

# A world full of Innovative Dental Products.



**72 PAGES  
QUALITY  
Dental  
Products!**

## **Restoratives**

The new standard of  
composites

## **Endodontics**

The NEW bioactive  
materials

## **Prosthetics**

Discover the  
incredible variety

**Classical:**  
**Harvard Cement.**  
The Original. Since 1892.



Made in Germany

Harvard  
**MultiChrome**

**NEW!**

**8**

Harvard  
**UltraFill**

**12**

Harvard  
**PremiumFill+**

**15**

Up to 4 mm  
in the blink of an  
**EYE!**

**NEW!**

Harvard  
**IonoSphere Bulk Flow**

**18**

Harvard  
**BioCal®-Line**

**NEW!**

**25**

Resin-Reinforced  
**MTA**  
Protective Liner

Harvard  
**UltraFill**

**ENDO**

**34**

Harvard  
**BioCal®-CAP**

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**NEW!**

**54**

Harvard  
**TEMP C&B Ultra**

Harvard  
**BioCal®-RootSeal**

**NEW!**

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Harvard  
**Cement.**  
The Original. Since 1892.

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Harvard  
**VeneerCem**

**NEW!**

**63**

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**NEW!**

**1892**  
seit  
 **HARVARD®**

# “ Find your Harvard Smile.”

Innovative Dental Products. Made in Germany.

## New at Harvard

- 1.** Harvard MultiChrome
- 2.** Harvard IonoSphere Bulk Flow
- 3.** Harvard BioCal<sup>®</sup>-Line
- 4.** Harvard BioCal<sup>®</sup>-CAP
- 5.** Harvard BioCal<sup>®</sup>-RootSeal
- 6.** Harvard MTA-RootSeal
- 7.** Harvard TEMP C&B Ultra
- 8.** Harvard VeneerCem

# Preferred composition in your hands.

MultiChrome  
Shade Adaptive



UltraFill  
Multi Opacity



UltraFill  
Universal Opacity



Harvard is **Much more than you expect**. This guiding principle applies to our entire range. The tradition of high quality originated in 1892 and continues into the present and the future. The production „**Made in Germany**“ guarantees the high quality standards.

## The right composite for every requirement.

### **Harvard MultiChrome – the shade-adaptive composite for almost all tooth shades.**

The innovative high-tech composite Harvard MultiChrome absorbs the colour spectrum of the tooth to be treated and matches it to the existing tooth shade substance thanks to its special Hyper-Nano technology. The secret is the composition, shape and distribution of the fillers in the material.

The pleasant consistency, the excellent polishability and permanent high gloss complement the excellent physical properties of Harvard MultiChrome.

### **Harvard UltraFill – for esthetic restorations.**

Harvard UltraFill offers excellent and permanent high gloss polishability and a tooth-like fluorescence with chameleon effect. The low polymerisation shrinkage and the high abrasion resistance ensure long durability. Suitable for anterior and posterior restorations. It offers a wide range of multi- and universal shades. Also available as a flowable material and in OptiTips®.

### **Harvard PremiumFill + – for durable restorations.**

Harvard PremiumFill + is a nano-hybrid composite with optimal physical properties and very high abrasion resistance. It offers a non-sticky consistency and good sculptability. For posterior and anterior restorations. Also available as a flowable material and in OptiTips®.

### **Harvard Restore – for economical restorations.**

Harvard Restore is a universal, light-curing microhybrid composite. It is suitable for anterior and posterior fillings. It offers low abrasion and is easy to polish. Good and non-sticky consistency. Easy to use. Also available as a flowable version.

**Find your Harvard Smile!**

Love is ...

... when dentists say  
**THANK YOU**  
to Harvard  
MultiChrome!



Harvard  
**MultiChrome**

**Shade-adaptive composite for almost all tooth shades.**



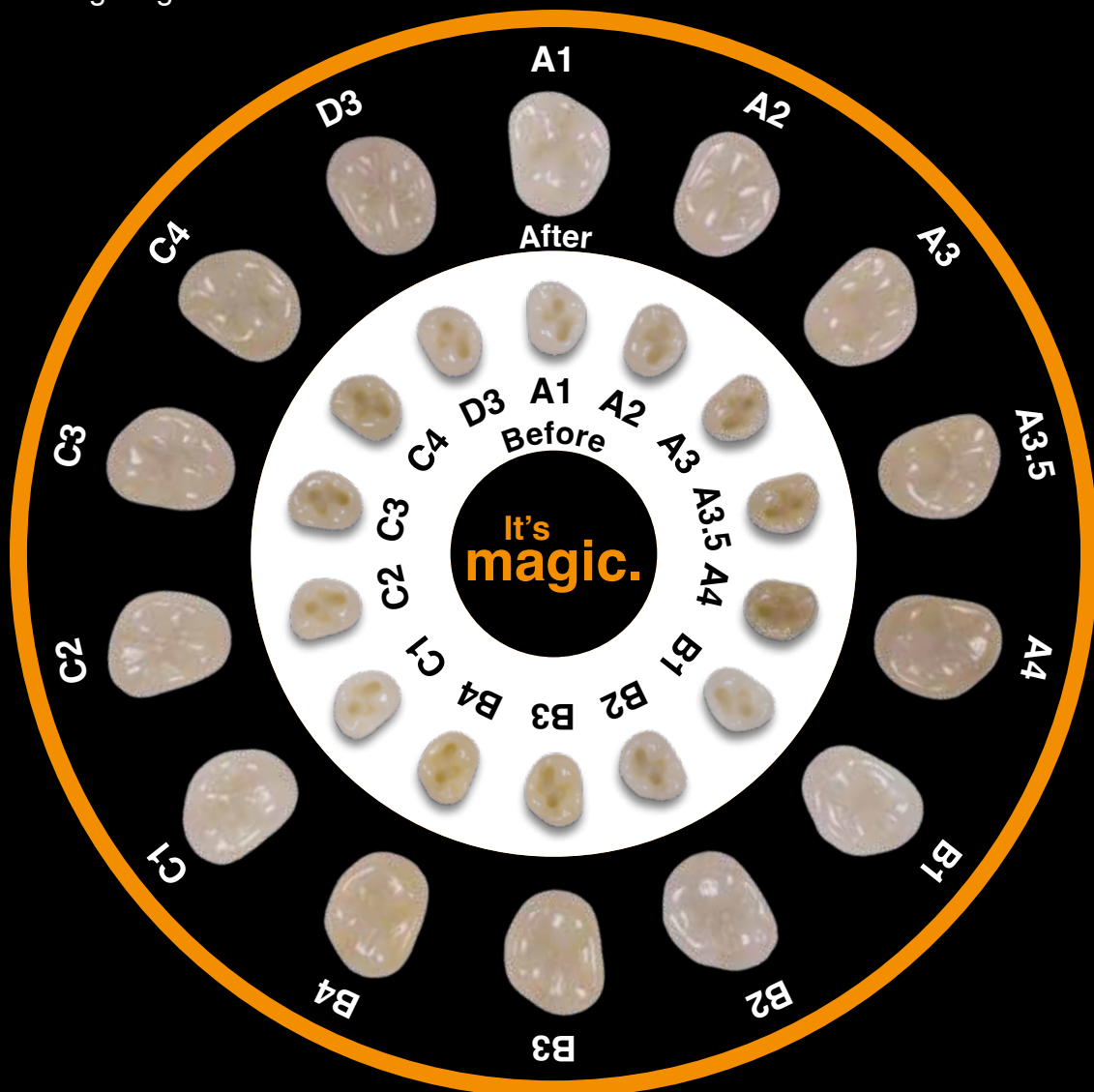
# Harvard MultiChrome

## It's magic.

Shade-adaptive  
composite for almost all  
tooth shades.

**NEW!**

- Hyper-Nano technology, spherical fillers
- Without any color pigments
- Light-optical chameleon effect for perfect match with natural tooth substance
- Simple storage logistics





# Composite for Fillings

## Restoration

### Harvard MultiChrome Multi-Shade Restorative

- For users who only want to use one single composite
- Shade-adaptive composite for almost all tooth shades
- Invisible transition between enamel, dentine and composite, creating margins that simply disappear
- Hyper-Nano technology, spherical fillers
- Without any color pigments
- Light-optical chameleon effect
- Superior handling properties
- Low shrinkage
- Permanent high gloss after polishing
- High abrasion resistance
- Excellent physical properties
- Radiopaque
- Opalescence
- Simple storage logistics



### Harvard Block 'n Mask

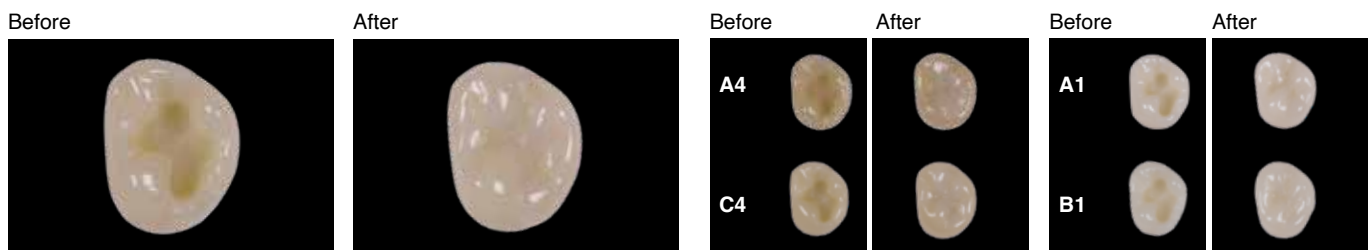
Composite for blocking and masking

- Corrects shade matching in difficult situations and for strong discolourations. (e.g. when the dark oral cavity shines through, covering discolourations)

Harvard MultiChrome	
3 g syringe	7100001
Harvard MultiChrome	
20 x 0.25 g OptiTips®	7100002
Harvard Block 'n Mask	
3 g syringe	7100005
Harvard Applier OptiTips®	7095200

Kit	
Harvard MultiChrome Kit	
3 syringes ea. 3 g Harvard MultiChrome, 1 syringe 3 g Harvard Block 'n Mask	7100009

Optimal shade-adaptation for almost all tooth shades after light polymerization.



Posterior preparation A3

Posterior restoration with Harvard MultiChrome

Teeth of different shades restored with Harvard MultiChrome

# Harvard MultiChrome Flow

Perfect for  
small enamel  
restorations.

**NEW!**

- Hyper-Nano technology, spherical fillers
- Shade-adaptive composite for almost all tooth shades
- Without any color pigments
- Light-optical chameleon effect
- Simple storage logistics



**The flowable**

## Harvard MultiChrome Flow

### Multi-Shade Flowable Restorative

- For users who want one single flowable composite for many shades
- Shade-adaptive composite for almost all tooth shades
- Invisible transition between enamel, dentine and composite, creating margins that simply disappear
- Extended posterior fissure sealing
- Hyper-Nano technology, spherical fillers
- Without any color pigments
- Light-optical chameleon effect
- Excellent handling
- Optimal flow consistency, thixotropic
- Low shrinkage
- Permanent high gloss after polishing
- High abrasion resistance
- Excellent physical properties
- Radiopaque
- Opalescence
- Simple storage logistics





### Harvard Block 'n Mask Flow

Flowable composite for blocking and masking

- Corrects shade matching in difficult situations and for strong discolourations (e.g. when the dark oral cavity shines through, covering discolourations)



Harvard MultiChrome Flow	
2 x 1 ml syringe, incl. 8 needle tips H18	7100003
Harvard Block 'n Mask Flow	
2 x 1 ml syringe, incl. 8 needle tips H18	7100006
Harvard NeedleTips H18	7095158
Refill bag with 50 needle tips	

with chameleon effect.

Optimal shade-adaptation for small enamel restorations.



Before



After



Extended posterior fissure

Restoration with Harvard MultiChrome Flow

# Composite for Fillings

## Restoration

### Harvard UltraFill

Ultra Gloss, Opalescent, High Performance Composite for **anterior** and **posterior** restorations

- Permanent high gloss
- Opalescence
- Tooth-like fluorescence
- Easy to work with
- Superior handling properties
- Low polymerization shrinkage
- High abrasion resistance
- Optimal physical properties
- Radiopaque



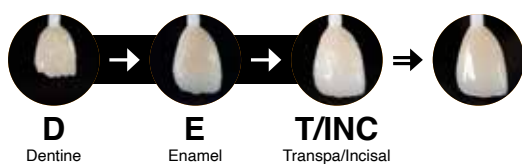
IntroKit S, 3 x 3 g



3 g

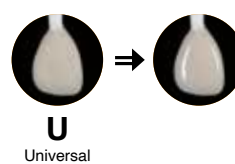
20 x 0.25 g

#### Multi Opacity layering technique






- Multiple shades in **various** opacities
- Excellent permanent esthetics
- Chameleon effect

#### Universal Opacity easy technique



- Selected shades in **one** opacity
- In 80 % of clinical cases best compromise of opacity

Harvard UltraFill „Multi Opacity“	
Shade	3 g syringe
A1 E	7131111
A1 D	7121111
A2 E	7131112
A2 D	7121112
A3 E	7131113
A3 D	7121113
A3.5 E	7131114
A3.5 D	7121114
BL E	7131153
BL D	7121152
INC	7141160
T	7141170

Harvard UltraFill „Universal Opacity“		
Shade	3 g syringe	20 x 0.25 g OptiTips®
A1 U	7111111	7111211
A2 U	7111112	7111212
A3 U	7111113	7111213
A3.5 U	7111114	7111214
BL U	7111151	
Harvard Applier OptiTips®		7095200
Kits		
Harvard UltraFill „Universal Opacity“ IntroKit S		7175100
3 syringes ea. 3 g, A2 U, A3 U, A3.5 U		

Further shades are possible. Please contact us.

## Multi Opacity

Closing a diastema



Andreas Kluschke MSc., Dentist  
Hamburg Smile, Hamburg, Germany

**>> Perfect esthetic results with the Harvard UltraFill Multi Opacity layering technique. <<**



Before



After 6 month



Dr. Pawel Paszkiewicz, Estetique Clinic,  
Polanica Stroj, Poland

**Class IV incisor restoration 11:  
>> For this demanding case I decided to use Harvard UltraFill. <<**



Initial situation with incisor tooth fracture



Removal of the old composite, Silicone impression



A palatal shell was cast on as a basis for the restoration



Mamelons were prepared with dentine composite (90% opacity – Harvard UltraFill A1 D)



Final layer was applied to the mamelons with enamel opacity (80% opacity – Harvard UltraFill A1 E) and an incisal edge of Harvard UltraFill INC



After the 3D anatomical correction

## Universal Opacity

Class V Restoration

**>> Great high-gloss result with Harvard UltraFill Universal Opacity <<**

Andreas Kluschke MSc., Dentist  
Hamburg Smile, Hamburg, Germany



Before



After 6 month

Class I Restoration

**>> Perfect marginal seal with Harvard UltraFill Universal Opacity. <<**

Dr. Pawel Paszkiewicz, Estetique Clinic,  
Polanica Stroj, Poland



Before



After

# Composite for Fillings

## Restoration



### Harvard

# UltraFill Flow

Ultra Gloss, Opalescent, Flowable Composite for **anterior** and **posterior** restorations

- Easy polishability, **permanent high gloss**
- Opalescence
- Optimal flow consistency
- Thixotropic
- Tooth-like fluorescence
- Reduced polymerization shrinkage
- High abrasion resistance
- Optimal physical properties
- Easy to work with
- Radiopaque
- Available in **Comfortip®F**



Harvard UltraFill Flow		
Shade	2 x 1 ml syringe	20 x 0.25 g Comfortip® F
A1	7112111	7112211
A2	7112112	7112212
A3	7112113	7112213
A3.5	7112114	
B1	7112121	
BL	7112151	
	incl. 8 needle tips H18	
Harvard NeedleTips H18		7095158
Refill bag with 50 needle tips		
Harvard Applier OptiTips®		7095200



Further shades are possible. Please contact us.

### The experts' assessment

>> Easy and quick to polish, durable high gloss. <<



Tooth 14 and 15 Wedge-shaped defects



Class V restorations after high gloss polish



Andreas Kluschke MSc., Dentist  
Hamburg Smile, Hamburg, Germany

# Composite for Fillings

## Restoration

### Harvard PremiumFill<sup>+</sup>

Nano-Optimized Hybrid Composite  
for **posterior** and anterior restorations

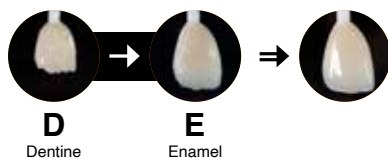
- Excellent esthetics
- Superior handling properties
- Non-sticky consistency and highly sculptable
- Low polymerization shrinkage
- Tooth-like fluorescence
- Excellent high gloss polishability
- High abrasion resistance
- Optimal physical properties
- Nano-filler technology



IntroKit S, 3 x 4 g



### Dual Opacity layering technique






- Selected shades in **two** opacities

### Universal Opacity easy technique



- Selected shades in **one** opacity

Harvard PremiumFill <sup>+</sup> „Dual Opacity“	
Shade	4 g syringe
A1 E	7082310
A2 E	7082311
A2 D	7082320
A3 E	7082312
A3.5 E	7082313
A3.5 D	7082321

Harvard PremiumFill <sup>+</sup> „Universal Opacity“		
Shade	4 g syringe	20 x 0.3 g OptiTips®
A1 U	7082300	7082400
A2 U	7082301	7082401
A3 U	7082302	7082402
A3.5 U	7082303	7082403
B1 U	7082304	
B2 U	7082305	

Harvard Applier OptiTips®	7095200
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Kits	
Harvard PremiumFill <sup>+</sup> „Universal Opacity“ IntroKit S 3 syringes ea. 4 g, A2 U, A3 U, A3.5 U	7082500

Further shades are possible. Please contact us.



# Composite for Fillings Restoration

## Harvard PremiumFlow<sup>+</sup>

Nano-Optimized Hybrid Flowable Composite  
for **posterior** and anterior restorations

- Optimal flowable consistency
- Thixotropic
- Excellent high gloss polishability
- Beautiful esthetic restorations
- Low polymerization shrinkage
- Low abrasion
- Improved mechanical properties



PremiumFlow <sup>+</sup>		
Shade	2 x 1 ml syringe	20 x 0.25 g OptiTips <sup>®</sup> F
A1	7082600	
A2	7082601	7082701
A3	7082602	7082702
A3.5	7082603	
	incl. 8 needle tips H18	

Harvard NeedleTips H18	7095158
Refill bag with 50 needle tips	
Harvard Applier OptiTips <sup>®</sup>	7095200



20 x 0.25 g OptiTips<sup>®</sup>

Further shades are possible. Please contact us.

### What the experts say



Defective filling



After removal etching and bonding



Application of  
Harvard PremiumFlow<sup>+</sup>



Polished filling



Before



After

**>> Perfect flow properties for the construction of sophisticated anatomical shapes (e.g. incisal and cervical restorations). <<**



Andreas Kluschke MSc., Dentist  
Hamburg Smile, Hamburg, Germany



# Composite for Fillings

## Restoration

## Harvard Restore

Universal light cure microhybrid composite

- Suitable for anterior and posterior restorations
- Nice non-sticky consistency
- Low abrasion
- Good polishability
- Tooth-like fluorescence
- Good price / performance ratio



System Kit Plus

4 g

Harvard Restore	
Shade	4 g syringe
A1	7083201
A2	7083202
A3	7083203
A3.5	7083204
B1	7083221
B2	7083222

Kits	
<b>System Kit Plus</b>	7083217
4 syringes ea. 4 g, A1, A2, A3, A3.5 3 ml syringe Harvard RestoreFlow in the shade A2 5 ml bottle Harvard Self-Bond, 5 Appli-Pads, 50 Microbrush®, 5 needle tips	

## Harvard RestoreFlow

Universal flowable light cure microhybrid composite

- Suitable for anterior and small posterior restorations and for lining of cavities
- Controlled flow
- Good mechanical properties
- Tooth-like fluorescence
- Good price / performance ratio

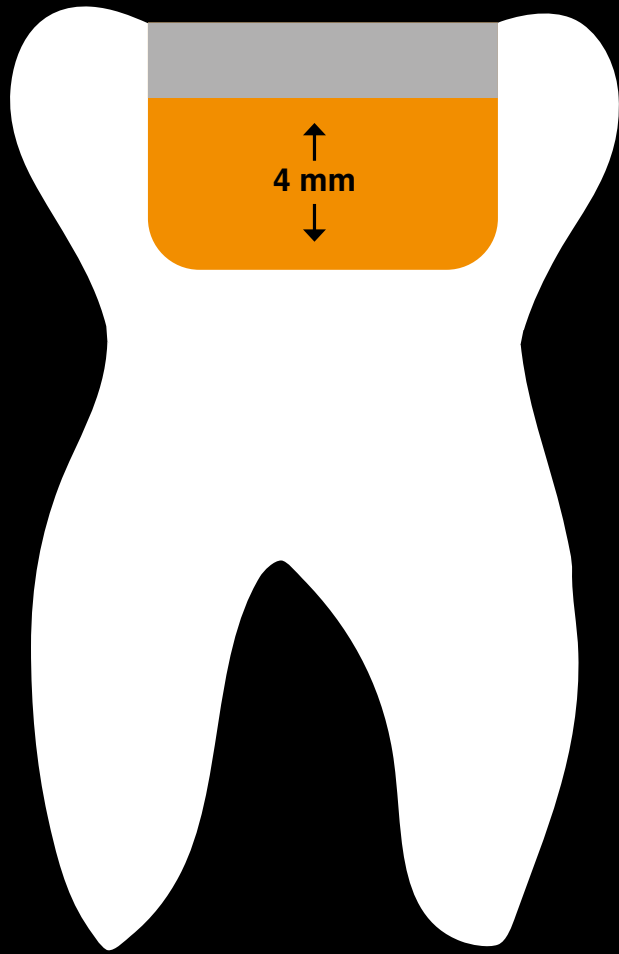


3 ml

Harvard RestoreFlow	
Shade	3 ml syringe
A1	7083211
A2	7083212
A3	7083213
A3.5	7083214
	incl. 3 needle tips H20

<b>Harvard NeedleTips H20</b>	7091226
Refill bag with 50 needle tips	

Further shades are possible. Please contact us.



Up to 4 mm  
in the blink of an  
**EYE!**

And this with very low shrinkage and  
very low shrinkage stress.

**Self-leveling.**  
**Also ion-active.**

**NEW!**

**Finish the restoration as  
usual!** Any composite can be used for the enamel restoration



Base in cavity up to 4 mm  
with Harvard IonoSphere  
Bulk Flow



Finalized restoration  
with your trusted  
moldable composite

# Composite for Fillings Restoration

## Harvard IonoSphere Bulk Flow NEW!

Flowable composite with bioceramic fillers for a fast bulk dentine filling without the need for complex layering techniques.

The layer thickness of up to 4 mm enables efficient bulk filling. The flowable material is self-leveling at the surface and thus easy and quick to apply, with excellent adaptation on the cavity walls. The final layer can be carried out with the desired shade of a moldable composite. Harvard IonoSphere Bulk Flow exhibits a very low shrinkage and very low shrinkage stress, is ion-active and acid-inhibiting.



- Bulk dentine filling up to 4 mm layer thickness
- Good flow properties
- Very low shrinkage
- Very low shrinkage stress
- Acid-inhibiting
- Ion-active
- Fluoride releasing
- Radiopaque



OptiNeedleTips 0.25 g



2 x 1 g

Harvard IonoSphere Bulk Flow		
Shade	2 x 1 g syringe	20 x 0.25 g OptiNeedleTips
Universal	7100011	7100012
	incl. 8 needle tips H18	

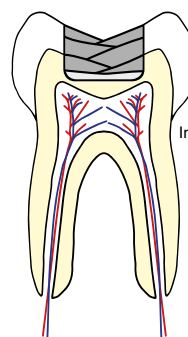
Harvard NeedleTips H18	7095158
Refill bag with 50 needle tips	
Harvard Applier OptiTips®	7095200

## With bioceramic fillers for precise and fast bulk dentine filling.

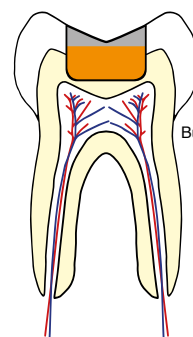


Class 2 cavity

Base in cavity up to 4 mm in one layer



Increment technique



Bulk flow technique



# Light cure adhesives at a glance

Restoration

Not all **adhesives** are equal.




**Strong connections:  
Easy to BOND!**

## Harvard InterLock® ONE


### Universal Adhesive

- **Universal:** suitable for all tooth conditioning techniques: with or without etching gel, wet or dry
- Only one thin layer necessary
- High and reproducible bond strength to enamel and dentine even under long term stress
- Effective marginal seal for low risk of postoperative sensitivity
- Excellent performance also with self or dual cure composites
- Convenient and precise application with the triangle ergonomic bottle with defined drop size

If light curing of **Harvard InterLock® ONE** cannot be achieved, please use **Harvard Bond SE Dual**.

<b>Harvard InterLock® ONE</b>	
Universal Adhesive 5 ml bottle	7083611

<b>Microbrush®</b>	7095156
Refill bag with 50 applicators	

<b>Harvard InterLock® ONE SingleDose</b>	
Universal Adhesive 50 x 0.1 ml SingleDose	7083613*

\* No stock item, please contact the Harvard sales team.



Good to know ...



5 ml



50 x 0.1 ml

## Harvard InterLock® ONE Self Cure Activator

for InterLock® ONE

- Activator for safe adhesion in indications, where light curing of **Harvard InterLock® ONE** cannot be ensured (e.g. in the root canal)
- Ideal for cementing of posts with dual and self cure composites

Self Cure Activator



<b>Harvard InterLock® ONE Self Cure Activator</b>	
Universal Adhesive 5 ml bottle	7083612

# Light Cure Adhesives

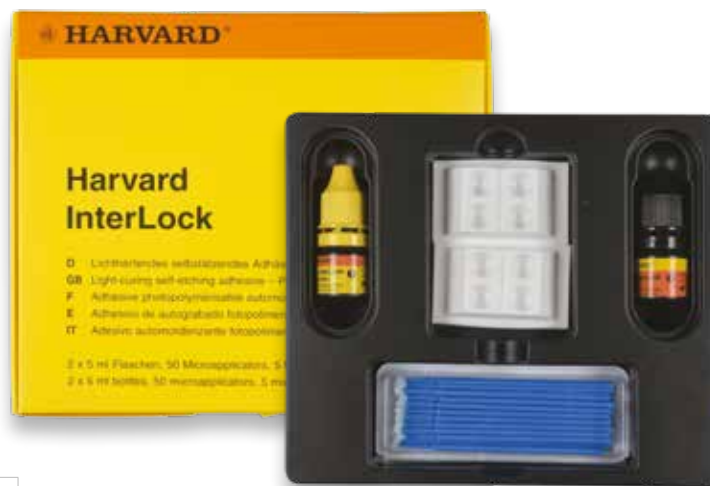
## Restoration

### Harvard InterLock®

Very strong, self-etch, light cure bonding within two steps

- Long-term and safe adhesion to enamel and dentine
- High and even bond strength
- Extremely reliable
- Easy and fast application
- Excellent seal
- Not technique and moisture sensitive
- Hydrophilic for wet bonding technique
- For perfect margins to protect against secondary caries

The gold standard



2 x 5 ml

<b>Harvard InterLock®</b>	
2 x 5 ml bottle, 50 Microbrush®, 5 Appli-Pads	7083603
<b>Microbrush®</b>	7095156
Refill bag with 50 applicators	

### Harvard Bond SE Mono

Self-etch, light cure bonding; etching, priming and bonding in one step

- Strong and long-lasting adhesion to enamel and dentine
- Only one layer necessary
- Hydrophilic for wet bonding technique
- Good price / performance ratio



5 ml

<b>Harvard Bond SE Mono</b>	
5 ml bottle	7083601
<b>Microbrush®</b>	7095156
Refill bag with 50 applicators	

### Harvard


# Self-Bond

Self-etch, light cure bonding

- For bonding of composites on dentine and enamel
- No extra etching necessary
- Only one layer necessary
- Easy application
- Hydrophilic for wet bonding technique
- Good price / performance ratio



5 ml

<b>Harvard Self-Bond</b>	
5 ml bottle	7083218

### Harvard

# Bond TE Mono

Light cure one bottle adhesive for total-etch technique

- Strong bonding to enamel and dentine
- Strong bonding of light cure composites, non-precious and precious metals
- Hydrophilic for wet bonding technique
- 2 bonding layers necessary; very strong adhesion
- Good price / performance ratio



5 ml

<b>Harvard Bond TE Mono</b>	
5 ml bottle	7083607

### Harvard

# Etch

Thixotropic etching gel for etching of enamel and dentine

- Selective enamel etching or total-etch technique for:
  - Composite restorations
  - Sealing of fissures
  - Adhesive cementation of inlays, onlays, crowns and bridges
- Optimal consistency: stays where placed
- Thixotropic, controlled etching
- Good price / performance ratio



2 ml

<b>Harvard Etch</b>	
2 ml syringe, 3 needle tips	7054000
<b>Harvard NeedleTips H25</b>	
Refill bag with 50 needle tips	7095126

# Not all **Liners** are the same.

Effective liners are used in dentistry to protect the pulp. On the one hand, there are **bioactive liners** that are resin-reinforced which combine MTA components and release calcium and hydroxyl ions. This enables effective protection of the pulp through an increased pH value and mineralization at the same time. Light cure allows further filling with composite to take place immediately.

On the other hand, there are also **classic liners** such as calcium hydroxide liners (hydroxyl release) and ionomer liners (fluoride release) which are also light cure.

In comparison to classic liners, bioactive liners can form apatite more easily.

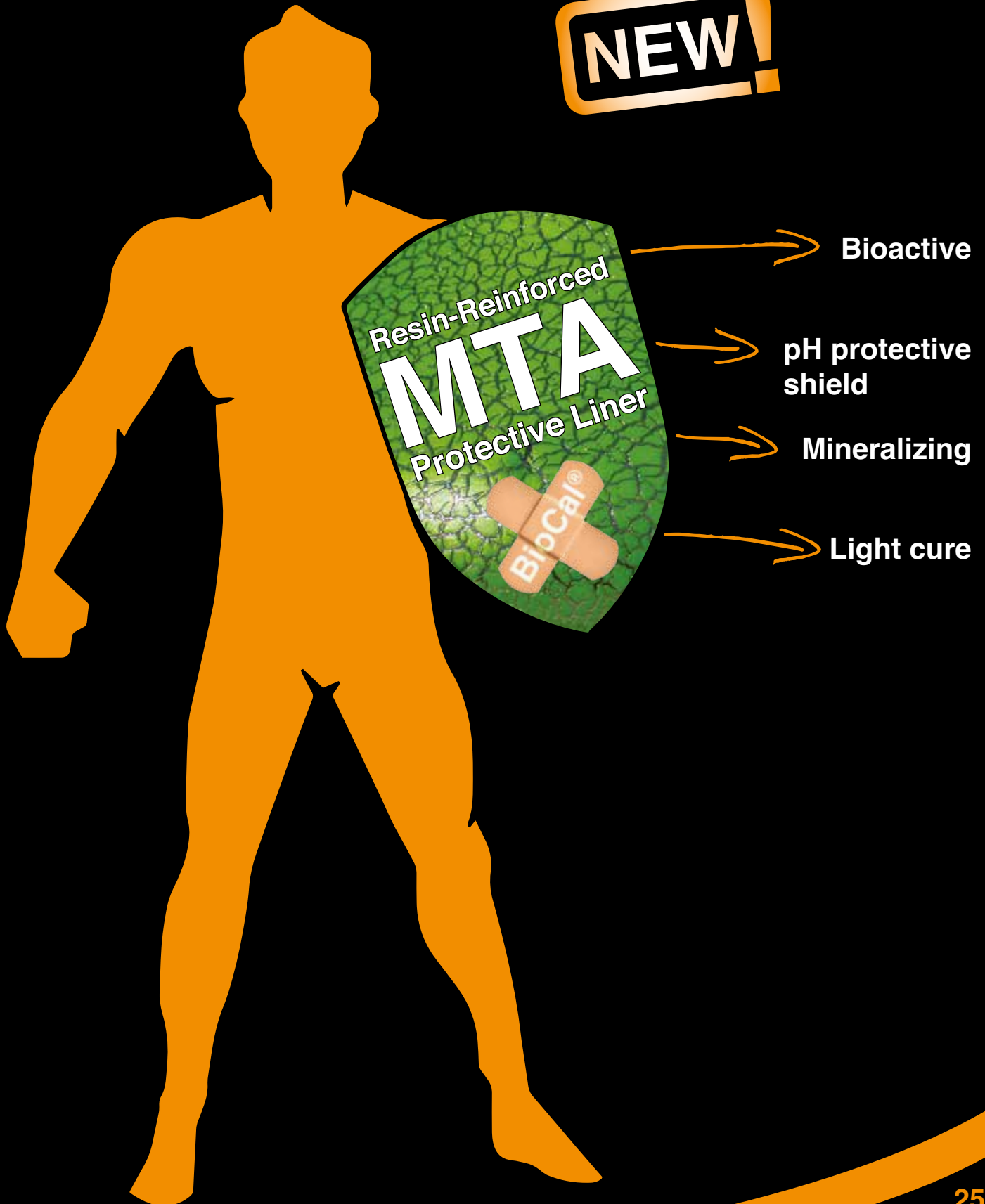




# Harvard BioCal<sup>®</sup>-Line

Bioactive resin-reinforced **MTA protective liner**

**NEW!**



## Harvard BioCal<sup>®</sup>-Line NEW!

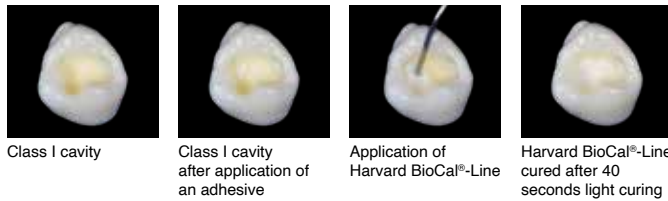
**Bioactive, light cure, resin-reinforced MTA protective liner**

The good strength and the protective effect of the MTA components (high alkalinity and mineralization) ensure pulp protection with sufficient stability for subsequent filling at the same time.

- Perfect as a thin-layer, protective liner in deeper cavities
- Also suitable for indirect and direct pulp capping
- Environment hostile to bacteria (pH 11)
- Mechanically stable
- Short setting times due to light cure
- Mineralizing
- Compatible with all composite restorative materials
- Radiopaque

**Bioactive**

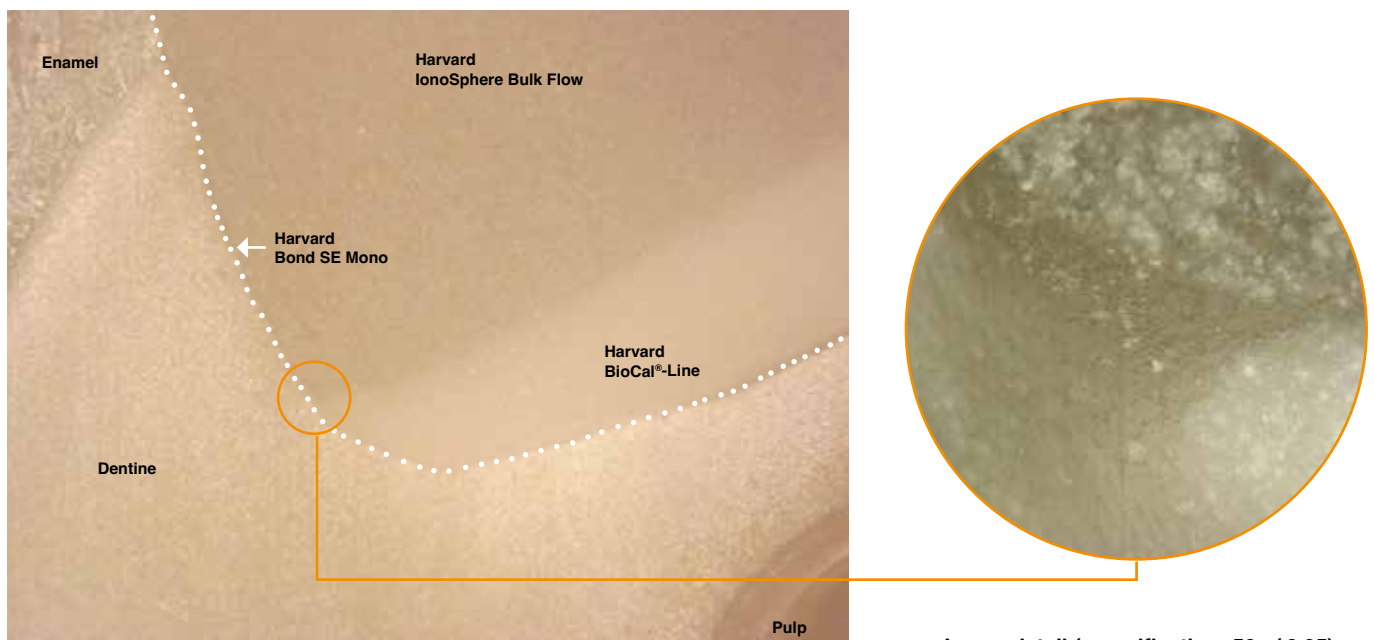
<b>Harvard BioCal<sup>®</sup>-Line</b>	
1 g syringe, 12 needle tips	7081554
<b>Harvard NeedleTips H20</b>	
Refill bag with 50 needle tips	7091226



Technical data		
Flexural strength	76	MPa
Compressive strength	187	MPa
Calcium release (24 h)	204	µg / cm <sup>2</sup>
pH value (24 h)	11	

Harvard BioCal<sup>®</sup>-Line should be used with a dentine adhesive, ideally with Harvard Bond SE Mono. Harvard Bond SE Mono does not restrict the bioactive effect. A continuous gap-free marginal seal and high alkaline bioactive MTA components protect pulp and dentine equally, especially in deep restorations.

High strength values and minimal layer thickness ( $\leq 1$  mm) form the foundation for safe and reliable restorative therapy.



**Laser microscopic image (magnification: 5x / 0.13)**  
Deep composite restoration close to the pulp Experimental Tooth. Preparation (cross section) after one-week storage in artificial saliva (37 °C / 98,6 °F / thermocycling)

**Image detail (magnification: 50x / 0.95)**  
Interface: Dentine / Harvard IonoSphere Bulk Flow & Dentine / Harvard BioCal<sup>®</sup>-Line  
In between: Harvard Bond SE Mono

### The experts' assessment

>> Maximum pulp protection with light-curing bioactive MTA liner in deep caries lesions. <<



Premolar after initial preparation



Full caries excavation



Cavity lining with **Harvard BioCal®-Line** after application of adhesive system



Composite restoration with **Harvard UltraFill**




Andreas Kluschke MSc., Dentist  
Hamburg Smile, Hamburg, Germany

## Harvard CalciumHydroxide LC

Calcium hydroxide liner, light cure, resin-based  
with calcium release, pH 11

- Suitable for indirect pulp capping and as a liner for filling procedure
- High pH level with antimicrobial effect
- Optimal flow
- Radiopaque
- Good price / performance ratio



Harvard CalciumHydroxide LC	
2 ml syringe, 3 needle tips	7071263

Harvard NeedleTips H18	7095158
Refill bag with 50 needle tips	


Classical

## Harvard IonoLine

Glass ionomer liner, light cure, resin-modified  
with fluoride release

- Suitable as liner or base
- Fluoride release
- Perfectly flowing
- Radiopaque
- Good price / performance ratio

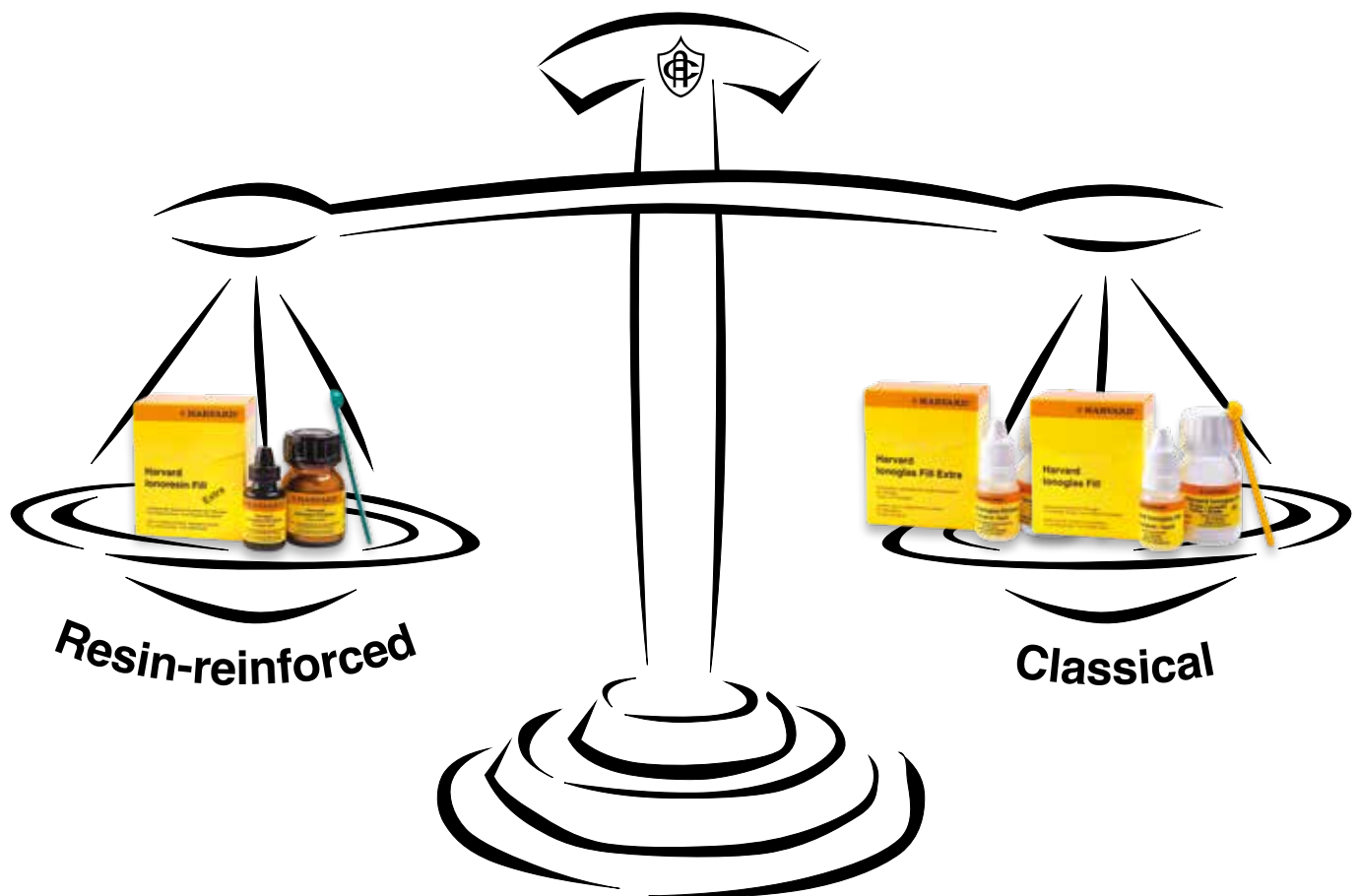


Harvard IonoLine	
2 ml syringe, 3 needle tips	7071260

Harvard NeedleTips H20	7091226
Refill bag with 50 needle tips	

# Always the right choice

when it comes to Filling Cements.



Fast, easy and convenient are the unbeatable arguments for our **resin-reinforced** glass ionomer restorative cements.

These highly esthetic cements offer good polishability and very good marginal seal. The fluoride release and moisture tolerance coupled with a very good bonding to composites enables safe processing with time savings due to light curing.

The **classic** glass ionomer cements do not contain any methacrylates and are ideal for sensitive patients or deciduous tooth treatment. The strong fluoride release supports this treatment.

# Glass Ionomer Cements for Fillings

## Restoration

### Harvard


## IonoResin Fill Extra (LC)


Resin-reinforced glass ionomer cement for fillings, light cure

- Esthetic natural transparency
- Fine fillers
- Light- and self cure
- Good polishability
- Very good mechanical properties, practically no shrinkage
- Practically insoluble
- Fluoride release
- Radiopaque
- HandMix or OptiCaps®



**Resin-Reinforced**

Harvard IonoResin Fill Extra (LC)	
15 g powder / 8 ml liquid, dosage spoon, mixing pad	
A2	7071118
A3	7071119
A3.5	7071120*

Harvard IonoResin Fill Extra (LC)	
50 OptiCaps® ea. 0.5 g	
A2	7071253
A3	7071254*
A3.5	7071255*

\* No stock item, please contact the Harvard sales team.

Harvard Applier OptiCaps®	7092000
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Good to **know ...**

# Glass Ionomer Cements for Fillings

## Restoration

### Harvard

## IonoGlas Fill Extra

Esthetic classical glass ionomer cement for fillings, self cure

- Esthetics and natural translucency
- Convenient to apply and easy to handle
- Easy finishing
- Low solubility
- High fluoride release
- Radiopaque
- HandMix or OptiCaps®



15 g / 8 ml

50 x 0.5 g

Harvard IonoGlas Fill Extra	
15 g powder / 8 ml liquid, dosage spoon, mixing pad	
A2	7052112
A3	7052113

Harvard IonoGlas Fill Extra	
50 OptiCaps® ea. 0.5 g	
A2	7052252
A3	7052253

Harvard Applier OptiCaps®	7092000
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**Classical**

### Harvard

## IonoGlas Fill

Classical glass ionomer cement for fillings

- Good molding
- Good marginal fit and seal
- Easy to mix and to use
- HandMix
- Good price / performance ratio

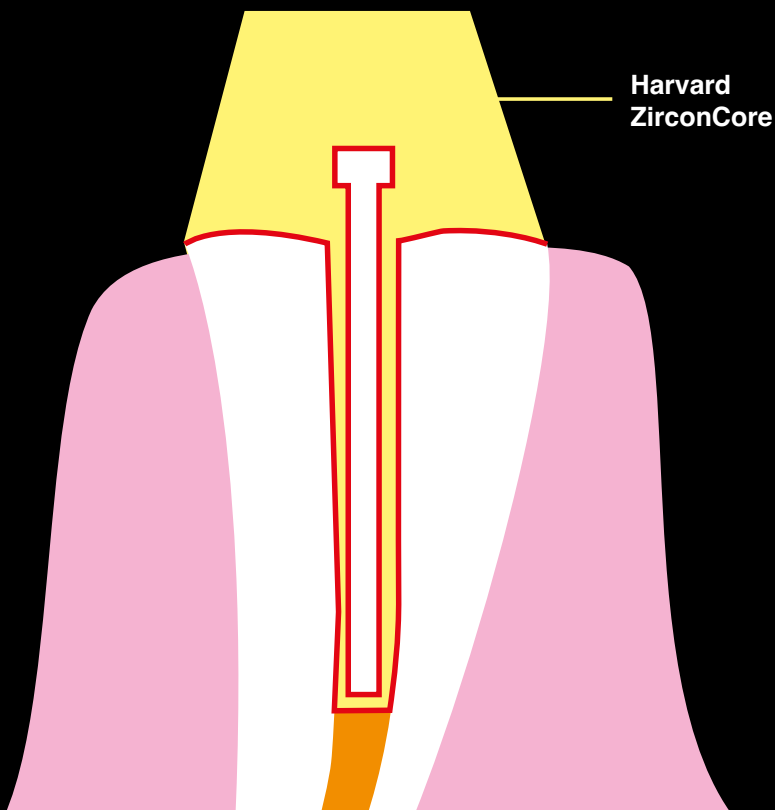


10 g / 5.6 ml

Harvard IonoGlas Fill	
Dosage spoon, mixing pad	
10 g powder – A2 / 5.6 ml liquid	7051110*
15 g powder – A2 / 8 ml liquid	7051115
15 g powder – A3 / 8 ml liquid	7051116*
35 g powder – A2 / 20 ml liquid	7051120*

\* No stock item, please contact the Harvard sales team.

# Core Build-up and Post Cementing Restoration



## Cuts like dentine.

Excellent mechanical properties in all curing modes.

### The experts' assessment

>> Due to the dual indication – post-cementation and core build-up – the work becomes easier, faster and more efficient. <<



Prepared and bonded root canal



Application into the root canal



Placing the root post



Cured core build-up



Finished core build-up



Dr. Pawel Paszkiewicz, Estetique Clinic,  
Polanica Stroj, Poland



# Core Build-up and Post Cementing




## Restoration

## Harvard ZirconCore

Dual cure core build-up and post cementation composite

- Optimal consistency for two indications:  
Core build-up and post cementing
- "Cuts like dentine"
- Very good mechanical properties for durable restorations
- Contains substantial amount of nano zirconia particles
- Fluoride release
- Very good radiopacity
- Thixotropic properties
- **For optimal results:**  
To be used with **Harvard Bond SE Dual**



<b>Harvard ZirconCore – A2</b>	
5 ml minimix syringe – A2, 10 mixing tips, 10 intra tips long	7083599
<b>Harvard ZirconCore – A3</b>	
5 ml minimix syringe – A3, 10 mixing tips, 10 intra tips long	7083600
<b>Harvard ZirconCore – 25 ml</b>	
25 ml automix cartridge – A3, 10 mixing tips, 10 intra tips	7083598*

\* No stock item, please contact the Harvard sales team.

<b>Harvard Mini 1:1 O-Brown</b>	7083610
Refill bag with 50 mixing tips	
<b>Harvard IntraTips long</b>	7083620
Refill bag with 50 intra tips long	
<b>Harvard Auto 1:1 O-Yellow</b>	7091300
Refill bag with 50 mixing tips	
<b>Harvard IntraTips yellow</b>	7083619
Refill bag with 50 intra tips	

Technical data	
Working time (23 °C / 73 °F)	1:30 min
Setting time (self cure)	3:30 min
Light cure (optional)	40 sec
Elasticity modulus (light cure resp. dual cure)	7,5 GPa
Elasticity modulus (dark cure)	5,4 GPa

**Suitable**  
adhesive

## Harvard Bond SE Dual

Dual cure self-etch bonding

- Etching, priming and bonding after mixing in one step
- Only one layer necessary
- Strong and long-lasting adhesion to enamel and dentine
- Hydrophilic for wet bonding technique
- For use with dual cure composites e.g. **Harvard ZirconCore**
- Good price / performance ratio



<b>Harvard Bond SE Dual</b>	
2 x 5 ml bottle, 50 Microbrush®, 5 mixing wells	7083602
<b>Microbrush®</b>	7095156
Refill bag with 50 applicators	



ENDO

## Discover ...

... all Harvard products for the endodontic treatment.

Our reliable and easy-to-use materials will help you to provide a patient-oriented and successful treatment and thus ensure long-lasting success. Harvard has the perfectly matched product for every indication.

- **CAP** – for direct and indirect pulp capping. Bioactive, light cure with resin-reinforced MTA cement or self cure with flowable MTA cement, in syringe or capsule. (**Harvard BioCal®-CAP**; **Harvard MTA-CAP**)
- **PT** – bioactive materials with MTA fillers for the substitution of removed/partially removed pulp in capsule. (**Harvard MTA-PT**)
- **Repair** – an MTA cement in the capsule; designed for the closure of root perforations. (**Harvard MTA-Repair**)
- **Ortho** – for direct and simple closure of the apex with a particularly thin-bodied and long-setting MTA cement in the capsule. The enclosed EndoDirect syringe has a very flexible application cannula, so that even in the case of strongly curved root canals can be applied at full working length. (**Harvard MTA-Ortho**)
- **Retro** – MTA materials for retrograde root canal filling in capsule. (**Harvard MTA-Retro**)
- **Root Seal** – for definitive root canal sealing in combination with a master point in the automix syringe or in the capsule. (**Harvard BioCal®-RootSeal**; **Harvard MTA-RootSeal**)

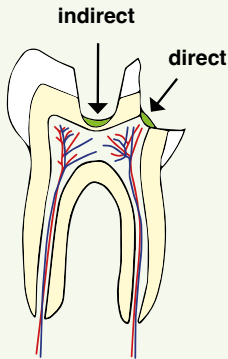
The Harvard **MTA Universal** cements for mixing or in the capsule are suitable for all endodontic indications. All Harvard MTA cements and BioCal® materials are also very well suited for the treatment of children.

# Overview of all applications

Endodontics

## CAP

Pulp capping



Harvard  
**BioCal®-CAP**



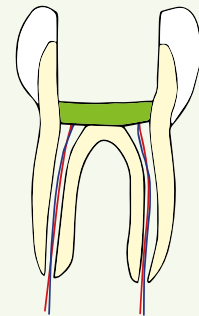
or

Harvard  
**MTA-CAP**  
(MTA XR Flow Fast)



## PT

Pulpotomy

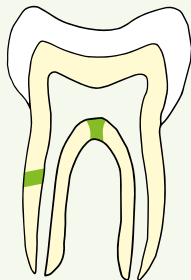


Harvard  
**MTA-PT**  
(MTA XR Flow Fast)



## REPAIR

For filling of root perforations

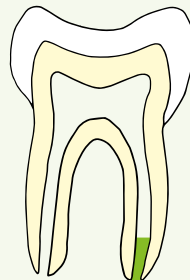


Harvard  
**MTA-Repair**  
(MTA XR)



## ORTHO

Orthograde root canal filling

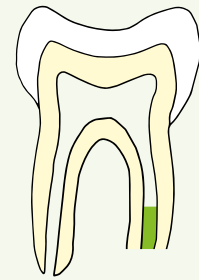


Harvard  
**MTA-Ortho**  
(MTA XR Flow EWT)



## RETRO

Retrograde root canal filling

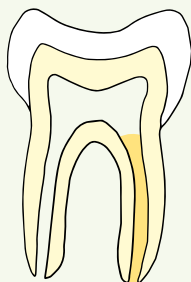


Harvard  
**MTA-Retro**  
(MTA XR Fast)

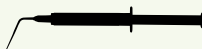


## ROOT TEMP

Temporary root canal filling

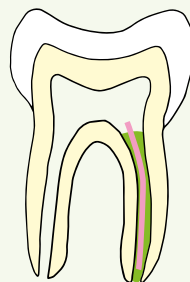


Harvard  
**RootTemp**

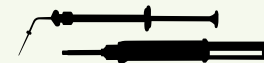


## ROOT SEAL

Root canal sealer



Harvard  
**BioCal®-RootSeal**



or

Harvard  
**MTA-RootSeal**



# Pulp Protection – CAP

## Endodontics

### Harvard BioCal®-CAP

Bioactive, light cure, resin-modified MTA cement for direct and indirect pulp capping

- For direct and indirect pulp capping in the treatment of deciduous and adult teeth
- Calcium release and a high pH value (pH 11) promote the formation of hydroxyapatite as well as tertiary dentine
- Creates an environment hostile to bacteria
- Moisture tolerant
- Virtually no solubility
- Good Radiopacity
- Fast, after light cure, treatment can be continued immediately
- Thixotropic properties

<b>Harvard BioCal®-CAP</b>	
1 g syringe, 12 needle tips	7081550
4 x 1 g syringe, 50 needle tips	7081551
<b>Harvard NeedleTips H22</b>	7095162
Refill bag with 50 needle tips	



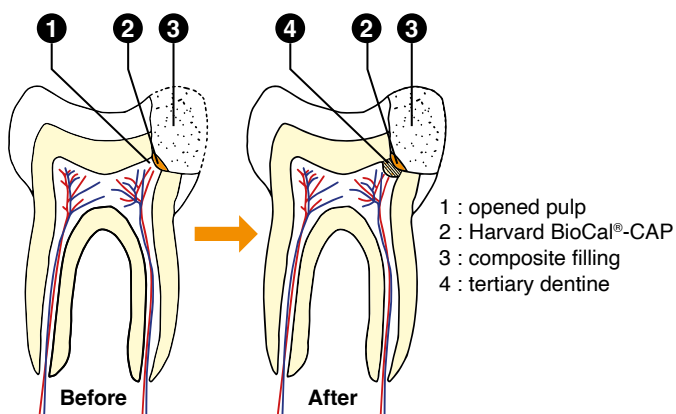
### The experts' assessment

>> Harvard BioCal®-CAP revealed antimicrobial activity against *S. mutans*, which was related to its Ca/Si release and alkaline pH. <<

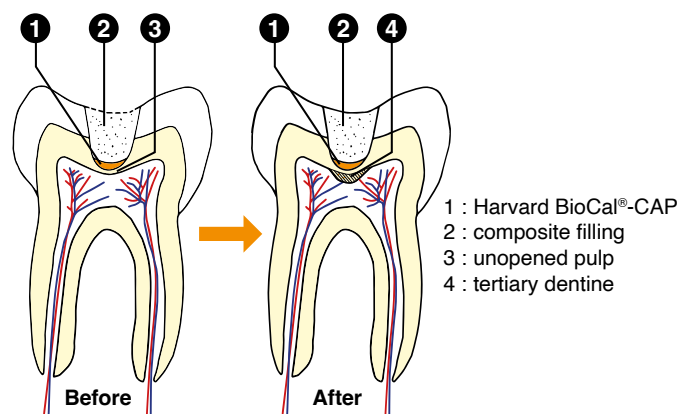
- Pedano De Piero, Mariano Simón ( Department of Oral Health Sciences, BIOMAT, KU Leuven and University Hospitals (UZ Leuven), Belgium )
- Van Holm, Wannes ( Department of Oral Health Sciences, Oral Microbiology, KU Leuven and University Hospitals (UZ Leuven), Belgium )
- Li, Xin ( Department of Oral Health Sciences, BIOMAT, KU Leuven and University Hospitals (UZ Leuven), Belgium )
- Nedeljkovic, Ivana ( Dental Materials Science, Academic Centre for Dentistry Amsterdam (ACTA), University of Amsterdam and Vrije Universiteit Amsterdam, Netherlands )
- Van Landuyt, Kirsten ( Department of Oral Health Sciences, BIOMAT, KU Leuven and University Hospitals (UZ Leuven), Belgium )
- Teughels, Wim ( Department of Oral Health Sciences, Oral Microbiology, KU Leuven and University Hospitals (UZ Leuven), Belgium )
- Van Meerbeek, Bart ( Department of Oral Health Sciences, BIOMAT, KU Leuven and University Hospitals (UZ Leuven), Belgium )

IADR Division: Meeting: 2021 Continental European and Scandinavian Divisions Meeting (Brussels, Belgium, Hybrid), Year: 2021, Final Presentation ID: 0058

#### Direct pulp capping



#### Indirect pulp capping



Significant release of bioactive calcium promotes the formation of hydroxyapatite and tertiary dentine.



# The plaster for the pulp.



**BioCal®-CAP** the bioactive, light cure, resin-modified MTA cement for direct and indirect pulp capping

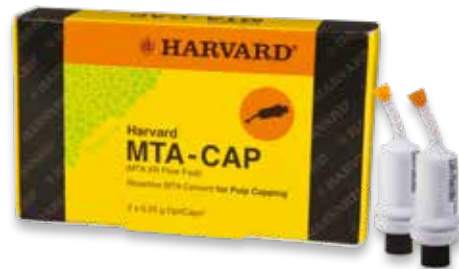
## Harvard MTA-CAP

(MTA XR Flow Fast)

Flowable fast setting MTA cement in capsules

- Particularly suitable for pulp capping
- Calcium release and a high pH value (pH 12) promote the formation of hydroxyapatite and tertiary dentine
- Flowable consistency
- Extra fast setting
- Mixing time: 30 sec
- Working time: 2:00 min (from start of mixing at 23 °C (73 °F))
- Next treatment step: 3:00 min

Set also in humid conditions



2 x 0.25 g

Harvard MTA-CAP (MTA XR Flow Fast)	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081503
Harvard Applier OptiCaps®	7092000


## Harvard CalciumHydroxide

Calcium hydroxide paste

- Suitable for direct and indirect pulp capping
- Paste with perfect consistency
- Good price / performance ratio



2 ml

Harvard CalciumHydroxide	
2 ml syringe, 3 needle tips	7071261

# Pulpotomy – PT

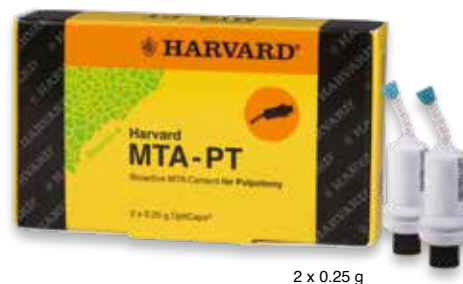
## Endodontics

### Harvard MTA-PT


Fast cure, reinforced radiopaque MTA cement in capsules

- **Particularly suitable for pulpotomy**
- Calcium release and a high pH value (pH 12) promote the formation of hydroxyapatite as well as tertiary dentine
- Flowable consistency
- Particularly radiopaque
- Fast setting
- Mixing time: 30 sec
- Processing time: 2:00 min (from start of mixing at 23 °C (73 °F))
- Next treatment step: 3:00 min

Set also in humid conditions



2 x 0.25 g

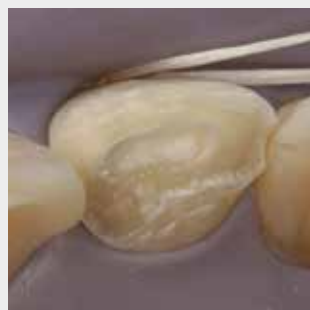
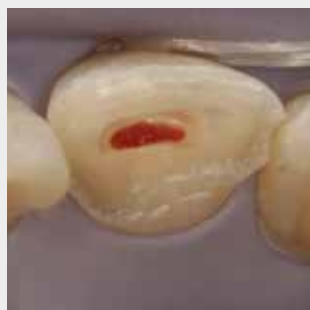
Harvard MTA-PT	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081512

Harvard Applier OptiCaps®	7092000
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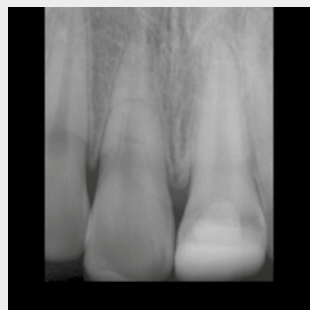
### The experts' assessment

Clinical case with Harvard MTA-PT (MTA XR Flow Fast) Source: Thonemann/Federlin, University Regensburg, Germany

>> Product solutions that are increasingly adapted to the individual situation in terms of technology and material consistency make work in endodontics much easier. <<



- 1.: Initial situation:  
Anterior tooth trauma,  
complicated crown fracture 21
- 2.: Partial Pulpectomy
- 3.: Application of **Harvard MTA-PT**
- 4.: Covering with  
glass ionomer cement
- 5.: 4 months after trauma: 21 vital
- 6.: 1 year after trauma: 21 vital



Prof. Dr. Marianne Federlin,  
University Regensburg, Germany

# Root Canal MTA Universal

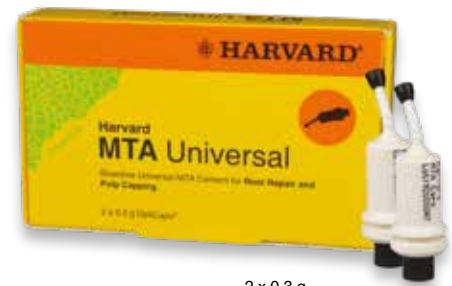
## Endodontics

## Harvard MTA Universal OptiCaps®


Endodontic repair cement in capsules based on MTA

- Highly biocompatible material
- Excellent bond to dentine
- Radiopaque
- Firm and homogenous consistency directly from the capsule
- Forms tertiary dentine
- Setting not affected by humidity
- Suitable for pulp capping, sealing root perforations, root end fillings (orthograde or retrograde)
- Mixing time: 30 sec
- Working time: 2:00 min (from start of mixing at 23 °C (73 °F))
- Next clinical step: 5:00 min

Set also in humid conditions

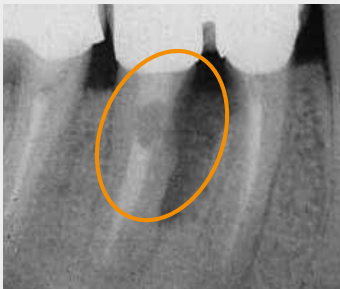


2 x 0.3 g

<b>Harvard MTA Universal OptiCaps®</b>	
2 OptiCaps® ea. 0.3 g, ea. packed in an aluminum pouch	7081502

<b>Harvard Applier OptiCaps®</b>	7092000
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### The experts' assessment



**Initial situation:**  
Damaged root canal wall and demineralized bone



**After treatment:**  
Root canal perforation sealed with Harvard MTA Universal



**After one year:**  
Perfect seal of the application areas, new remineralized bone and better retention of the tooth

>> Due to MTA, good long term prognosis. <<



Oxana Hilfer, Dentist,  
Hamburg, Germany

## Harvard MTA Universal HandMix

Endodontic repair cement based on MTA, as HandMix

- Biocompatible material
- Excellent bond to dentine
- Radiopaque
- Forms tertiary dentine
- Setting not affected by humidity
- Suitable for pulp capping, sealing root perforations, root end fillings (orthograde or retrograde)
- Very easy to mix



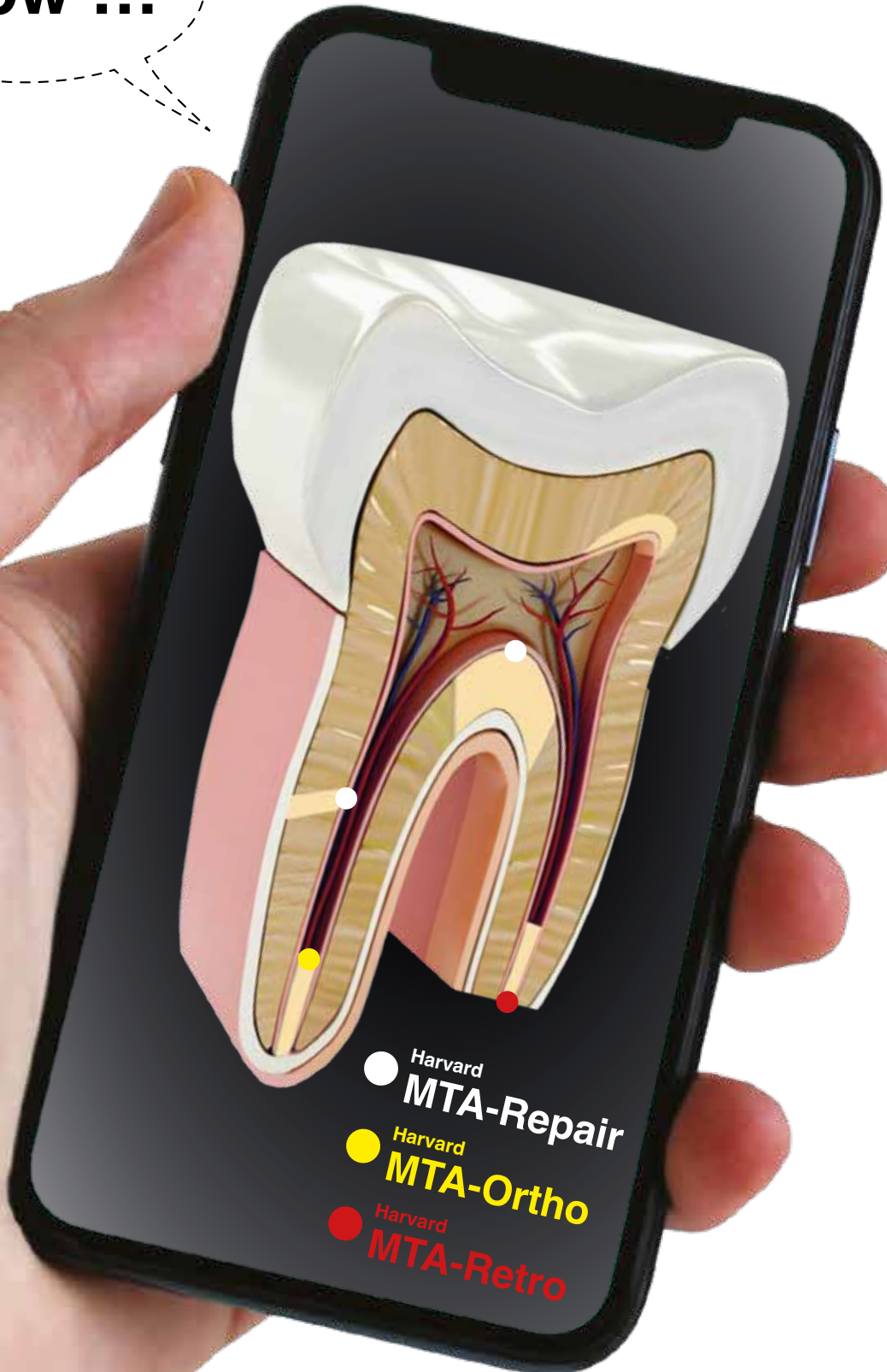
1 g / 3 ml or 2 g / 4 ml

<b>Harvard MTA Universal HandMix</b>	
1 g powder, 3 ml liquid, dosage spoon, mixing pad, spatula	7081507
2 g powder, 4 ml liquid, dosage spoon, mixing pad, spatula	7081508

# Root Canal MTA Specialities

Endodontics

Good to  
**know ...**





### Harvard MTA-Repair


(MTA XR)

Extra radiopaque MTA cement in capsules

- Specially recommended for filling of root perforations
- Firm consistency
- Extra radiopaque
- Mixing time: 30 sec
- Working time: 2:00 min (from start of mixing at 23 °C (73 °F))
- Next clinical step: 5:00 min

Set also in humid conditions



Harvard MTA-Repair (MTA XR)	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081505

### Harvard MTA-Ortho plus EndoDirect

(MTA XR Flow EWT)

Flowable MTA cement in capsules with extended working time


- Particularly suitable for direct and easy close of the apex
- Flowable consistency
- Extra long working time (4:00 min)
- Mixing time: 30 sec
- Working time: 4:00 min (from start of mixing at 23 °C (73 °F))
- Next treatment step: after only 10:00 min

Set also in humid conditions

#### Easy to use:

1. Mix the MTA capsule
2. Fill the endo syringe with the material directly from the capsule
3. Thanks to the flexible endo tip and the endo-stop, controlled MTA application up to the apex of the root canal



Harvard MTA-Ortho (MTA XR Flow EWT)	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch, 2 MTA EndoDirect syringes with flexible ento tip	7081510



# Root Canal MTA Specialities

## Endodontics

### Harvard MTA-Retro

(MTA XR Fast)


Fast setting, extra radiopaque MTA cement in capsules

- Specially recommended for root end filling (retrograde)
- Firm consistency
- Extra radiopaque
- Fast setting
- Mixing time: 30 sec
- Working time: 2:00 min (from start of mixing at 23 °C (73 °F))
- Next clinical step: 3:00 min

Set also in humid conditions



2 x 0.25 g

Harvard MTA-Retro (MTA XR Fast)	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081506

Harvard Applier OptiCaps®	7092000
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### The experts' assessment



Harvard MTA-Retro Fast setting, extra radiopaque MTA cement in capsules



#### Infected tooth 25

„Pain swollen on the upper left second premolar 25. From the diagnostic X-ray, a radiolucency around the tip of the root, clinical examination reveals movement of the tooth and an old root canal with post and core plus crown.“

## Perfect root end filling ...



First clinical image



X-ray after 12 months



First X-ray before treatment



X-ray after placement of Harvard MTA-Retro

>> Harvard MTA Retro. The perfect material for this treatment. <<



Dr. med. Klaus Herrligkoffer, Dentist, Berlin, Germany


## Harvard Glide & Clean

Harvard Glide & Clean is a carbamide peroxide and EDTA containing gel in syringes for the effective and facilitated cleaning of the root canal

EDTA supports the preparation by dissolving calcium salts from the canal. Developed for use in combination with sodium hypochlorite rinses.

- Facilitated removal of pulp tissue, dentine chips and debris
- Removal of the smear layer
- Chemical preparation
- Lubricant for rotary instruments for root canal preparation, reduction of the risk of fracture




<b>Harvard Glide &amp; Clean</b>	
2 ml syringe, 6 flexible tips	7081560

## Harvard RootTemp

Harvard RootTemp is calcium hydroxide for temporary root canal dressing

- Bacteria hostile environment (pH 12)
- Mineralizing
- Good radiopacity
- Easy application directly into the root canal with flexible, curved EndoTip



<b>Harvard RootTemp</b>	
2 ml syringe, 6 endo tips	7071264

<b>Harvard Endo Tips</b>	7083618
Refill bag with 25 endo tips	

# Root Canal Sealers

## Endodontics

### Harvard BioCal®-RootSeal **NEW!**

Bioactive, resin-modified MTA root canal sealer

Apatite formation through reaction of released calcium and hydroxide with endogenous phosphate.

- Excellent seal
- Apatite formation through reaction of released calcium and hydroxide with endogenous phosphate
- Mineralizing
- Environment hostile to bacteria (pH 11)
- Self cure and additional light cure for faster setting of the surface
- Easy to remove and revise, e.g. for subsequent post placement with fiber posts
- Convenient application from the minimix syringe
- Radiopaque
- **Optional:** for optimal, bubble-free, direct application into the root canal also available with **EndoDirect syringes** (Harvard BioCal®-RootSeal plus EndoDirect)

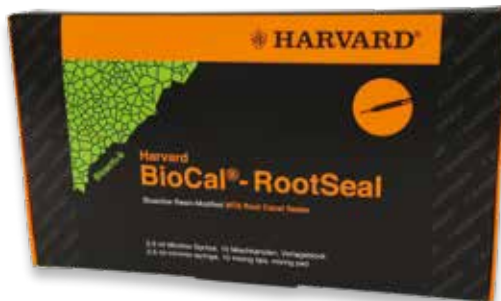
For perfect direct bubble-free insertion



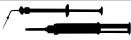

10 x EndoDirect

4 g (2.5 ml)

For the classic insertion with a lentulo

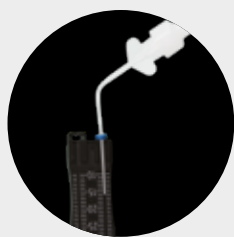


4 g (2.5 ml)

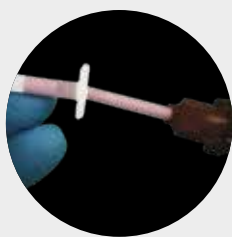
<b>Harvard BioCal®-RootSeal plus EndoDirect</b>	
4 g (2.5 ml) minimix syringe 10 EndoDirect syringes with flexible endo-tip 10 mixing tips (S-Brown)	7081552
<b>Harvard BioCal®-RootSeal</b>	
4 g (2.5 ml) minimix syringe 10 mixing tips (5 x S-Brown, 5 x O-Brown) 5 intra tips long, mixing pad	7081553

<b>Harvard Mini 4:1 / 10:1 S-Brown</b>	7093050
Refill bag with 50 mixing tips	
<b>Harvard Mini 4:1 / 10:1 O-Brown</b>	7091100
Refill bag with 50 mixing tips	
<b>Harvard IntraTips long</b>	7083620
Refill bag with 50 intra tips	

### Application with the EndoDirect syringe:



Set of the working length with the endo stop



Transfer the required amount of Harvard BioCal®-RootSeal into the EndoDirect syringe

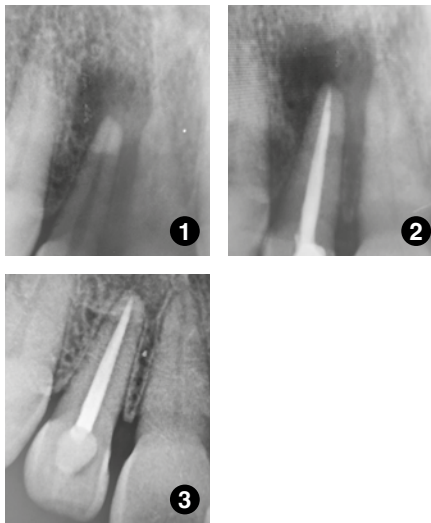


Injection of Harvard BioCal®-RootSeal into the root canal



Insertion of gutta-percha up to the working length into the root canal

# The bioactive root canal sealer.



- 1.: Apical radiolucency 12
- 2.: Definitive root canal filling with **Harvard BioCal®-RootSeal** and gutta-percha
- 3.: Recall after 6 months: Successful bone regeneration in apical region

>> The bioactive success! <<

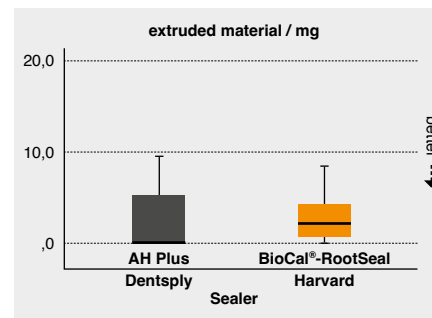


Dr. Hassan Salma, Dentist  
Mediclinic Al Noor Hospital, Abu Dhabi

## Investigation of microleakage of bioactive root canal sealers.

University Erlangen, Germany.  
Kopecka M, Opperskalski L, Zorzin J, Petschelt A, Lohbauer U, Ebert J

The aim of this study was to measure microleakage of this new sealer at two different time points (one week and 6 months) and to compare them with two well-established sealer materials. Additionally, the amount of material pressed beyond the apex (overfilling) was measured.

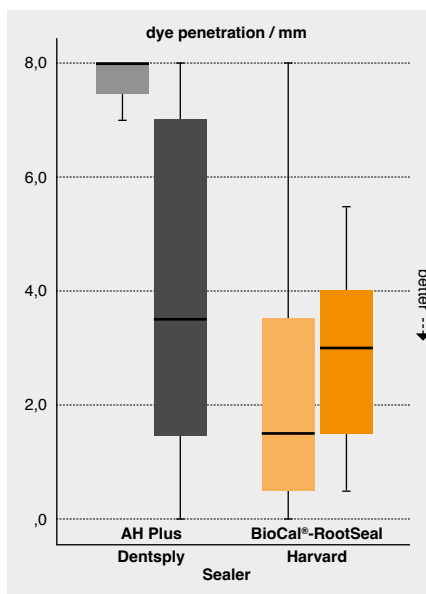


Amount of filling material pressed beyond the apex regarding different sealers.

### Conclusion

The new materials under investigation showed less leakage and slightly less material overfilling than the well-established material AH Plus that was used for comparison.

Thus, regarding the parameters tested, both new material Harvard BioCal®-RootSeal can be recommended for clinical use.



Time: ■ 1 week, ■ 6 month

Dye penetration regarding different sealers and time points.



PD Dr. Johannes Ebert,  
Universität Erlangen, Germany



**NEW!**



Harvard  
**BioCal®-RootSeal**  
The **bioactive**  
Root Canal  
Sealer.

# Root Canal Sealers

## Endodontics

### Harvard MTA-RootSeal **NEW!**


Bioactive MTA root canal sealer in capsules

- Excellent seal
- Apatite formation through reaction of released calcium and hydroxide with endogenous phosphate
- Mineralizing
- Bacteria-hostile environment (pH 12)
- Self cure
- Easily removable with Mastercone/Guttapercha
- Radiopaque
- OptiCaps® capsule for consistent consistency and convenient mixing
- Optional with EndoDirect syringe: direct application into the root canal
- Mixing time: 30 sec
- Working time: > 10:00 min  
(from start of mixing at 23 °C (73 °F))
- Next clinical step: after 60:00 min

Set also in humid conditions



2 x 0.25 g

<b>Harvard MTA-RootSeal</b>	
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch, 2 MTA EndoDirect syringes with flexible endo-tip	7081511
2 OptiCaps® ea. 0.25 g, ea. packed in an aluminum pouch	7081513

Optional: The **EndoDirect** syringe for perfect application.



Angled needle tip with individual working length



Filling the EndoDirect syringe

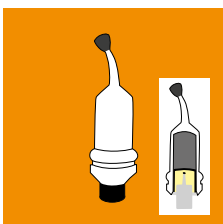


Insertion of the plunger into the EndoDirect syringe

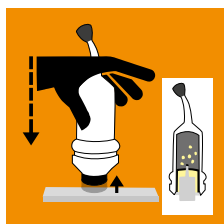


Application of the material into the root canal

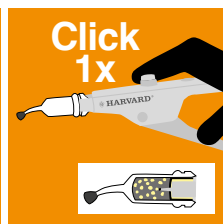
**Click before you mix.** Instructions for activating and mixing Harvard OptiCaps®.



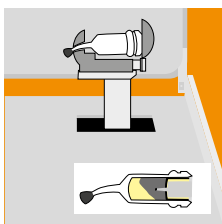
OptiCaps® before activation



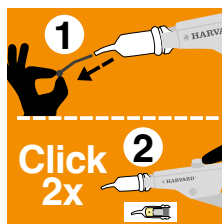
Activation: press the plunger on a hard and plane surface to the end into the OptiCaps®



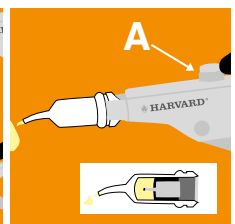
Insert the OptiCaps® into the Harvard Applier OptiCaps® and click once to standardize



To mix capsule



Insert the OptiCaps® into the Harvard Applier OptiCaps®, remove the pin from the nozzle



Extrude the mixed material on a glass plate or apply directly, unlock the gun and remove the capsule

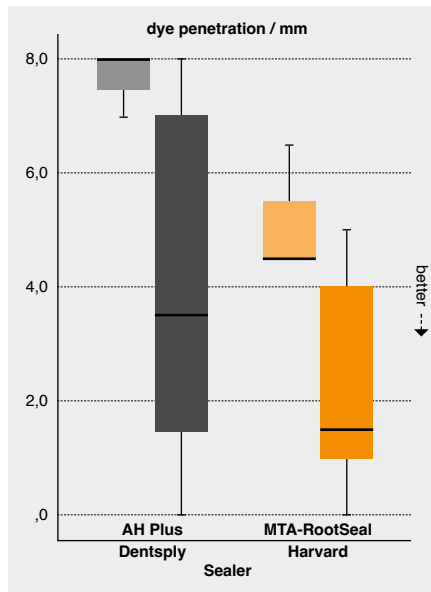
## Investigation of microleakage of bioactive root canal sealers.

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The aim of this study was to measure microleakage of this new sealer at two different time points (one week and 6 months) and to compare them with two well-established sealer materials. Additionally, the amount of material pressed beyond the apex (overfilling) was measured. Excerpt from the study Erlangen, Germany 2022

### Conclusion

The new materials under investigation showed less leakage and slightly less material overfilling than the well-established material AH Plus that was used for comparison. **Thus, regarding the parameters tested, both new material Harvard MTA-RootSeal can be recommended for clinical use.**

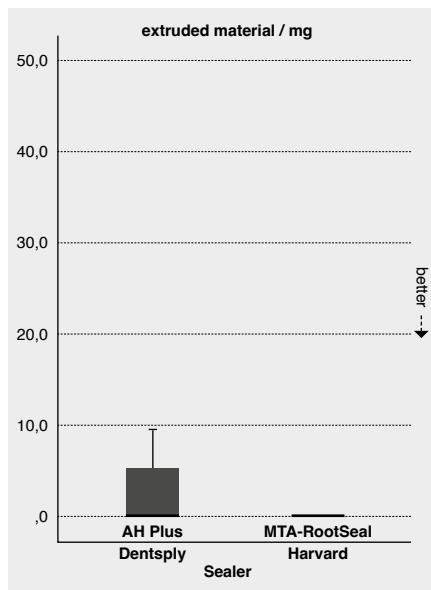


Time: ■ 1 week, ■ 6 month  
Dye penetration regarding different sealers and time points.

>> Harvard MTA-RootSeal is the first choice for me. <<



Harvard MTA-RootSeal is a pure MTA, easy to use, hydrophilic, has a very good consistency and offers a very good adaptation and sealing of the root canal wall. Further advantages are: a high pH value (antibacterial effect) biocompatibility, fast setting time, no postoperative pain and easy revisability.



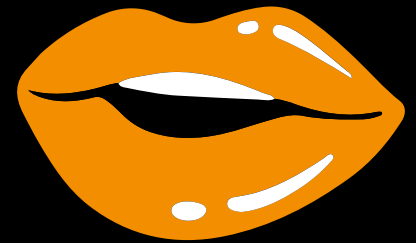
Amount of filling material pressed beyond the apex regarding different sealers.



Amir Ibrik D.D.S., N.D.B., E.R.B., MSc  
Scientific Affairs

Love is ...

... when two Harvard MTA-RootSeal OptiCaps® improve endodontics.



Harvard  
**MTA-RootSeal**  
Bioactive MTA  
root canal sealer













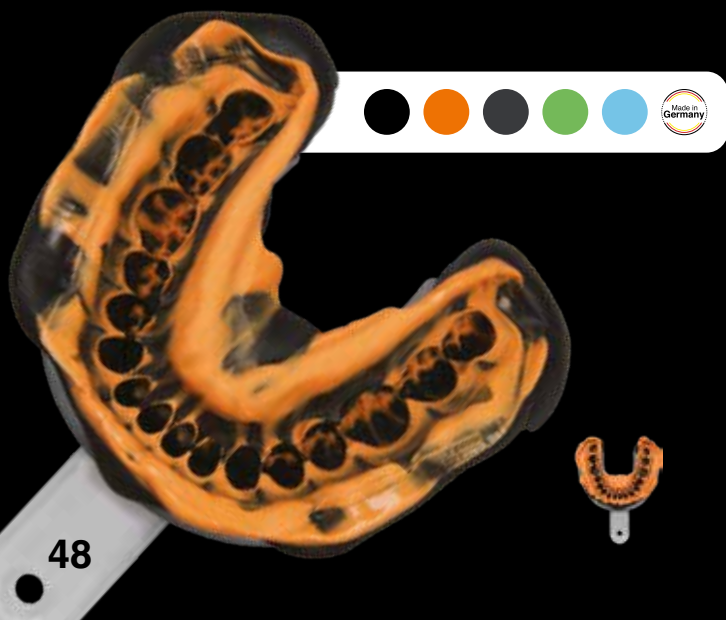


# Harvard SuperSnap®

Superhydrophilic vinyl polysiloxane impression material with SuperSnap property

The recommended combinations of Harvard SuperSnap®:

	phase 1 / step 1	+	phase 2 / step 2
<b>2 steps / 2 phases</b> Putty-wash technique (Material application successively)	 Putty		 Light
<b>1 step / 2 phases</b> Sandwich technique (Material application simultaneously)	 +  Putty Soft + Medium	→	
	 +  Heavy + Medium		
<b>1 step / 1 phase</b> Monophasetechnique	 Mono	→	



## Harvard SuperSnap®

# Impress with „SPEED“.

Super fast – super comfortable!



# Impression Materials

## Prosthetics

### Harvard SuperSnap®

Superhydrophilic vinyl polysiloxane impression material with SuperSnap property

- Same convenient working time as Harvard PremiumSil – **shortened intra oral setting time**
- Super hydrophilicity for perfect wettability and excellent reproduction of details
- Extremely user- and patient-friendly
- Excellent flow properties
- High elastic recovery, dimension stability
- Intensive colors for excellent legibility
- Available in two Snap-Set times: **Regular Snap** and **Quick Snap**
- Optimal kneadable consistency for the putty products
- Suitable for the sandwich technique and the putty-wash technique
- **Different viscosities:**  
**Putty, Putty Soft, Heavy, Mono, Medium, Light**



Working time  
**Quick Snap** Intra oral setting time



Harvard SuperSnap® Regular Snap	Color		
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1, 4 IntraTips yellow			
<b>Light</b>	orange		7083801
<b>Medium</b>	green		7083811
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1			
<b>Mono*</b>	blue		7083821*
<b>Heavy*</b>	black-grey		7083831*
2 jars ea. 600 g, 2 spoons			
<b>Putty</b>	black		7083841
<b>Putty Soft</b>	black		7083851
MaxiMix cartridge, 380 ml, 10 dynamic mixers, 1 bayonet ring			
<b>Putty Soft</b>	black		7083853
<b>Heavy*</b>	black		7083833*

Harvard SuperSnap® Quick Snap	Color		
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1, 4 IntraTips yellow			
<b>Light</b>	orange		7083802
<b>Medium</b>	green		7083812*
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1			
<b>Mono*</b>	blue		7083822*
<b>Heavy*</b>	black-grey		7083832*
2 jars ea. 600 g, 2 spoons			
<b>Putty</b>	black		7083842
<b>Putty Soft</b>	black		7083852
MaxiMix cartridge, 380 ml, 10 dynamic mixers, 1 bayonet ring			
<b>Heavy*</b>	black-grey		7083834*

\* No stock item, please contact the Harvard sales team.



<b>Harvard Auto-T 1:1 O-Yellow</b>	7098000
Refill bag with 50 mixing tips for Light, Medium – Regular / Quick	
<b>Harvard Auto-T 1:1 O-Green</b>	7098010
Refill bag with 50 mixing tips for Heavy – Regular / Quick	
<b>Harvard Auto-T 1:1 O-Pink</b>	7098020
Refill bag with 50 mixing tips for Mono – Regular / Quick	
<b>Harvard IntraTips yellow</b>	7083619
Refill bag with 50 mixing tips for Light, Medium – Regular / Quick	
<b>Harvard Maxi 5:1 Dynamic</b>	7091400
Refill bag with 50 dynamic mixers and 2 bayonet rings for Putty Soft MaxiMix Putty Soft MaxiMix Heavy – Regular / Quick MaxiMix	
<b>Harvard Dispenser Automix 1:1</b>	7095100








Working time  
**Regular Snap** Intra oral setting time



# Harvard PremiumSil

Superhydrophilic vinyl polysiloxane impression material

## The recommended combinations of Harvard PremiumSil:

Technique	Phase 1	Phase 2
<b>2 steps / 2 phases</b> Putty-wash technique (Material application successively)	 Putty + Light	or  Putty + Medium
<b>1 step / 2 phases</b> Sandwich technique (Material application simultaneously)	 Putty Soft + Medium	or  Heavy* + Medium
<b>1 step / 1 phase</b> Monophasetechnique	 Mono	

## Harvard PremiumSil

Superhydrophilic vinyl polysiloxane impression material

- Super hydrophilicity for perfect wettability and excellent reproduction of details
- Long working time, short intra oral setting time
- Excellent flow properties
- Optimal kneadable consistency for the putty products
- Very low shrinkage
- Suitable for the sandwich technique and the putty-wash technique
- Two setting times
- Durable storage of impression
- **Different viscosities: Putty, Putty Soft, Heavy, Mono, Medium, Light**



Harvard PremiumSil Normal Set	Color		
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1, 4 IntraTips yellow			
<b>Light</b>	orange		7083701
<b>Medium</b>	bright green		7083711
4 automix cartridges ea. 50 ml			
<b>Light</b>	orange		7083703*
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1			
<b>Heavy</b>	bright purple		7083731
2 jars ea. 600 g, 2 spoons			
<b>Putty</b>	dark purple		7083751
<b>Putty Soft</b>	purple		7083741
MaxiMix cartridge, 380 ml, 10 dynamic mixers, 1 bajonet ring			
<b>Putty Soft</b>	purple		7083740

Harvard PremiumSil Fast Set	Color		
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1, 4 IntraTips yellow			
<b>Light Fast</b>	orange		7083702
<b>Medium Fast</b>	bright green		7083712
4 automix cartridges ea. 50 ml			
<b>Light Fast</b>	orange		7083704*
2 automix cartridges ea. 50 ml, 12 mixing tips 1:1			
<b>Heavy Fast</b>	bright purple		7083732
2 jars ea. 600 g, 2 spoons			
<b>Putty Fast</b>	dark purple		7083752
<b>Putty Soft Fast</b>	purple		7083742
MaxiMix cartridge, 380 ml, 10 dynamic mixers, 1 bajonet ring			
<b>Heavy Fast</b>	bright purple		7083733

\* No stock item, please contact the Harvard sales team.



<b>Harvard Auto 1:1 O-Green</b>	7096000
Refill bag with 50 mixing tips for Harvard PremiumSil Heavy / Heavy Fast	
<b>Harvard Auto 1:1 O-Pink</b>	7091200
Refill bag with 50 mixing tips for Harvard PremiumSil Mono / Mono Fast	
<b>Harvard Auto 1:1 O-Yellow</b>	7091300
Refill bag with 50 mixing tips for Harvard PremiumSil Light / Light Fast Harvard PremiumSil Medium / Medium Fast	
<b>Harvard IntraTips yellow</b>	7083619
Refill bag with 50 mixing tips for Harvard PremiumSil Light / Light Fast Harvard PremiumSil Medium / Medium Fast	
<b>Harvard Maxi 5:1 Dynamic</b>	7091400
Refill bag with 50 dynamic mixers and 2 bajonet rings for Harvard PremiumSil Putty Soft MaxiMix Harvard PremiumSil Heavy Fast MaxiMix	
<b>Harvard Dispenser Automix 1:1</b>	7095100

## Harvard TraySive

Conventional tray adhesive for silicones

- Tray adhesive for all silicone impression materials
- Tacky bond between impression tray and A-silicone

<b>Harvard TraySive</b>	
10 ml bottle	7083753



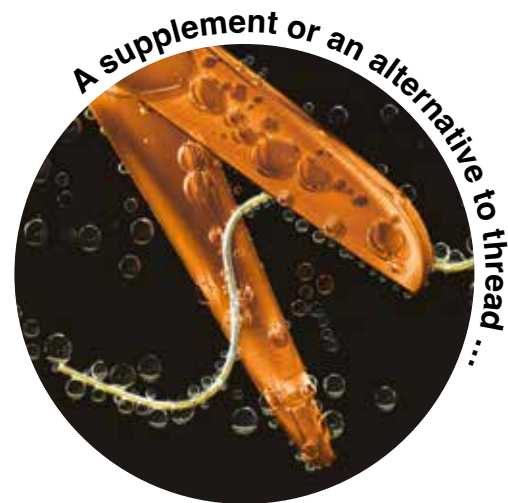
# Retraction Material


## Prosthetics

### Harvard LiquiCord®

Retraction paste for temporary gingiva displacement

- For patients: less painful
- For dentists: time saving, easy to use
- For a dry and expanded sulcus
- Neutral taste



Harvard LiquiCord®	
10 x 0.7 g, 20 needle tips	7083870

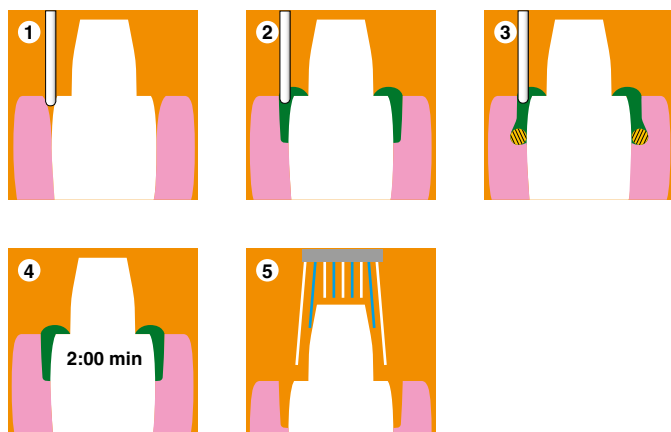
Harvard NeedleTips H18 white	7083875
Nachfüllbeutel mit 50 Needle Tips	

### Application of Harvard LiquiCord® ...

... for accurate impressions the gingiva retraction is very important: after a tooth preparation the gingival sulcus normally is filled with saliva, blood or other liquids and therefore not accessible for the impression material. This requires effective retraction with Harvard LiquiCord®. It temporarily displaces the gingiva and keeps the sulcus dry and protected. In addition Harvard LiquiCord® has a hemostatic effect.

**Harvard LiquiCord® can be used for all indications of temporary displacement of the marginal gingiva and to provide a dry and expanded sulcus:**

- For digital impressions
- For conventional impressions
- Impressions for restorations (temporary and permanent)
- Preparations of class II and V



1. Introduce the tip / needle into the sulcus, opening the sulcus
2. Move the top of the tip slowly and evenly around the tooth while pressing out the paste. Fill the sulcus all around with enough Harvard LiquiCord® so that an excess appears
3. If necessary, Harvard LiquiCord® can be used in combination with a retraction cord, that is placed before in the sulcus, to open the sulcus further
4. Let Harvard LiquiCord® work for at least 2 minutes and keep away all moisture during this time
5. After this time flush off Harvard LiquiCord® completely from the sulcus with air and water

## Harvard Bite

Bite registration material based on A-silicone

- Precise and distortion-free
- Fast setting (45 sec)
- Very low shrinkage
- Easy to cut, not brittle
- Ideal consistency
- Durable storage of bite registrate
- Vanilla smell
- Neutral taste



<b>Harvard Bite</b>	
2 x 50 ml automix cartridge, in the shade Yellow (vanilla smell), 12 mixing tips	7083700
4 x 50 ml automix cartridge	7083710
<b>Harvard Auto 1:1 O-Green</b>	7096000
Refill bag with 50 mixing tips	
<b>Harvard Dispenser Automix 1:1</b>	7095100

### The experts' assessment



Intraoral application of **Harvard Bite**: optimal consistency



Only 45 seconds cure



Excellent reproduction of the bite situation



Bite registration



Precise trimming and grindability

>> Harvard Bite has convinced me with its positive properties. <<



Kay Zischow,  
Zischow Dental Hamburg GmbH,  
Germany

The advantages of Harvard Bite for CMD registrations are that the material becomes very firm after curing, is very thin-flowing and the bite can thus be ideally fixed in a locked position. I would recommend this material to all dentists and colleagues at any time.

# Temporary Crown & Bridge Materials

## Prosthetics

### Harvard TEMP C&B Ultra **NEW!**

Semi-permanent crown and bridge material, ratio 10:1

- Highgloss polishability
- High flexural strength
- Reduced smear layer
- High color stability
- Excellent esthetic
- Ratio 10:1



50 ml

<b>Harvard TEMP C&amp;B Ultra</b>	
50 ml automix cartridge 10:1, 10 mixing tips	
A2	7081662
A3	7081663

<b>Harvard Auto 4:1 / 10:1 S-Blue</b>	7094000
Refill bag with 50 mixing tips	
<b>Harvard Dispenser Automix 4:1 / 10:1</b>	7095000



Harvard  
TEMP C&B Ultra

# Highgloss polishability

The natural fluorescence and very good polishability ensure perfect semi-permanent esthetic results.

**NEW!**

# Temporary Crown & Bridge Materials

Prosthetics

## Harvard TEMP C&B

Temporary crown and bridge material, ratio 10:1

- Reliable and easy to use
- Final processing after 5:00 min
- Very good fracture resistance and hardness specially for veneers and longer bridge spans
- Very low polymerization temperature
- Natural esthetics and fluorescence
- High color stability



50 ml

Harvard TEMP C&B	
50 ml automix cartridge 10:1, 10 mixing tips	
A1	7081651
A2	7081652
A3	7081653
A3.5	7081654
BL	7081650

Harvard Auto 4:1 / 10:1 S-Blue	7094000
Refill bag with 50 mixing tips	
Harvard Dispenser Automix 4:1 / 10:1	7095000


### Harvard TEMP Glaze LC

Varnish for temporary crowns and bridges

- Highly esthetic and shiny surface without polishing
- Ideal for crowns and bridges in the visible area



30 ml

Harvard TEMP Glaze LC	
30 ml bottle	7081730

## Harvard TEMP C&B Pro

Temporary crown and bridge material, ratio 4:1

- Reliable and easy to use
- Good fracture resistance and hardness
- Low polymerization temperature
- Natural esthetics and fluorescence
- Color stability
- Good price / performance ratio



50 ml

Harvard TEMP C&B Pro	
50 ml automix cartridge 4:1, 10 mixing tips	
A1	7081641
A2	7081642
A3	7081643

Harvard Auto 4:1 / 10:1 S-Blue	7094000
Refill bag with 50 mixing tips	
Harvard Dispenser Automix 4:1 / 10:1	7095000

# Temporary Luting Cements

## Prosthetics

### Harvard TEMP Cem

Eugenol-free temporary luting cement in a minimix syringe

- Optimal adhesion
- Easy removal of the temporary
- No residual cement on the core
- Contains zinc oxide
- Excellent flow
- Eugenol-free
- Easy removal of excess material



Harvard TEMP Cem	
5 ml minimix syringe, 10 mixing tips	7081100
10 ml minimix syringe, 20 mixing tips	7081200

Harvard Mini 1:1 S-Brown	7091050
Refill bag with 50 mixing tips	

### The experts' assessment

>> Harvard TEMP Cem save precious working time and make patients feel satisfied. <<



Preparation



Crown fixation with  
Harvard TEMP Cem



Removal of excess material



Temporary

Harvard TEMP Cem is a temporary cement of the latest generation. The minimix syringe saves valuable working time and is easy to use. Depending on the application, the cement can hold the restoration reliably for several days to several months. Excess can be easily removed and cleaned without leaving any residue.

I save valuable working time and my patients are very satisfied.




Oxana Hilfer, Dentist,  
Hamburg, Germany

### Harvard TEMP Cem EasyDose®

Eugenol-free temporary luting cement in a dosing syringe

- Handmix – more economic
- Optimal adhesion
- Easy removal of the temporary
- No residual cement on the core
- Contains zinc oxide
- Excellent flow behavior
- Eugenol-free
- Easy removal of excess



Harvard TEMP Cem EasyDose®	
10 ml EasyDose® syringe	7081103



# Temporary Luting Cements

Prosthetics


## Harvard TEMP Cem Esthetic

Translucent zinc oxide cement for temporary luting

- Translucent and esthetic material
- Easy removal of excess material
- Easy removal of the restoration
- No residual cement on the core
- Eugenol-free



5 ml

<b>Harvard TEMP Cem Esthetic</b>	
5 ml minimix syringe, 10 mixing tips	7081104

<b>Harvard Mini 1:1 S-Brown</b>	7091050
Refill bag with 50 mixing tips	

# Semi-permanent Luting Cement

Prosthetics


## Harvard Implant Semi-permanent

Dual cure composite cement for semi-permanent cementation of implant based crowns and bridges

- Safe fixation, easy removal, easy re-cementation
- Elastic polymer film to minimize chewing pressure on the bone
- Excellent sealing, no shrinkage
- Easy removal of the crown
- Easy removal of excess material
- Contains zinc oxide



5 ml

<b>Harvard Implant Semi-permanent</b>	
5 ml minimix syringe, 10 mixing tips	7081400

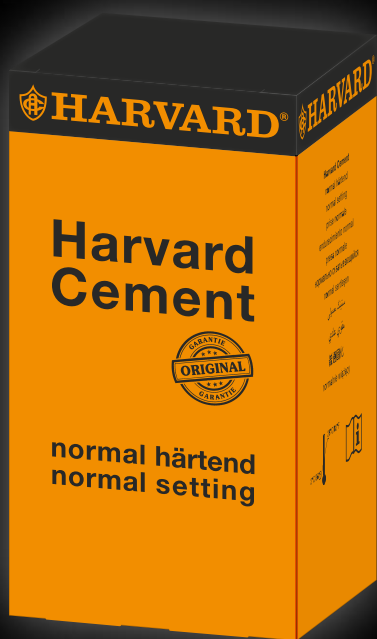
<b>Harvard Mini 4:1 / 10:1 S-Brown</b>	7093050
Refill bag with 50 mixing tips	

Love is ...

... when you  
don't notice  
how fast  
time flies.



Harvard  
**Cement**  
The Original.  
Since 1892.



It all started

# 1892 with Harvard Cement.

The cement. Timeless and contemporary.  
Harvard Cement stands  
for a long and successful history.  
In addition, Harvard the cement inventor has  
developed into a dental  
specialist in almost all areas.  
See for yourself ...



## Harvard Cement The Original. Since 1892.

Zinc phosphate cement for permanent luting of restorations and for lining.

**The classic – well-proven since 1892.**

- High compressive strength and low film thickness
- Good biocompatibility
- Easy and safe application
- Unmatched price / performance ratio for luting and lining materials
- Applicable for:
  - Zircon oxide ceramic
  - Silicate ceramic
  - Aluminium oxide ceramic
  - Gold and non precious-metals
- Cement according to DIN EN ISO 9917-1
- Available in two setting times: normal and fast setting
- **Well-proven since 1892**

(Mixing advice see page 68)



15 ml / 40 ml

15 ml / 40 ml





50 x 0.5 g






10 x 0.5 g

**Also available in OptiCaps®**

- For permanent luting of crowns and bridges
- Quantity for 1 to 2 crowns
- **Mixing time: 10 sec**
- **Working time: 1:30 min** from start of mixing

Harvard Cement normal setting		
<b>Powder</b>		Single powder 35 g
Shade		Clinic powder 100 g
1 - White		7002501
2 - Bluish white		7002201
3 - Yellowish white		7002202
4 - Light yellow		7002203
5 - Yellow		7002204
		7002205
<b>Liquid</b>		Single liquid 15 ml
		Clinic liquid 40 ml
		7002600
		7002300

Harvard Cement quick setting		
<b>Powder</b>		Single powder 35 g
Shade		Clinic powder 100 g
1 - White		7001501
2 - Bluish white		7001201
3 - Yellowish white		7001202
4 - Light yellow		7001203
5 - Yellow		7001204
		7001205
<b>Liquid</b>		Single liquid 15 ml
		Clinic liquid 40 ml
		7001600
		7001300

Harvard Cement OptiCaps®	
ea. packed in an aluminum pouch	
10 OptiCaps® ea. 0.5 g, Shade 3 - Yellowish white	7081310
50 OptiCaps® ea. 0.5 g, Shade 3 - Yellowish white	7081350
<b>Harvard Applier OptiCaps®</b>	7092000

## Harvard Polycarboxylat Cement


Zinc polycarboxylate cement for permanent luting and lining


- Non-irritant for sensitive teeth
- Cement according to DIN EN ISO 9917-1
- Easy and safe application
- Unmatched price / performance ratio for luting materials

(Mixing advice see page 68)



15 ml / 40 ml

<b>Powder</b>		Single powder 35 g	Clinic powder 100 g
Shade			
3 - Yellowish white		7031503	7031203
4 - Light yellow		7031504	7031204

<b>Liquid</b>		Single liquid 15 ml	Clinic liquid 40 ml
		7031600	7031300

# Glass Ionomer Cements for Luting Prosthetics

## Harvard IonoResin Cem Extra (LC)

Esthetic light and self cure resin-reinforced glass ionomer cement for luting of crowns and bridges, inlays, onlays and as a liner under composite fillings (with additional light curing)

- Good esthetics
- Low film thickness
- Practically insoluble
- Improved mechanical properties
- Very low shrinkage
- Set on demand by three types of curing:  
self + light cure + classical cement reaction
- Radiopaque
- HandMix or OptiCaps®



Harvard IonoResin Cem Extra (LC) 15 g powder – Universal / 10 ml liquid dosage spoon, mixing pad		7061116
--	---	---------

50 OptiCaps® ea. 0.4 g – Universal		7061251
Harvard Applier OptiCaps®		7092000

**Resin-  
Reinforced**

## Harvard IonoResin Cem (LC)

Self cure resin-reinforced glass ionomer cement for luting crowns and bridges (with additional light curing)

- Radiopaque
- Moisture tolerant
- Easy to mix and convenient to apply
- Good marginal fit and seal
- Practically insoluble
- In clinical situations close to the pulp use **Harvard CalciumHydroxide** liner (see also page 37)
- HandMix
- Good price / performance ratio

Harvard IonoResin Cem (LC) 15 g powder – Universal / 10 ml liquid dosage spoon, mixing pad		7041216*
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\* No stock item, please contact the Harvard sales team.

# Glass Ionomer Cements for Luting Prosthetics

## Harvard IonoGlas Cem Extra

Classical self cure glass ionomer cement for luting of crowns and bridges, metal based inlays, onlays and as a liner under composite fillings

- Good esthetics
- Radiopaque
- Low solubility
- Good adhesion to enamel and dentine
- High fluoride release
- Biocompatible
- HandMix or OptiCaps®



<b>Harvard IonoGlas Cem Extra</b> 15 g powder – Universal / 10 ml liquid dosage spoon, mixing pad		7042115
---	---	---------


50 OptiCaps® ea. 0.4 g – Universal	7042250
Harvard Applier OptiCaps®	7092000

Classical

## Harvard IonoGlas Cem

Classical self cure conventional glass ionomer cement for luting of crowns and bridges

- Good adhesion to dentine and enamel
- Fluoride release, biocompatible and radiopaque
- Easy to mix and to use
- Good marginal fit and seal
- HandMix
- Good price / performance ratio

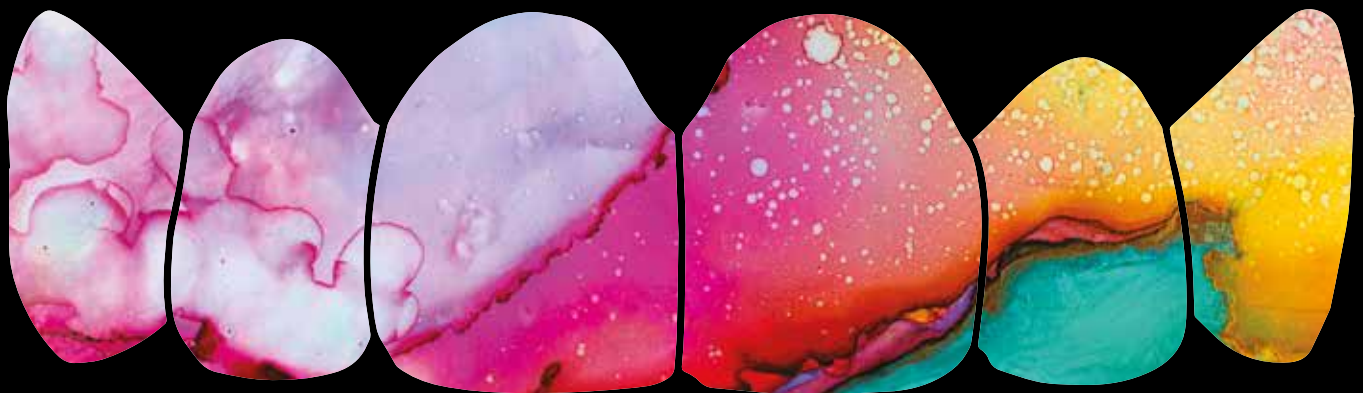
<b>Harvard IonoGlas Cem</b> Dosierlöffel		
15 g powder – Universal / 10 ml liquid		7041115
35 g powder – White / 20 ml liquid		7041130*
35 g powder – Universal / 20 ml liquid		7041135



\* No stock item, please contact the Harvard sales team.

Harvard

# VeneerCem



**NEW!**

**Shade-adaptive  
light cure veneer  
composite cement.**

- Precise application
- Superior handling properties
- Excellent physical properties
- Simple storage logistics

### Harvard LuteCem SE

Self-adhesive dual cure resin-modified luting cement

- Suitable for:
  1. Luting of posts made of ceramics, metal, fiber-reinforced materials
  2. Luting of crowns and bridges made of ceramics, zirconia, composites and metal
- Dual cure
- Fluoride release



5 ml

<b>Harvard LuteCem SE</b>	
5 ml minimix syringe, 10 mixing tips Harvard Mini 4:1 / 10:1 S-Brown 5 mixing tips Harvard Mini 4:1 / 10:1 O-Brown 5 intra tips long	
Translucent	7081101
A2	7081105
White opaque	7081107*

<b>Harvard Mini 4:1 / 10:1 S-Brown</b>	7093050
Refill bag with 50 mixing tips	
<b>Harvard Mini 4:1 / 10:1 O-Brown</b>	7091100
Refill bag with 50 mixing tips	
<b>Harvard IntraTips long</b>	7083620
Refill bag with 50 intra tips	

\* No stock item, please contact the Harvard sales team.

### Harvard VeneerCem

Shade-adaptive, light cure composite cement for the cementation of translucent veneers

- Shade-adaptive – for a good adaption to the existing restoration
- Precise application
- Easy excess removal
- Permanent result
- Very high polishability
- Natural fluorescence
- No try-in paste required (time saving)
- High color stability



2 x 1 ml

<b>Harvard VeneerCem</b>	
2 x 1 ml syringe, incl. 8 needle tips H18	7100020

<b>Harvard NeedleTips H18</b>	7095158
Refill bag with 50 needle tips	

## Precise application

# Transparent Matrix Material

## Prosthetics

### Harvard TransMatrix

Transparent matrix and bite registration material based on A-silicone

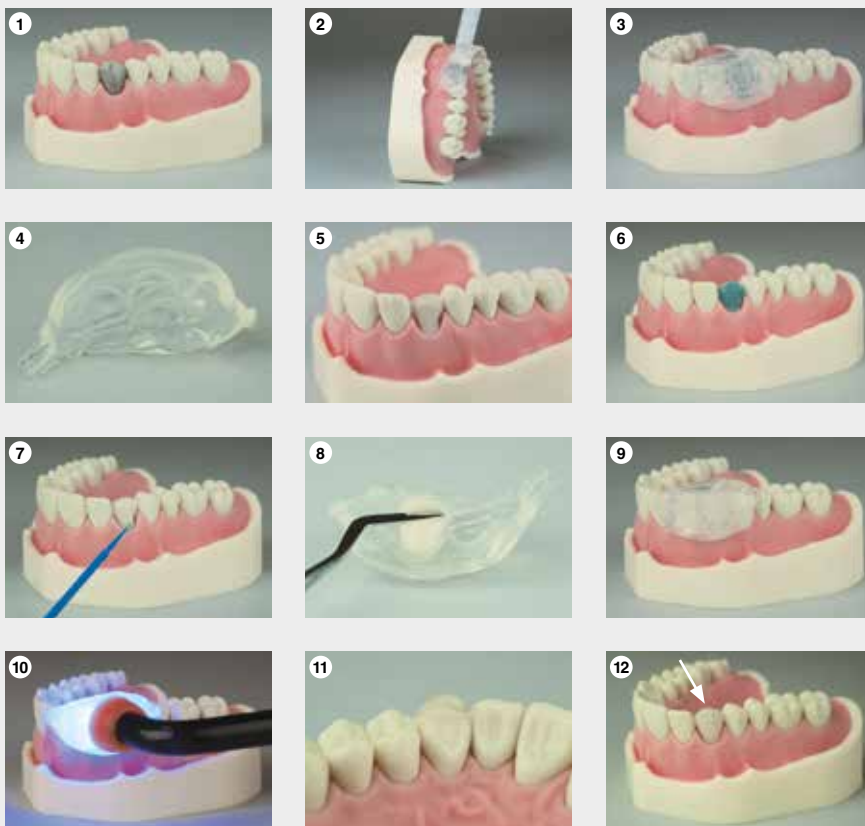
- Highly transparent to allow perfect light cure of composite through the matrix
- Appropriate final hardness and good detail reproduction
- Original shape remains unaltered
- Dimensionally stable over time and after disinfection
- Perfect consistency and thixotropy
- Fast setting time (1:20 min in mouth)
- Comfortable for the patient with neutral taste and flavor
- Time-saving – direct application in the mouth
- Also usable as transparent bite registration material



<b>Harvard TransMatrix</b> 2 x 50 ml automix cartridge, shade transparent, 12 mixing tips		7083798
--	---	---------

<b>Harvard Auto 1:1 O-Green</b> Refill bag with 50 mixing tips	7096000
<b>Harvard Dispenser Automix 1:1</b>	7095100

### The experts' assessment



- 1: Initial situation
- 2: Application of Harvard TransMatrix to the surface to be prepared and adjacent teeth
- 3: Fast curing time (1:20 min intraorally)
- 4: Complete matrix
- 5: Preparation with enamel chamfer
- 6: Etching of the prepared surface with **Harvard Etch**
- 7: Application of adhesive system, e.g. **Harvard InterLock ONE**
- 8: Application of a slightly warmed, moldable composite into the matrix, e.g. **Harvard UltraFill**
- 9: Correct repositioning of the filled matrix into the oral cavity
- 10: 40 sec light curing through the matrix, repeat the procedure after removing the matrix
- 11: Excess removal and polishing with suitable rotary instruments and, if necessary, finishing strip
- 12: **Finished direct composite restoration**



Amir Ibrak D.D.S., N.D.B., E.R.B., MSc  
Scientific Affairs

>> Easy application of Harvard TransMatrix. <<



# With this selection you can relax lean back.



*Much more  
than you  
expect.*

# Accessories and More.



# Accessories

## Miscellaneous

<b>Harvard NeedleTips H18</b>	7095158
with 50 needle tips for Harvard MultiChrome Flow, Harvard UltraFill Flow, Harvard PremiumFlow, Harvard IonoSphere Bulk Flow, Harvard CalciumHydroxide LC	
<b>Harvard NeedleTips H18 white</b>	7083875
with 50 needle tips for Harvard LiquiCord®	
<b>Harvard NeedleTips H20</b>	7091226
with 50 needle tips for Harvard IonoLine, Harvard RestoreFlow, Harvard BioCal®-Line	
<b>Harvard NeedleTips H22</b>	7095162
with 50 needle tips for Harvard BioCal®-CAP	
<b>Harvard NeedleTips H25</b>	7095126
with 50 needle tips for Harvard Etch	
<b>Harvard Microbrush®</b>	7095156
with 50 applicators for Harvard InterLock® ONE, Harvard InterLock®, Harvard Bond SE Mono, Harvard Restore System Kit, Harvard Bond SE Dual	
<b>Harvard Auto-T 1:1 O-Yellow</b>	7098000
with 50 mixing tips for SuperSnap® Light, Medium, Regular / Quick	
<b>Harvard Auto-T 1:1 O-Green</b>	7098010
with 50 mixing tips for SuperSnap® Heavy Regular / Quick	
<b>Harvard Auto-T 1:1 O-Pink</b>	7098020
with 50 mixing tips for SuperSnap® Mono, Regular / Quick	
<b>Harvard IntraTips yellow</b>	7083619
with 50 intra tips for Harvard PremiumSil Light, SuperSnap®, Light Fast, Medium, Medium Fast, Harvard ZirconCore 25 ml	
<b>Harvard IntraTips long</b>	7083620
with 50 intra tips long for Harvard Core, Harvard ZirconCore, Harvard LuteCem SE, Harvard BioCal®-RootSeal, Harvard BioCal®-Cem	
<b>Harvard Mini 1:1 O-Brown</b>	7083610
with 50 mixing tips for Harvard Core, Harvard ZirconCore	
<b>Harvard Mini 4:1 / 10:1 O-Brown</b>	7091100
with 50 mixing tips for Harvard LuteCem SE, Harvard BioCal®-RootSeal, Harvard BioCal®-Cem	
<b>Harvard Mini 4:1 / 10:1 S-Brown</b>	7093050
with 50 mixing tips for Harvard LuteCem SE, Harvard Implant Semi-permanent, Harvard BioCal®-RootSeal plus EndoDirect, Harvard BioCal®-RootSeal, Harvard BioCal®-Cem	
<b>Harvard Mini 1:1 S-Brown</b>	7091050
with 50 mixing tips for Harvard TEMP Cem Esthetic, Harvard TEMP Cem	
<b>Harvard Auto 4:1 / 10:1 S-Blue</b>	7094000
with 50 mixing tips for Harvard TEMP C&B, Harvard TEMP C&B Pro	
<b>Harvard Auto 1:1 O-Green</b>	7096000
with 50 mixing tips for Harvard Bite, Harvard TransMatrix, Harvard PremiumSil Heavy / Heavy Fast	
<b>Harvard Auto 1:1 O-Pink</b>	7091200
with 50 mixing tips for Harvard PremiumSil Mono / Mono Fast	
<b>Harvard Auto 1:1 O-Yellow</b>	7091300
with 50 mixing tips for Harvard PremiumSil Light / Light Fast, Harvard PremiumSil Medium / Medium Fast, Harvard ZirconCore 25 ml	
<b>Harvard Maxi 5:1 Dynamic</b>	7091400
with 50 dynamic mixers and 2 bayonet rings for Harvard PremiumSil and Harvard SuperSnap®, Putty Soft MaxiMix, Heavy Fast MaxiMix	
<b>Harvard Endo Tips</b>	7083618
with 25 endo tips for Harvard RootTemp	
<b>Harvard Applier OptiCaps®</b>	7092000
for all OptiCaps®	
<b>Harvard Applier OptiTips®</b>	7095200
for all OptiTips® and ComforTips®s	
<b>Harvard Dispenser Automix 4:1 / 10:1</b>	7095000
for Harvard TEMP C&B, Harvard TEMP C&B Pro	
<b>Harvard Dispenser Automix 1:1</b>	7095100
for Harvard Bite, Harvard TransMatrix, Harvard PremiumSil and Harvard SuperSnap®, Light / Light Fast, Medium / Medium Fast, Heavy / Heavy Fast, Mono / Mono Fast	
<b>Harvard Dispenser Automix 1:1 / 2:1</b>	7095600
for Harvard ZirconCore 25 ml	



# Mixing Advices

## Miscellaneous



### For Harvard Cement



1

**Tip:**  
use a cold glass plate,  
especially in warm  
countries.

Dispense onto a clean, dry glass plate powder and liquid at approx. 23 °C (73 °F).



2

Divide into 4 portions as follows: 1/2, 1/4, 1/8, 1/8.



3

Mixing: start first 1/8 with the whole liquid quartely within 15 seconds.



4

Add second 1/8 and mix for 15 seconds while spreading.



5

Draw 1/4 into the mixture.



6

Mix while pressing with flat spatula in the next 30 seconds.



7

Mix with the remaining half portion for 30 seconds to obtain an homogen mass.



8

Use the entire surface of glass plate.



9

Ready-for-use cement mix within 90 seconds.

#### Harvard Cement normal setting:

For luting consistency: powder 1.5 g, liquid 1.0 g  
For cavity lining consistency: powder 2.1 g, liquid 1.0 g

#### Harvard Cement quick setting:

For luting consistency: powder 1.8 g, liquid 1.0 g

### For Harvard Polycarboxylat Cement

For mixing of polycarboxylate cement the whole amount of powder is divided into two equal halves. One half is further divided into two equal parts (quarter).

In 30 seconds mix one half of the powder into the liquid. Then the other two quarters are mixed in for another 15 seconds each. This will result in a total mixing time of 60 seconds.

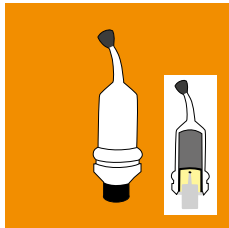
The mixing ratio (by weight) of powder to liquid is 2.9 : 1 (luting cement) or 3.6 : 1 (liner).

# Activating and mixing OptiCaps®

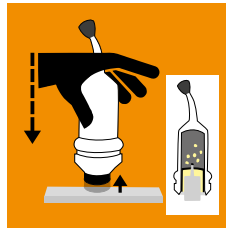
Miscellaneous

## “Click before you mix!”

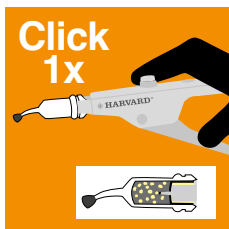
Remove capsule (OptiCaps®) from the pouch



1. OptiCaps® before activation.

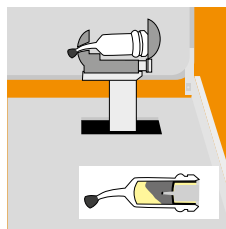


2. For activation of the OptiCaps® press the plunger on a hard and plane surface to the end into the OptiCaps®.

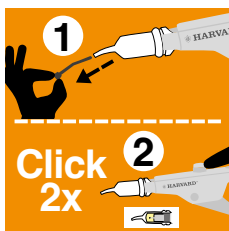


3. Insert the OptiCaps® into the Harvard Applier OptiCaps® and click once to standardize.

Note: The plunger must be at the same level as the bottom of the capsule.

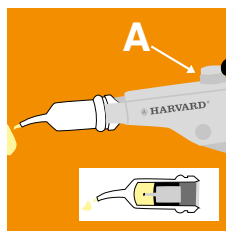


4. Insert the OptiCaps® into a mixer, close lid and mix immediately for the period mentioned in the instructions for use (with about 4300 oscillations / min).



5. Insert the OptiCaps® into the Harvard Applier OptiCaps®. Remove the pin from the nozzle. If not, capsule can burst.

Pull the lever twice (2 clicks) to prime the OptiCaps®.



6. Extrude the mixed material on a glass plate or apply directly. Unlock the gun (push button A) and remove the OptiCaps®.

**Only** with the Harvard Applier OptiCaps® (Order-No. 7092000) the optimal amount of mixed material is guaranteed.

For the selection of a suitable capsule mixer, our sales and marketing colleagues are gladly available to you.

## Mixing & working times of various Harvard OptiCaps® products.

Product	Mixing time	Working time*	Next clinical step
Harvard MTA-CAP (MTA XR Flow Fast)	30 sec	2:00 min	3:00 min
Harvard MTA-PT	30 sec	2:00 min	3:00 min
Harvard MTA Universal	30 sec	2:00 min	5:00 min
Harvard MTA-Repair (MTA XR)	30 sec	2:00 min	5:00 min
Harvard MTA-Ortho (MTA XR Flow EWT)	30 sec	4:00 min	10:00 min
Harvard MTA-Retro (MTA XR Fast)	30 sec	2:00 min	3:00 min
Harvard MTA-RootSeal	30 sec	>10:00 min	60:00 min
Harvard Cement	10 sec	1:30 min	n/a
Harvard Ionoglas Fill Extra	10 sec	1:30 min	n/a
Harvard Ionoresin Fill Extra	10 sec	1:30 min	n/a
Harvard Ionoglas Cem Extra	10 sec	1:30 min	n/a
Harvard Ionoresin Cem Extra	10 sec	2:00 min	n/a

\* from the start of mixing at 23 °C (73 °F)



**For your Notes**

Miscellaneous



Lined area for notes, consisting of horizontal grey lines on a white background.



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than you  
expect.

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