dent Mater J. 2014;33(6):764-9.

Advantages:

- Improved seal and bond to deep moist dentin
- Strong physical properties
- High radiopacity
- Significant calcium release

Support documents available - www.bisco.com

TheraCal LC Stimulates Apatite Formation

TheraCal LC is a light-cured, resin-modified calcium silicate filled liner designed for use in direct and indirect pulp capping, as a protective base/liner under composites, amalgams, cements, and other base materials. It can be used as a replacement for calcium hydroxide, glass ionomer, RMGI, IRM/ZOE and other restorative materials. TheraCal LC performs as a insulator/barrier and protectant of the dental pulpal complex.

The proprietary formulation of TheraCal LC consists of tricalcium silicate particles in a hydrophilic monomer that provides significant calcium release* making it a uniquely stable and durable material as a liner or base.

- Calcium release[1*] stimulates hydroxyapatite and secondary dentin bridge formation[2, 3]
- The alkaline pH promotes healing and apatite formation[2, 4]
- Significant calcium release[1] leads to protective seal[5, 7, 8]
- Forms a protective barrier that insulates the pulp[5, 6]
- Moisture tolerant[1] and radiopaque - can be placed under restorative materials and cements

A Protective Liner: Liquid Apatite at Your Fingertips

- A protective liner for use under restorative materials, cements or other base materials.
- Pulp capping agent: TheraCal LC may be placed directly on pulpal exposures after hemostasis is obtained. It is indicated for any pulpal exposures, including carious exposures, mechanical exposures or exposures due to trauma.

* BISCO has, on file, the calcium release data for TheraCal LC.

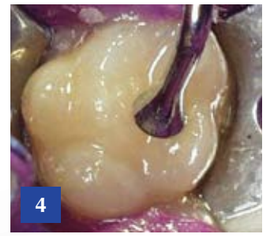
Direct Pulp Capping Placement

Dentistry courtesy of Dr. Mark Cannon

Hemostasis achieved prior to TheraCal LC direct pulp capping placement.

TheraCal LC applied directly to exposed pulp and light-cured in 1mm increments.

Etched, rinsed, and bonding applied.



Continued restoration of the tooth.

Final restoration.

1 Gandolfi MG, Siboni F, Prati C. Chemical–physical properties of TheraCal, a novel light-curable MTA-like material for pulp capping . International Endodontic Journal. 2012 Jun;45(6):571-9.

2 ADA definitions for direct and indirect pulp capping at http://www.ada.org/en/publications/cdt/glossary-of-dental-clinical-and-administrative-ter

3 Apatite-forming Ability of TheraCal Pulp-Capping Material, M.G. GANDOLFI, F. SIBONI, P. TADDEI, E. MODENA, and C. PRATI J Dent Res 90 (Spec Iss A):abstract number 2520, 2011 (www.dentalresearch.org)

4 Okabe T, Sakamoto M, Takeuchi H, Matsushima K (2006) Effects of pH on mineralization ability of human dental pulp cells. Journal of Endodontics 32, 198–201.

5 Sangwan P; Sangwan A; Duhan J; Rohilla A. Tertiary dentinogenesis with calcium hydroxide: a review of proposed mechanisms. Int Endod J. 2013; 46(1):3-19

6 Selcuk SAVAS, Murat S. BOTSALI, Ebru KUCUKYILMAZ, Tugrul SARI. Evaluation of temperature changes in the pulp chamber during polymerization of light-cured pulp-capping materials by using a VALO LED light curing unit at different curing distances. Dent Mater J. 2014;33(6):764-9.

7 Cantekin K. Bond strength of different restorative materials to light-curable mineral trioxide aggregate. J Clin Pediatr Dent. 2015 Winter;39(2):143-8.

8 Mechanical Properties of New Dental Pulp-Capping Materials Over Time. M. NIELSEN, R. VANDERWEELE, J. CASEY, and K. VANDEWALLE, USAF, JBSA-Lackland, TX, , J Dent Res 93(Spec Iss A): 495, 2014 (www.dentalresearch.org)