

ENDODONTIC CEMENTS



THIXOTROPIC
DIMENSIONAL
HERMETIC SEAL
RADIOCOMPACTIVITY
BIOCOMPATIBILITY



HERMETIC seal, proven
BIOCOMPATIBILITY
and excellent
RADIOCAPACITY



EXPERIENCE

Proclinic Expert MTA (Mineral Trioxide Aggregate)

Biocompatible endodontic restorative cement containing mineral oxides in the form of white, hydrophilic, bioactive, radiopaque and sparingly soluble particles.



Comments from consultants at "The Dental Advisor"

- "Ideal for pulpotomy"
- "Excellent results in perforations"
- "Radiopaque; easily identified in X-rays"

COMPOSITION

Tricalcium silicate / Dicalcium silicate / Tricalcium aluminate
Lime-/Bismuth oxide-free



Dr Eduardo González Arroyo
Clínica Fernández
www.oralsturgerytube.com
Dental council registration No.: 28007247

"Thanks to its easy handling during preparation, **Proclinic Expert MTA** has excellent setting and stability properties. It is a material that meets the expectations of even the most demanding dentists."

PROVEN RESULTS

Proclinic Expert MTA ensures a long-lasting hermetic seal and a biological restoration.

HERMETIC SEAL

0.3% 0.12%

Reduced expansion

Reduced dimensional change

ANTI-MICROBIAL POWER

Initially at pH 10 after mixing with water, it settles to pH 12 after 3 hours, creating an antimicrobial alkaline environment

COMPRESSIVE STRENGTH

40 MPa

Withstands large occlusal forces

MOISTURE TOLERANT

Optimal long-term results even in moist conditions

BIO-COMPATIBLE

Minimises the risk of adverse effects and promotes biological repair by releasing calcium and phosphate ions, which are biocompatible with the main molecules found in dental tissues

BIO-CERAMIC

Made from pure materials, free from contaminants or harmful ingredients

	Solubility	Radiopacity
Proclinic Expert MTA	0.1-1%	7.17mm
ISO 6876	< 3%	> 3mm

Technical data compared with ISO standards

AN EXCELLENT RESPONSE IN CLINICAL TESTS



Proclinic Expert MTA
++++ ½

THE DENTAL ADVISOR
www.dentaladvisor.com

RATINGS:
Excellent +++++
Very Good ++++
Good +++

201 | tests in
clinical
applications

91% | satisfaction

85% | of consultants
consider it
**TO BE AS GOOD AS OR
BETTER THAN**
| other brands

KEY FEATURES

	Poor	Satisfactory	Good	Very good	Excellent
Container					
Easy to mix					
Working time					
Retention					

CONSULTANTS WHO WOULD:

Change to
Proclinic Expert MTA 81%

Recommend
Proclinic Expert MTA 88%

INDICATIONS

1 VITAL AND NECROTIC PULP TREATMENTS

- Direct pulp capping.
- Pulpotomy



Initial X-ray



60 days later

2 RESTORATION OF ROOT CANAL PERFORATIONS

- Root perforations (canals and furcations).
- Root perforations due to internal root resorption



Initial X-ray

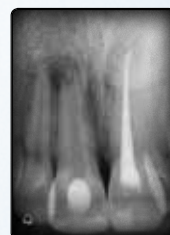


3 years later

Clinical case studies carried out by Dr Leandro Pereira

3 ROOT APEX TREATMENTS

- Apexification / Apexogenesis.
- Retrograde filling



Initial X-ray



18 months later



STATE OF THE ART

Proclinic Expert Root Canal Sealer

Radiopaque cement indicated for permanent root canal fillings in combination with gutta-percha points. Comprised of a two-component epoxy/amine resin paste containing insoluble, antibacterial macromolecules.

COMPOSITION

Epoxy resin
Zirconium oxide / Silica



Dr Mijail Solomonov

Director of the post-graduate endodontic programme,
Department of Endodontics, Hospital Sheba,
Tel Hashomer, Israel.

“From my point of view, the use of insoluble macromolecules to prevent biofilm formation can take coronal sealing techniques to a new level.”

Dr Larisa Chepinskaya
Smile Plus Clinic, Kiev.

“I used a well-known epoxy resin sealer for gutta-percha techniques for a long time. A few years ago I decided to try some newer materials, such as **Proclinic Expert Root Canal Sealer**, which contains antibacterial particles. Its relatively high viscosity and wettability means it adheres to canal walls magnificently and there is a minimal layer between gutta-percha cones.”



SCIENTIFIC STUDY



Dr Tal Becker

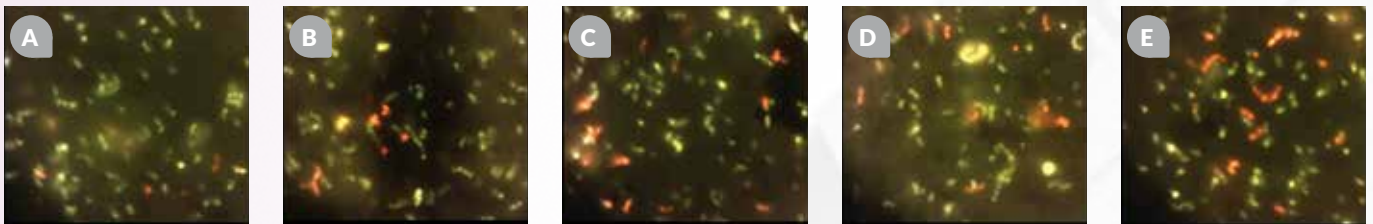
The Maurice and Gabriela Goldschleger School of Dental Medicine,
Tel Aviv University

Dr Becker presented the poster "Antibiofilm Activity of Epoxy Sealer with Quaternary Ammonium Macromolecule" at the International Association for Dental Research/Pan European Regional Congress 2016.

The incorporation of quaternary ammonium macromolecules onto epoxy sealer discs may be an effective method for preventing new bacterial biofilm formation in treated root canals.

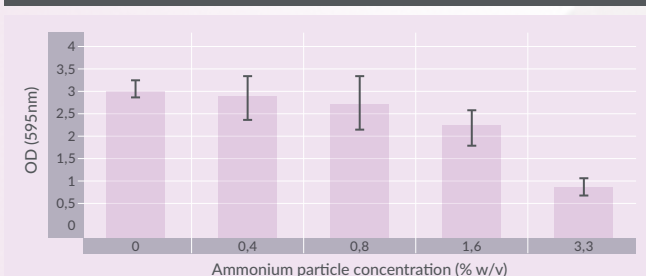
The antibacterial effect of **Proclinic Expert Root Canal Sealer** combined with quaternary ammonium macromolecules and their ability to inhibit new biofilm formation was evaluated in an existing *Enterococcus faecalis* biofilm.

Incorporation of these macromolecules produced significant reductions in new biofilm formation of between 25% and 72% and reductions in existing biofilm viability of 20% to 36%.



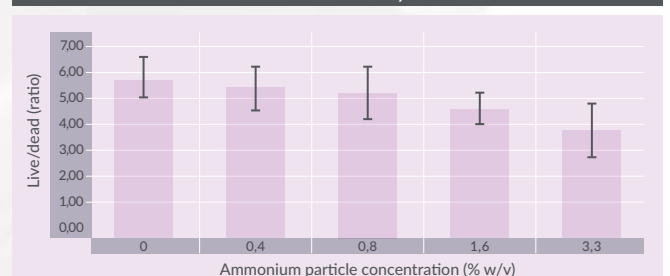
Fluorescence microscopy images of live (green) and dead bacteria (orange/red) taken at different concentrations of quaternary ammonium incorporated onto epoxy sealer discs:
A) control group (0%); B) 0.4% w/v; C) 0.8% w/v; D) 1.6% w/v; E) 3.3% w/v.

Effect of quaternary ammonium particle concentration on *E. faecalis* biofilm formation.



Mean results (± SD) for *de novo* biofilm formation at the quaternary ammonium concentrations incorporated onto epoxy sealer discs and for the control (0, 0.4, 0.8, 1.6 and 3.3% w/v). Results correspond to the optical density (OD) measured at 595nm.

Effect of quaternary ammonium particle concentration on *E. faecalis* biofilm viability.



Mean results (± SD) for the effect of different concentrations of quaternary ammonium incorporated onto epoxy sealer discs and in the control (0, 0.4, 0.8, 1.6 and 3.3% w/v) on biofilm viability. Results are expressed as the live/dead bacteria ratio.

OUTSTANDING, LONG-LASTING SEAL

Proclinic Expert Root Canal Sealer

gives a hermetic seal with long-lasting strength thanks to its excellent solubility and outstanding dimensional stability.



Proclinic Expert
Root Canal Sealer



Conventional
epoxy resin-based
root canal sealer



COMPATIBLE WITH ANY TECHNIQUE

OBTURATION TECHNIQUES

Proclinic Expert Root Canal Sealer is compatible with either standard or warm gutta-percha obturation techniques. In the case of warm gutta-percha, it can be applied using:

THE VERTICAL CONDENSATION TECHNIQUE

by Dr
Schilder and Dr Machtou

TECHNIQUE CONTINUOUS WAVE OF CON- DENSATION

by Dr Buchanan

TECHNIQUE COMBINED following the method by Dr Solomonov

	Solubility	Dimensional change, %	Fluidity in mm
Proclinic Expert Root Canal Sealer	Less than 0.3% by mass	2.1%	38mm
Conventional epoxy resin-based sealer / Market leader	Less than 0.3% by mass	6.3%	36mm

SETTING
TIME
INITIAL FINAL
10' ⇒ 15'

CLINICAL
EXPERIENCE
over 20 years
PROVEN

THE DENTAL
ADVISOR
Improving Patient Care Through Research & Education
++++ ½



Proclinic Expert MTA

- Long-lasting hermetic seal.
- Excellent obturation of root perforations (in canals and furcations).
- Biological repair guaranteed.

Proclinic Expert MTA has a short setting time and does not need to be fully cured before proceeding with treatment.

Proclinic Expert MTA 1g (1g powder + 3ml distilled water) - Ref. 78551



ACTION
BIO
safe
ANTIBACTERIAL

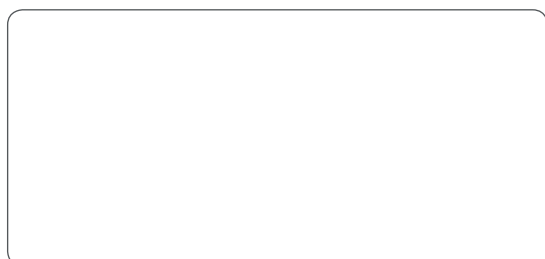
Proclinic Expert Root Canal Sealer

- Radiopaque epoxy/amine resin cement.
- Long-lasting hermetic seal.
- Antibacterial action.

Proclinic Expert Root Canal Sealer comes in automix syringes with intra-oral tips that adapt to the root canal shape. No hand mixing is required – this ensures a homogeneous consistency and easy, clean, waste-free application.

Proclinic Expert Root Canal Sealer. 1 x 10g syringe, 10 mixing tips, 10 intra-oral tips, 1 mixing pad - Ref. 78550

| www.proclinic-products.com | info@proclinic-products.com |



 **proclinic**
EXPERT