

THE DENTAL ADVISOR™

"Improving Patient Care Through Research & Education"

3M ESPE Protemp 4 Temporization Material + + + + 1/2

3M ESPE
800.634.2249
www.3mespe.com

EXCLUSIVE REVIEW

Description

3M ESPE Protemp™ 4 Temporization Material is a two-component composite with a new generation of fillers for fabrication of interim restorations. It is indicated for temporization of single- and multiple-unit crowns, bridges, inlays/onlays and veneers, including long-term provisional restorations. It is packaged in 50-mL automix cartridges and is available in five fluorescent shades: A1, A2, A3, B3 and Bleach. The introductory kit contains one cartridge of **Prottemp 4 Temporization Material**, dispenser, and mixing tips. Twenty-two editors used **Prottemp 4 Temporization Material** for more than 480 interim restorations. This product received a 92% clinical rating.

Editors' Observations

Manufacturer's Instructions

The introductory kit is well organized and contains the necessary materials to fabricate, repair and cement the interim restorations. Detailed written instructions as well as a quick reference technique card are included to facilitate fabrication of the provisional restorations.

Ease of Dispensing/Mixing Tip Shape and Size

Prottemp 4 Temporization Material extrudes smoothly from the dispenser through a mixing tip, which helps control the flow of the material directly into the matrix.

Viscosity /Flow/Lack of Bubbles and Voids

The material exhibits good flow into the matrix with very few bubbles in the mix.



Editors' Comments

- ◆ "Prottemp 4 Temporization Material is easy to use and produces a very strong and durable temporary restoration."
- ◆ "Superior marginal detail and resistance to distortion/tearing."
- ◆ "The material's gloss is adequate without polishing for posterior provisional restorations; anterior restorations need minimal polishing."
- ◆ "Shades are good but are bright (high value) and opaque."
- ◆ "Sticks to adjacent teeth."

It also adapts well to the prepared tooth and captures margin detail. Editors commented that **Prottemp 4 Temporization Material** sticks to adjacent teeth and occasionally is difficult to remove after it has been in the mouth for the recommended time (1 minute 40 seconds after start of mixing).

Working/Setting Time

Working time is sufficient even for multiple interim restorations; however, many editors would prefer a slightly faster setting time. One concern was the need to keep the interim restoration in the matrix after removal from the mouth for five minutes before trimming and adjusting. Five minutes is recommended to achieve optimum esthetic properties.

REPRINT

EDITORS

John W. Farah, D.D.S., Ph.D.
John M. Powers, Ph.D.

EDITORIAL BOARD

Peter Yaman, D.D.S., M.S.
William A. Gregory, D.D.S., M.S.
Santine Anderson, D.D.S.
Sabiha Bunek, D.D.S.
Lori Brown, D.D.S.
Brent Kolb, D.D.S.
Nizar Mansour, D.D.S.
Charles I. McLaren, D.D.S., M.S.
Kathy O'Keefe, D.D.S., M.S.
Thomas Poirier, D.D.S.
John Shamraj, D.D.S.
William T. Stevenson, D.D.S.
Robert Stevenson, D.D.S.
Victoria Thompson, D.D.S.
David Traynor, D.D.S.
Gytis Udrys, D.D.S.

EXECUTIVE TEAM

Mary E. Yakas, B.A., CMC
Annette M. Frederick
Jennifer Kalasz
Pari Karani
Jackie Farah, M.A.Ed.
Jennifer Lill, M.A.Ed.
Tony Malmsten
John A. Molinari, Ph.D.
Tricia G. Price
Nelson Williams
Ron Yapp, M.S.

PUBLISHER

Dental Consultants, Inc.

Please send inquiries and address changes to: **THE DENTAL ADVISOR**
3110 West Liberty, Ann Arbor, MI 48103
Call: 800.347.1330 • 734.665.2020
Fax: 734.665.1648
E-mail: info@dentaladvisor.com
Web Site: www.dentaladvisor.com

No unauthorized duplication or reprints may be made. Inquiries concerning duplication may be directed to the publisher.

Copyright ©2009, Dental Consultants, Inc. All rights reserved. Printed in the U.S.A. (ISSN 0748-4666) by Print-Tech, Inc.

Ratings

Excellent	+++++
Very Good	++++
Good	+++

Lack of Oxygen-inhibited Layer

The presence of an oxygen-inhibited layer was not a consistent finding during this evaluation. Editors were almost evenly split, with some reporting that there was a minimal oxygen-inhibited layer, while the others described the sticky layer to be the same or worse than that of other products. The oxygen-inhibited layer was reported to be easily removed with alcohol. When the temporary was kept in the matrix for the recommended five minutes after removal from the mouth, the presence of an oxygen-inhibited layer was minimized.

Fit of Restoration/Strength/Resistance to Fracture

The interim restorations had very good fit, particularly the marginal adaptation, to the prepared teeth. *Protemp 4 Temporization Material* can be trimmed easily without cracking or chipping, and it seems to have more flexibility than other products. The strength is more than adequate for single-unit provisional restorations and small bridges. There were a few reports of fractures with fixed partial dentures.

Final Shade Match/Esthetics of Restoration

In general, the editors were satisfied with the esthetics of *Protemp 4 Temporization Material*; however, most remarked that the shades were consistently lighter than the labeled Vita shades. Additionally, the shades were reported to be opaque. The final interim restorations required very little polishing, which is an improvement over most other similar materials.

Clinical Tip

- Use *Filtek Supreme XT Flowable Restorative* to repair the temporary when needed.

Editors' Note: *3M ESPE Protemp 4 Temporization Material was evaluated as Protemp Plus Temporization Material. The Protemp 4 brand is used everywhere except the United States and Canada. ■*