

 **SILMET**  
Pro-Line Catalog



Nine PROGLASS™  
Silver PROBASE™ PROFil™  
PROLink™ SE PROSilver™ PROEtch™ PRODERMA DEN™  
SPHERODON-M® LC PROGLASS™ Plus PROGLASS™  
PROGLASS™ Nine PROGLASS™ Two PROGLASS™ Plus PROGLASS™  
Silver PROBASE™ PROFil™ PROFil™ flow PROFil™  
PROLink™ SE PROSilver™ PROGLASS™ PROGLASS™  
SPHERODON-M® PROGLASS™ Two LC PROGLASS™ Plus PROGLASS™  
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Silver PROBASE™ PROFil™ PROFil™ flow PROGLASS™

## About us

Silmet Ltd. was established in 1967 specializing in Dental Amalgam manufacture. Throughout the years the company positioned itself as a preferred source for Private Label and OEM amalgam products by many dental manufacturers.

From the onset, the Silmet production site was designed for mass production using cutting edge technology, advanced automatic machinery and monitoring systems to guarantee supply of high quality products.

Today Silmet is among the only dental manufacturers that produce in house a full range of restorative materials: Amalgam, Composites, Dental Adhesives, Glass Ionomer restoratives and luting cements. ProLine range of affordable products provides advanced solutions for virtually every restoration indication, and enhances the dentists practice.

Nearly Ten years ago, leading branded dental companies started differentiating the products by creating too many sub-categories in an attempt to maximize profit.

Although some of the new categories were true milestones, numerous products were introduced into the market prior to having sufficient clinical trial evidence.

As an OEM specialist, Silmet was able to observe this new market trend and identify the negative effect it might have on dentists, who were confronted with a daily dilemma about which products to choose. Silmet's ProLine, a complete line of restorative products focuses on presenting optimal balance between the average dentists' true daily needs, and affordable value.

The company's new Glass Ionomer line of capsules positions Silmet among the very few worldwide prestigious companies possessing the knowledge for production and manufacture of this type of advanced presentation. The use of this advanced capsule with a paste/paste system as replacement for dual syringe is being investigated.

→ **Glass Ionomer**

Composite

Bonding Agent

Amalgam

Other





Tailored to offer a wide range of restoration and cementation solutions, **Luer Lock Cap GI Capsule** features a variety of interchangeable tips designed to increase the ease of using Silmet's **ProGlass**<sup>™</sup> GIC line of products. This **new innovative** Capsule (patent pending) positions Silmet as one of few companies in this industry introducing GIC in capsule form.



# PROGLASS™ Nine

**ProGlass™ Nine** is an esthetic, condensable classical glass-ionomer restorative cement. The ingredients are based on a barium calcium fluoro-aluminosilicate glass, poly (acrylic acid) and tartaric acid. **The difference in setting is based on post-firing deactivating processing of the glass contained in ProGlass™ Nine.**

## Features

- Condensable viscosity
- High wear resistance
- Thicker consistency, for easy packing
- Early resistance to water uptake
- Excellent radiopacity, ensuring easy postoperative diagnosis
- Chemical bonding, no etching guaranty perfect marginal seal

## Physical Properties

- Net setting time **3.30 min.**  
Capsules feature shorter setting time **< 3.00 min.**
- Flexural Strength **> 140 MPa**
- Compressive Strength **> 225 MPa**
- Radiopaque



ProGlass™ Nine is the first to be available with Luer Lock Capsule, introducing an improved material with a non-sticky consistency.



Notes: .....

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# PROGLASS™ Plus

ProGlass™ Plus, a resin modified glass ionomer luting cement designed for final cementation of metal, porcelain-fused-to-metal and ceramic crowns, bridges, inlays and onlays. ProGlass™ Plus combines the advantages of Glass Ionomer with the benefits of Resin chemistry. First Choice in order to avoid post operative sensitivity and marginal discoloration.

## Features

- Higher bond strengths than conventional glass ionomer cements
- Error free cementation procedure
- Higher bond strengths than conventional glass ionomer cements
- Moisture tolerant during placement
- Stress free cementation
- Excellent biocompatibility to tooth structure and soft tissues
- Fluoride release

Notes: -----

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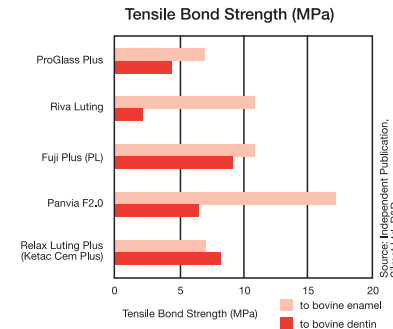
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## Physical Properties

- Film Thickness <15 μ
- Flexural Strength > 40 MPa
- Compressive Strength > 140 MPa
- Radiopaque



Source: Independent Publication, Silmet Ltd, 1980

# PROGLASS™ One

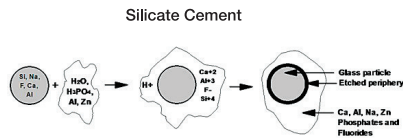
ProGlass™ One, a conventional self curing glass ionomer luting cement, chemically bonds to metal substrates and the tooth. It releases substantially higher fluoride to assist with remineralization of the natural dentition. These include the formation of fluorapatite, a more acid resistant than hydroxyapatite. ProGlass One does not contain resin eliminating the problem of volumetric shrinkage after curing.

## Features

- Sufficiently strong
- No surface preparation or bonding agent
- Minimizes microleakage
- Easy seating of restoration
- Superior longevity and restoration integrity
- No need for primer or adhesive
- Fluoride release

## Physical Properties

- Net setting time 3 - 5 min.
- Radiopaque
- The setting of ProGlass One is retarded by eugenol (from eugenol-based deep lining products).
- The individual components of ProGlass One (powder and liquid) should not be substituted for or by the components of other ionomer products.



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# PROGLASS™ Two LC

ProGlass™ Two LC is specially formulated with smaller particles that make it ideal for restorative fillings and other secondary indications such as liner and base. **ProGlass Two LC does not contain Bisphenol A (including its derivatives)**. It has a very low acid erosion value, improving the longevity of the restoration, resisting disintegration and wear caused by oral acidity.

## Features

- Light cured for ease of operation
- Excellent chemical adhesion
- Simplified clinical procedure
- Exceptional mechanical properties
- Fluoride release
- Designed primarily as a restorative material for use in Class III, V and deciduous teeth.
- More than 4 shades

## Physical Properties

- Working time 2 – 4 min.
- Diametrical Strength > 80 MPa
- Compressive Strength > 200 MPa
- Radiopaque



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Available also in a self cure version:  
ProGlass™ Two is an economical  
Glass Ionomer filling solution.



# PROGLASS™ Silver

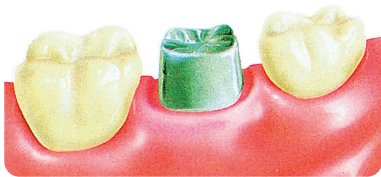
ProGlass™ Silver is a mercury free fluoride releasing silver restorative. Designed to offer strong abrasion resistance, ProGlass™ Silver offers a unique blend of spherical silver-tin alloy with glass ionomer, providing an ultimate balance between working and setting time. ProGlass™ Silver is ideal for lasting core build-ups, block-outs.

## Features

- Unique blend of 100% spherical silver-tin alloy with glass ionomer
- Versatile clinical application
- Strong abrasion resistant
- Optimal level of radiopacity
- Fluoride Release

## Physical Properties

- Net setting time 4 min.
- Diametral tensile strength >15 MPa
- Compressive Strength >150 MPa
- Radiopaque



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# PROBASE™

ProBase™ is a light cured reinforced glass-ionomer cement designed for use as a liner-base material. ProBase can be used under any kind of restorative material and is the perfect choice for isolating and protecting the pulp.

## Features

- Flouride release
- Strong adhesion to dentin
- Light cure command set
- Excellent radiopacity
- Biocompatible
- Good mechanical properties

## Physical Properties

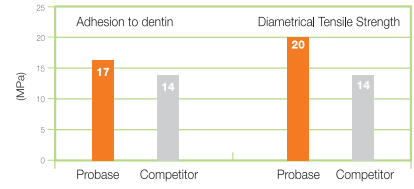
- Recommended setting time **20 sec.**
- Depth of cure > **4mm**
- Compression strength > **110 MPa**
- Diametral Tensile Strength > **20 MPa**
- Flexural Strength **44 MPa**



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Implementing Sandwich Technique with RMGI



\*The competitor product is Vitrabond from 3M ESPE.

Glass Ionomer

→ **Composite**

Bonding Agent

Amalgam

Other



Reproducing well-balanced color harmony is one of the greatest challenges in prosthetic and restorative dentistry. Patients demand **esthetic restorations** that are indistinguishable from the natural tooth structure, and preferably that also improve on nature. **ProFil™ offers predictable esthetics** for all direct restorations and makes it possible to balance dental science and the artistry of a patient's smile in all clinical direct restorative cases.

**ProFil™** gives the clinician **the ability to optimize esthetics** for direct composite restorations. The availability of universal, opaque and translucent shades makes it possible to restore cavities using either a single or **multi-shade layering technique**.





# PROFil™ SILMET

ProFil™ Micro Hybrid Composite Resin offers the latest in Nano Technology. Profil is designed for minimizing polymerization shrinkage by high density inorganic fillers loading, thus shows excellent marginal sealing and surface texture.

## Features

- Light cured, radiopaque & color stable
- Low polymerization shrinkage
- Reduced sensitivity to ambient light
- High polishability
- Non sticky formula, easy to apply & sculpt
- Fast placement technique & optimal balance of physical properties
- High strength & wear resistance

## Physical Properties

- Sensitivity to ambient light > 100 sec.
- Weight of total inorganic filler 78%
- Volume of total inorganic filler 59%
- Depth of cure > 1.5 mm
- Compressive strength > 230 MPa
- Flexural Strength > 120 MPa
- Water Absorption < 40 µg / mm3
- Solubility < 7.5 µg / mm3



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“Blends and polishes well.”\*  
“Opaque shades are very effective at covering dark dentin or metal!”\*  
\* The Dental Advisor, Volume 26, No.8





# PROFil™ Flow

ProFil™ Flow is a visible-light activated, radiopaque, flowable composite. The excellent flowable consistency characteristics makes ProFil Flow an ideal composite for filling cavities. ProFil Flow offers high compressive and tensile strength for optimal wear resistance based on the advanced resin technology of ProFil.

## Features

- Low viscosity
- No oozing or slumping
- Perfect for minimal invasive restorations
- Excellent esthetic properties
- Low shrinkage
- High polish retention & stable color match
- Long term fluoride release

## Physical Properties

- Sensitivity to ambient light > 60 sec.
- Weight of total inorganic filler 60%
- Depth of cure Above 1.5mm
- Flexural Strength > 80 MPa
- Water Absorption < 40.5 µg / mm<sup>3</sup>
- Solubility < 7.5 µg / mm<sup>3</sup>



Notes: -----  
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\*coming soon

“Polishes very well”  
 “Flows well and seems to adapt well to tooth surface”  
 “Good Viscosity, stays in place”  
 \* The Dental Advisor, Volume 26, No.8

Glass Ionomer

Composite

→ **Bonding Agent**

Amalgam

Other



“The selection of the volatile solvent in the bond system influences the moisture of dentin surface required for **ideal results**. Since alcohol is lighter than water, alcohol based systems require an extremely dry surface. **Acetone-based** adhesives such as ProLink™, **work best on a slightly moist surface** because acetone is drawn into the tubules through a moist surface.” Dr. Lev Nudelman, DDS





# PROLink™

ProLink is a single step bonding agent that delivers outstanding shear bonding values to dentin, enamel & all popular light, dual or auto-cure composites.

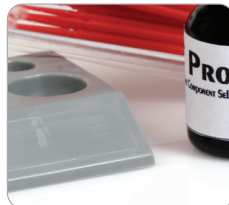
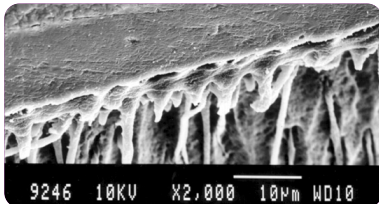
ProLink utilizes advanced Colloidal Glass Technology to provide a first class dental adhesive.

## Features

- Over 10 years of proven clinical experience
- Primer & Adhesive combined in 1 bottle
- Perfect marginal integrity
- Increased adhesion & durability
- Minimal treatment time

## Physical Properties

- Shear bond strength to etched bovine Enamel > 28 MPa
- Shear bond strength to etched bovine Dentin > 20 MPa
- Shelf Life 2 years



Notes: .....

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# PROLink™ SE

ProLink™ SE is a super quick adhesive saving valuable chair time: no need to neither etch the dentin or to wash it off. Once cured, you can immediately place your restorative. You can't over dry or over etch when using ProLink SE. Therefore, post-operative sensitivity will not occur. ProLink SE's low film thickness provides an invisible margin between the restoration and the tooth.

## Features

- Self etching one component dentin /enamel bonding agent
- Latest advancements in Nano Technology
- Excellent bond with any self-cured, visible light-cured or dual-cured composites
- Quick and easy solution, maximizing patient comfort

## Clinical Hints

- Teeth can be moist or dry – avoid pools of water or over drying.
- Rinse profusely with water and reapply the self-etching bonding agent, If contamination of Hemostatic agents or caries detectors of etched tooth occurs
- Avoid eugenol-based provisional materials.
- Wait one week after bleaching before a bonding procedure. Color of bleached tooth may rebound during this time as well.



Dental Products Report, Issue 10/2010, Volume 44

Notes: \_\_\_\_\_  
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Seventh-generation bonding agents use the smear layer as a bonding substrate. Because the etched surface is not rinsed, the demineralized smear layer is incorporated into the hybrid layer.



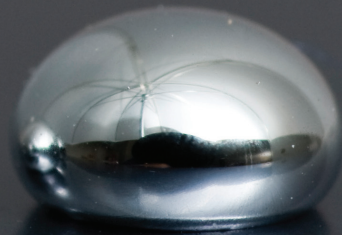
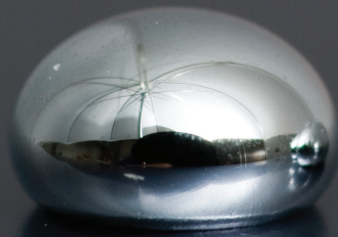
Glass Ionomer

Composite

Bonding Agent

→ **Amalgam**

Other



Amlgam is still used in the majority of dental practices and continues to remain **the most widely used** direct posterior restorative material by dentists. Important considerations in the selection of an amalgam alloy are the type of amalgam and its **physical properties**, handling characteristics, and clinical performance over time. Probably the most useful characteristic to consider when selecting an alloy is the way it handles during condensation and carving. Silmet offers a **wide range of solutions** from where you can find the amalgam of your choice.

**Fact:** FDA has spent decades analyzing scientific literature on the safety of dental amalgam products. Finally **FDA declared** that there exists no meritorious scientific evidence to indicate that the use of dental amalgam products will result in adverse health effects. **The benefits of these products** clearly outweigh their potential risks.



# NOGAMA<sup>®</sup>

Dispersed Phase Alloy 69.5%Ag. Similar to DISPERSALLOY  
Nogama<sup>®</sup> is an admix of spherical, copper-silver eutectic particles and lathe-cut conventional alloy.

## Features

- Silver shining surface
- Supreme marginal adaptability
- Excellent durability
- Firm pack & smooth carving

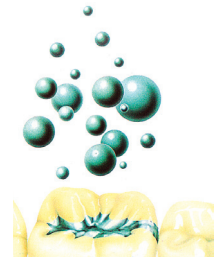


# PROSilver<sup>™</sup>

67.9% Silver , homogenized dispersed spherical particles.  
Zinc free alloy, Non gamma 2 amalgam.

## Features

- Homogenized blend of two total spherical powders
- High content of Silver & Copper evenly dispersed
- The average composition of the two spherical powders are with in the range of traditional high silver dispersed phase amalgam



# SILMET SPHERODON-M®

Admix Alloy 45.5% Ag. Similar to GS-80  
Spherodon M® provides excellent stability, enhanced corrosion resistance and reduced ditching.

## Features

- Outstanding dimensional stability
- Improved marginal integrity
- More body & easy condensation versatility
- Best seller, economical solution



# SILMET ProCopper™

40% Ag admix of spherical & irregular particles with same composition. Zinc free alloy, Non gamma 2 amalgam.

## Features

- 70% high strength lathe cut alloy
- Suited for dentists who prefer the “Feel” of a high quality conventional amalgam with sufficient condensation mobility to enable easy packing



# SPHERODON+®

100% Spherical Alloy, 60% Ag

Similar to TYTIN

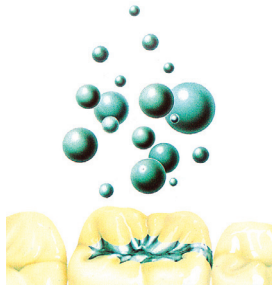
Spherodon+® is a single composition ultra-fine spherical ternary alloy.

## Features

- Superb compressive and tensile strength
- Decreased micro leakage
- Extra low mercury alloy ratio

## Physical Properties

- Composition Ag 60.5%, Sn 28%, Cu 11.5%
- Creep (7 days) 0.62%
- Dimensional Change +0.01%
- Compressive Strength 1hr > 171 MPa
- Compressive Strength 24hr > 485 MPa



Notes: .....

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# ADDITIONAL SERVICES

Our Multi chambered manufacturing plant for amalgam production is equipped with a computerized quality control laboratory, automatic amalgam capsule production lines for Non Gamma dispersion amalgams. Special emphasis is put on particle size distribution, particle shape and heat treatment.

The range of powders include Spherical / Lathe Cut with 40%-70% silver contents.

We can develop compositions to match any brand preferred within your territory or by your clients.

## Packaging and Presentation

- **Capsules:** We offer a variety of capsule types and colors to support our customers' unique identity.  
Packed in boxes or jars of 50, 100, 250 or 500 (1, 2 & 3 spill), as well as bulk packaging.
- **Powder:** Bottles of 30gr, 100gr, 155gr, 250gr, 1kg.
- **Tablets:** 10 vial packages (total 155.5gr) and Duet presentations.



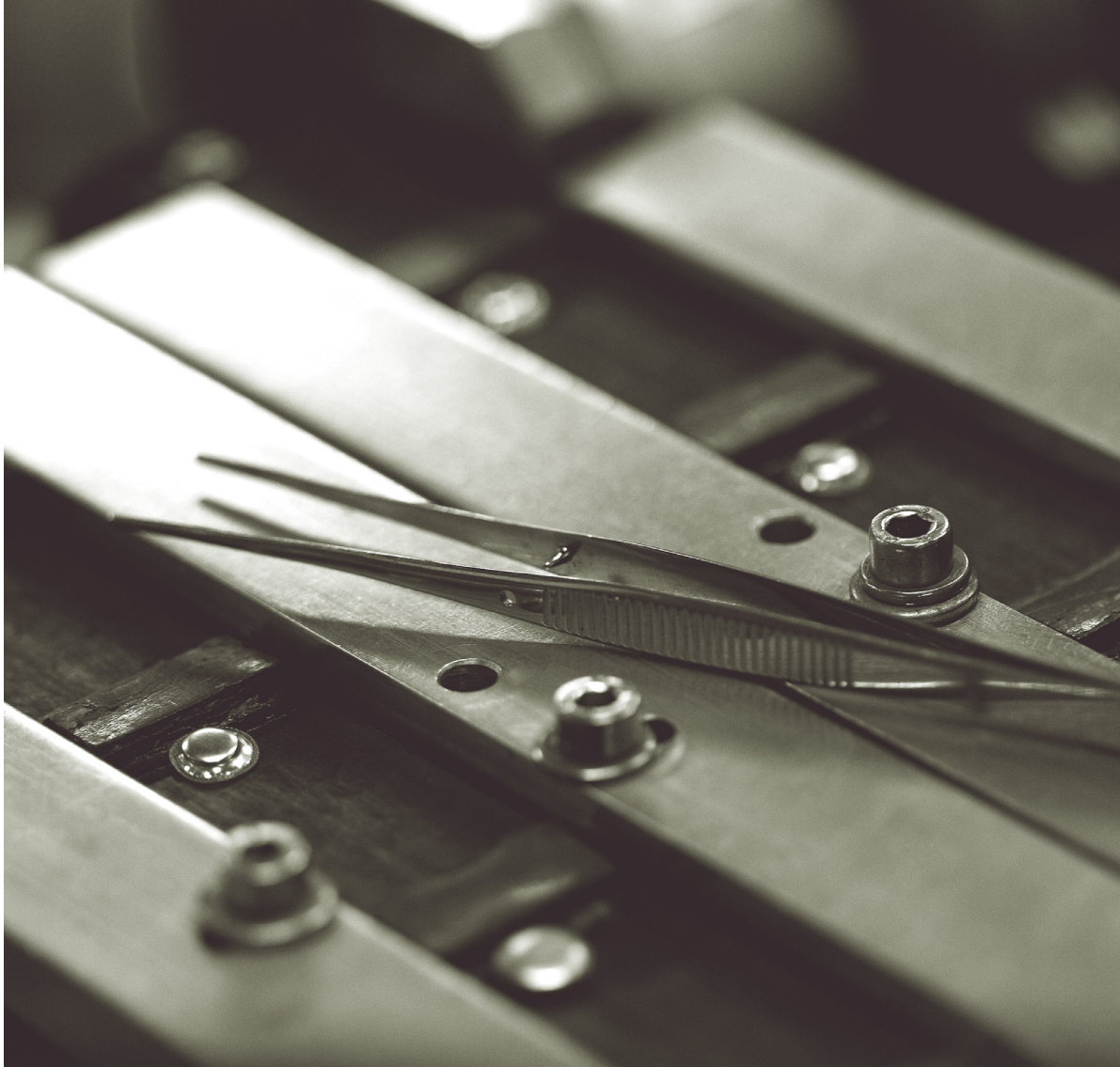
Glass Ionomer

Composite

Bonding Agent

Amalgam

→ **Other**



Silmet provides **quality and timeless** products for your daily restorative procedures. It is our responsibility to constantly search and research for products that can accommodate Proline to meet your **high standard** of quality. In this section you will find a range of products all of which are recommended for achieving **best** compatibility performance with **Proline**.



# PROETCH™

ProEtch™ is a 37% phosphoric acid gel offering excellent viscosity for precise application. ProEtch's disposable Tip can be angled to facilitate easy & accurate placement of the gel even in distal & lingual composite preparations.

## Features

- High quality, non drying, medium viscosity gel
- Stays put, does not run
- Disposable tips save time and are more sanitary
- Washes off quickly & easily
- Excellent water solubility
- Visible color



# PROFIL™ Temp

ProFil™ Temp is a ready to use temporary filling material with a synthetic resin base and plaster filler, providing an impermeable seal. ProFil Temp features a two stage setting mechanism providing a rapid initial set followed by hardening of the plaster filler. ProFil Temp is available in standard and high viscosity versions.

## Features

- Similar to Cavit
- Adequate strength yet easily removed
- Two stage setting
- Good adhesion to dentine
- Excellent marginal adaptation
- Easy to use and place



# SECURALIGHT™

SecuraLight™ LED light cure is designed for polymerization of dental composites and restorative materials containing Camphorquinone (CQ) Photoinitiators. Combining advanced technology and stylish appearance, this slim light cure is ergonomically designed for user's comfort and flexibility.

## Technical parameters:

- Handle size (excluded light guide):  
**Diameter 23X158mm**
- Power supply: **100-240V AC 50/60Hz**
- Input power: **5W**
- Lithium battery: **3.7V 2200 mA**
- Spectrum range: **460-470nm**
- Light intensity: **≥1800mW/cm2**
- Battery life:  
**1.5 million treatments (20seconds)**
- Full charge one time can be used:  
**250 treatments**
- Charging time: **about 5-6 hours**

2 YEARS WARRANTY



# SECURAMAT™

SECURAMAT™ is a universal mixer for Amalgam, Glass Ionomer, cements and other pre-dosed materials. SECURAMAT enables customized trituration-time availability.

## Features

- Touch pad selector and digital LED display
- Pre-programmed time settings
- Special pin for opening ultrasonically welded capsules
- Mixing fork with proven life cycle
- Sealed mix area
- Superb accuracy for more consistent mixing
- Elegant ergonomic design





# PRODERMA DENT<sup>®</sup>

ProdermaDent™ is an intensive nourishing hand cream uniquely formulated for the relief of dry hands caused by frequent use of latex gloves. ProdermaDent was developed in collaboration with Dead Sea Laboratories who are known for their AHAVA skin care line widely marketed in N. America, Europe, S. America and Asia

## Features

- Restores skin moisture
  - Improves clinical parameters of Seborrheic Dermatitis and Xerosis
  - Revitalizes and rejuvenates the skin
  - Retains the delicate balance of minerals in the epidermis
  - Hypo Allergenic
  - All ingredients are INCI Safety Approved
- Ingredients

## Ingredients

- Natural Dead Sea Mud for replenishment & rejuvenation
- Desert – Scented Jojoba Oil for moisturizing hand skin
- Aloe Vera and Allantoin gel for soothing irritated skin
- Vitamin E for impeding skin aging
- Botanical extracts & oils that stabilize skin pH levels



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Silmet Ltd and Dead Sea Laboratories Ltd (manufacturers of the AHAVA line of skin products) jointly developed ProdermaDent™.

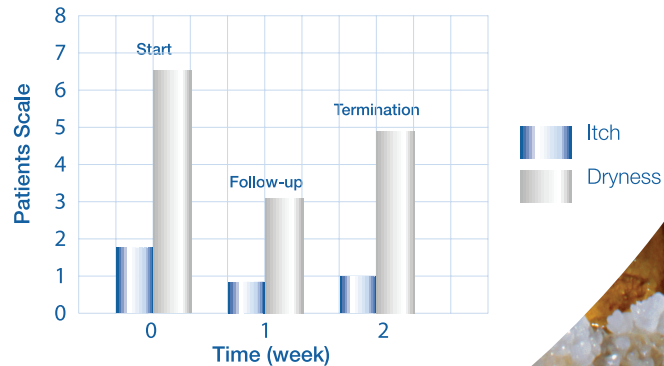
## Clinical performance

ProdermaDent™ patented formula delivers long-lasting moisture and soothing therapeutic relief to dry irritated skin. Independent clinical tests have shown that after 14 days of use there was:

- 83% improvement in level of skin dryness and cracking
- 80% reduction in epidermal scaling
- 49% reduction in skin itching
- 48% reduction in skin roughness



Effect of mud-enriched cream on psoriasis: patients' assessment by numerical severity 0-10 scale. Values are presented in figures as mean value SEM.



“... a very good choice for deep, wide Class II restorative resin in posterior teeth.”

The clinician's view of Smart Flow Universal composite, completely restorable.

**PROBLEM**  
Smart Flow™ is a unique, restorative primer, energy sensitive composite bonding the Class II PPDGK restorative composite to the natural dentin. It is designed for restoring posterior teeth with high tensile strength and flow handling. The advanced resin composite and flow primer are formulated for deep penetration and adhesion to dentin. Low modulus allows for denture, brackets. It cures both free resin and bonded to dentin. Superior handling, excellent wetting, and easy application. The primer and composite are available in 100g and 200g syringes and single dose applicators, as well as a variety of kits.



**DR. DAVID JOHNSON**  
Dentist  
Dental Products Report

**What sets this material apart?**  
Smart Flow™ is a unique, restorative primer, energy sensitive composite bonding the Class II PPDGK restorative composite to the natural dentin. It is designed for restoring posterior teeth with high tensile strength and flow handling. The advanced resin composite and flow primer are formulated for deep penetration and adhesion to dentin. Low modulus allows for denture, brackets. It cures both free resin and bonded to dentin. Superior handling, excellent wetting, and easy application. The primer and composite are available in 100g and 200g syringes and single dose applicators, as well as a variety of kits.

www.dentalproductsreport.com



www.dentalproductsreport.com

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CATEGORY SPOTLIGHT GLASS IONOMERS



SILMET ProGlass Plus

Smart's ProGlass Plus is a restorable glass ionomer luting system. This glass ionomer features high bond strength and is designed to be used for the restoration of metal, ceramic inlays and crowns, inlays and onlays, porcelain based inlays and veneers, and bridges. Designed with very low film thickness and excellent handling properties, ProGlass Plus can also be used for luting inlays. It then shifts to a non-leucite A2 shade when set. Additionally, on set, it is repaired before placement. According to Silmet, ProGlass Plus does not cause any postoperative sensitivity and delivers strong adhesion to teeth and metal. These properties ensure both patient and clinician satisfaction. The brush-free formulation of ProGlass Plus also delivers high radiopacity and fluoride release. ProGlass Plus is offered in prepackaged kits as well as Silmet's patented Laser-Lock capsules with screwable tips. The ease of capsule insertion may be advantageous; the application tip can be easily removed onto the capsule after insertion, allowing easy and accurate application of the material to the designated surface.

Small text at the bottom of the page, likely a disclaimer or contact information.

www.dentalproductshopper.com