



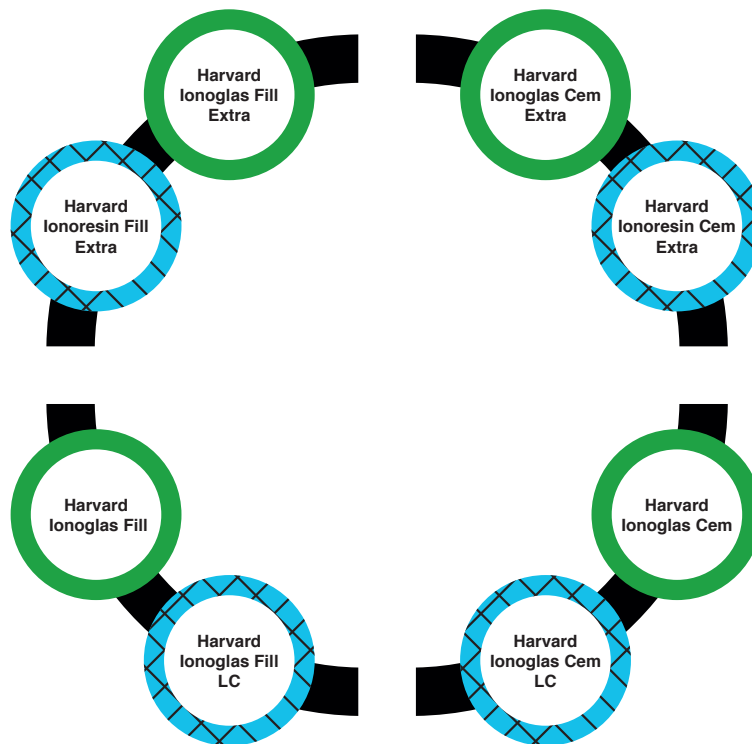
# The world of glass ionomer cements.





# Harvard Glass Ionomer Cement for:

## Fillings & Lutings.



### Harvard conventional glass ionomer cement

- Bond to dentine and enamel, no shrinkage, good marginal fit and sealing
- Fast and easy to use, without bonding and etching
- High fluoride release
- Contains no methacrylates
- Ideal for patients are allergic to methacrylates
- Ideal for deciduous teeth



### Harvard resin-reinforced glass ionomer cement

- Fast, efficient and comfortable
- Excellent marginal fit and sealing
- Time savings in terms of use light cure
- Good aesthetic and good polishability
- Fluoride release
- Moisture tolerant
- Excellent bonding to composites
- Ideal for deciduous teeth
- Practically insoluble

# For comfortable glass ionomer fillings.

## Technical data.

	PremiumLine				BasicLine	
	conventional GIC		resin-reinforced GIC		conventional GIC	resin-reinforced GIC
	Harvard Ionoglas Fill Extra	OptiCaps®	Harvard Ionoresin Fill Extra	OptiCaps®	Harvard Ionoglas Fill	Harvard Ionoglas Fill LC
Delivery form	powder/4x liquid	OptiCaps®	powder/4x liquid	OptiCaps®	powder/4x liquid	powder/4x liquid
Shade	A2; A3; A3.5		A2; A3; A3.5		A2; A3	A3
Mixing time	30 sec	10 sec	30 sec	10 sec	30 sec	30 sec
Working time - from start of mixing at 23 °C / 73 °F	1:30 min	1:30 min	2:30 min	2:00 min	1:20 min	2:00 min
Net setting time at 37 °C / 99 °F	3:30 min	3:30 min	LC** 20 sec without LC 4:00 min	LC** 20 sec without LC 4:00 min	4:00 min	LC** 20 sec without LC 5:30 min

\*\* LC: Light-cure

## Overview: Harvard GIC Fillings.

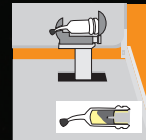
	conventional GIC	Harvard Ionoglas Fill Extra	Harvard Ionoglas Fill	Harvard Ionoresin Fill Extra	Harvard Ionoglas Fill LC
Deciduous teeth: final restorations for Class I, II and V	✓	✓	✓	✓	✓
Sandwich material for heavy stress bearing Class I and II cavities	✓	✓	✓	✓	✓
Long term restoration in non-load bearing areas of Class I and II	✓	✓	✓	✓	✓
Restorations for Class V (Dental neck caries)	✓	✓	✓	✓	✓
Intermediate restorations	✓	✓	✓	✓	✓
Core build-up material			✓	✓	



# Conventional meets aesthetics.



The long-term fluoride release is very high. This reduces the risk of secondary caries at the interface of tooth and filling.







# Harvard Ionoglas Fill Extra

Self cure conventional aesthetic glass ionomer cement for fillings.

Harvard's resin-free filling solution is used in particular for allergic patients and has been valued by customers worldwide for many years. Harvard Ionoglas Fill Extra is also ideal for deciduous tooth restorations. It also has sufficient mechanical strength.

Available as powder / liquid and OptiCaps®. Available shades A2, A3 and A3.5.  
Order information on last page.

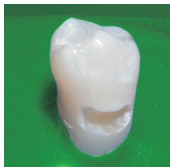
### Properties and advantages

- Natural translucency and aesthetics
- Convenient to apply and easy to handle
- Easy finishing
- Low solubility
- High fluoride release and radiopaque

### Indications

- Deciduous teeth: final restoration for Class I, II and V (according to Black)
- Long term restorations in non-load bearing areas of Class I and II
- Restorations for Class IV and V

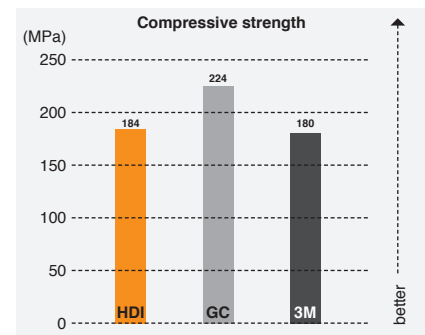
### Practice Test: Harvard Ionoglas Fill.



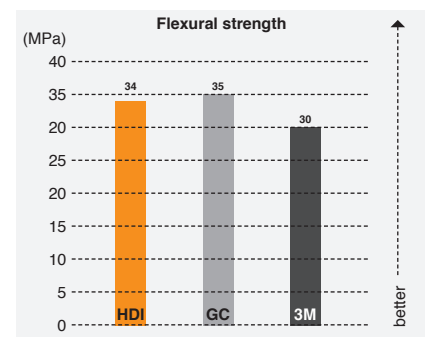
Prepared cavity



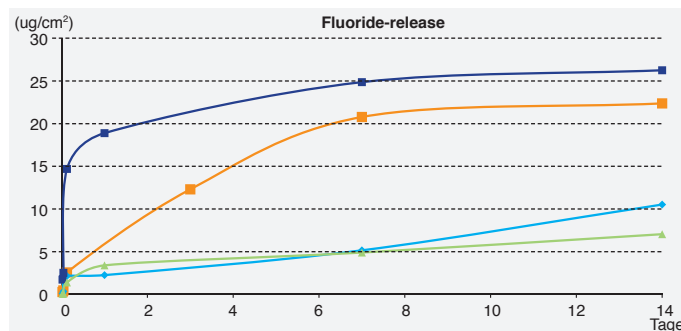
Finished filling



HDI ■ Harvard Ionoglas Fill Extra  
GC ■ GC FUJII IX GP Handmix  
3M ■ 3M Ketac Fil Plus Handmix



■ Harvard Ionoglas Fill Extra  
■ GC FUJII IX GP  
■ GC FUJII IX GP EXTRA  
■ 3M Ketac Fil Plus Aplicap



## BasicLine

**Harvard Ionoglas Fill**  
Self-cure conventional glass ionomer cement for fillings.

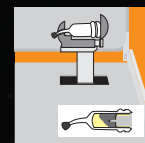
- Treatment completed after 6:00 minutes
- Good molding
- Good marginal fit and seal
- Easy to mix and to use



# Discover the resin modified EXTRA.



No need  
of primer,  
conditioner or  
coating.







# Harvard Ionoresin Fill Extra

**Aesthetic light and self cure resin-reinforced glass ionomer cement for fillings.**

This resin-reinforced glass ionomer cement combines excellent mechanical properties with fine fillers. Good polishability, almost like composites. Finally, no varnish is required. Large fillings can be done in just two steps. Light cure and self cure.

Available as powder / liquid and OptiCaps®.  
Available shades A2, A3 and A3.5.  
Order information on last page.

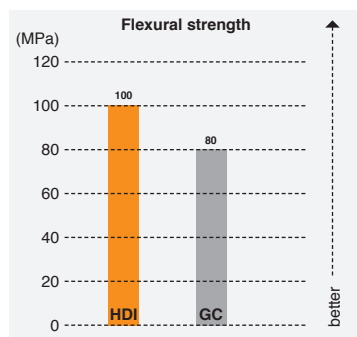
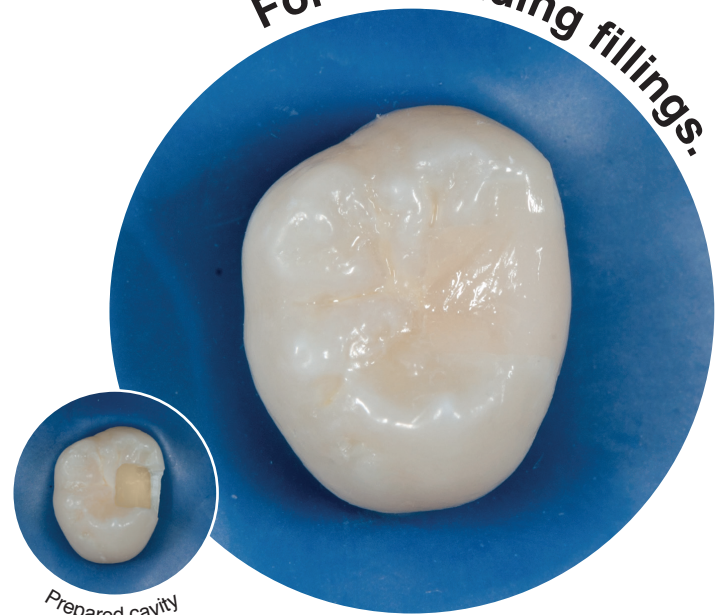
### Properties and advantages

- Fine fillers
- Good polishability, almost like composites
- No mandatory of additional bonding and surface sealing
- High mechanical properties, virtually no shrinkage
- Practically insoluble
- Fluoride release and radiopaque

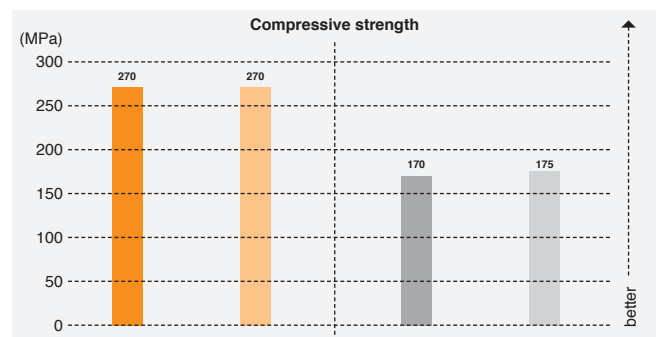
### Indications

- Deciduous teeth: restoration for Class I, II und V
- Long term restorations in non-load bearing areas of Class I and II
- Restorations for Class V
- Intermediate restorations
- As underfilling for heavy stress bearing Class I and II cavities (Sandwich-technique)

For demanding fillings.



HDI ■ Harvard Ionoresin Fill Extra  
GC ■ GC FUJII LC Handmix



self-curing light-curing self-curing light-curing  
■ Harvard Ionoresin Fill Extra ■ GC FUJII LC Handmix

## BasicLine

### Harvard Ionoglas Fill LC

Light-cure resin-reinforced glass ionomer cement for fillings.

- Easy to mix and to use
- Good and non-sticky consistency
- Light and self-cure
- Low shrinkage
- Radiopaque



# Glass ionomer which connects.





# For reliable cementations.

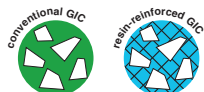
## Technical data.

	PremiumLine				BasicLine	
	conventional GIC		resin-reinforced GIC		conventional GIC	resin-reinforced GIC
	Harvard Ionoglas Cem Extra		Harvard Ionoresin Cem Extra		Harvard Ionoglas Cem	Harvard Ionoglas Cem LC
Delivery form	powder/4x liquid	OptiCaps®	powder/4x liquid	OptiCaps®	powder/4x liquid	powder/4x liquid
Shade	universal		universal		universal, white	universal
Mixing time	30 sec	10 sec	30 sec	10 sec	30 sec	30 sec
Working time - from start of mixing at 23 °C / 73 °F	1:30 min	1:30 min	2:30 min	2:00 min	1:25 min	1:30 min
Net setting time at 37 °C / 99 °F	5:00 min	5:00 min	LC** 20 sec without LC 4:00 min	LC** 20 sec without LC 4:00 min	4:30 Min.	LC** 20 sec without LC 5:30 min

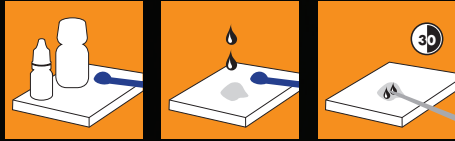
\*\* LC: Light-cure

## Overview: Harvard GIC Cements .

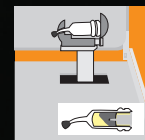
	Harvard Ionoglas Cem Extra	Harvard Ionoglas Cem	Harvard Ionoresin Cem Extra	Harvard Ionoglas Cem LC
As underfilling for composite fillings	✓	✓	✓	✓
Crowns & Bridges made of metal and zirconia	✓	✓	✓	✓
Crowns & Bridges made of lithium disilicate ceramics	✓	✓	✓	✓
Crowns & Bridges made of composites	✓	✓	✓	✓
Crowns & Bridges made of silicate ceramics	✓	✓	✓	✓
Crowns & Bridges made of hybrid ceramics			✓	✓
Inlays & Onlays made of metal	✓	✓	✓	✓
Inlays & Onlays made of silicate ceramics, lithium disilicate ceramics and composites			✓	✓
Inlays & Onlays made of hybrid ceramics			✓	✓



# Sometimes it should be conventional.



The long-term fluoride release is very high. This reduces the risk of secondary caries at the interface of tooth and filling.







# Harvard Ionoglas Cem Extra

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

This biocompatible and resin-free glass ionomer luting cement for allergy patients and for elderly patients. **Harvard Ionoglas Cem Extra** is known for its adhesion on the tooth structure and for its good marginal fit. The easy-to-use solution for metal-based restorations and even as a liner under composite fillings. Low opacity for good aesthetics.

Available as powder / liquid and OptiCaps®.  
Available shades A2, A3 and A3.5.  
Order information on last page.

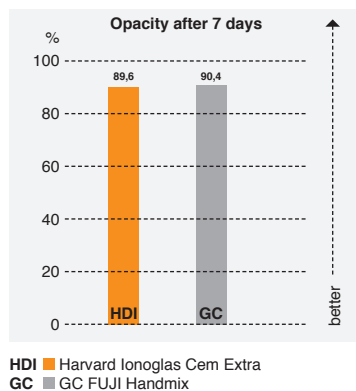
#### Properties and advantages

- Durable cementations
- Low solubility
- Good adhesion to enamel and dentin
- High fluoride release, biocompatible and radiopaque

#### Indications

- Permanent fixation of crowns & bridges made of metal, metal-ceramics, metal-composite, ceramics and zirconia
- As a liner under composite fillings

For allergy patients and elderly patients.



## BasicLine

#### Harvard Ionoglas Cem

Self cure conventional glass ionomer cement for luting crowns & bridges.

- Good adhesion to enamel and dentin
- Fluoride release, biocompatible and Radiopaque
- Easy to mix and to use
- Good marginal fit and sealing



# Improved adhesion for enamel & dentin.



No need  
of primer or  
conditioner.

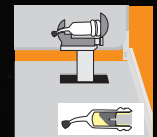


**HARVARD**  
Harvard  
Ionoresin Cem Extra  
Flüssigkeit / liquid  
Licht- und selbsthärtender kunststoffverstärkter  
ionomerzement für Befestigung und Unterfüllung  
and self cure resin-modified glass ionomer  
luting and lining cement



**HARVARD**  
Harvard  
Ionoresin Cem Extra  
Pulver / powder

Licht- und selbsthärtender kunststoffverstärkter  
ionomerzement für Befestigung und Unterfüllung  
and self cure resin-modified glass ionomer  
luting and lining cement



Premium





# Harvard Ionoresin Cem Extra

Light and self cure resin-reinforced aesthetic glass ionomer cement for luting crowns & bridges, inlays, onlays and as a liner under composite fillings.

The **Harvard Ionoresin Cem Extra** offers a very low film thickness while maintaining high compressive strength. Precise cementing of metal-, ceramic- and composite-based restorations is possible at any time. Easy excess removal and custom made curing by additionally light curing. The smart and comfortable solution.

Available as powder / liquid and OptiCaps®.

Available shades A2, A3 and A3.5.

Order information on last page.

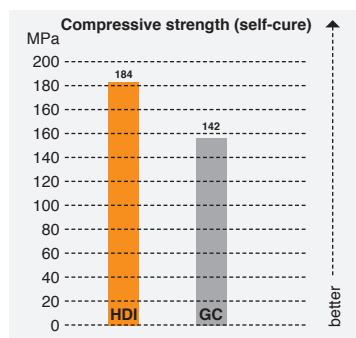
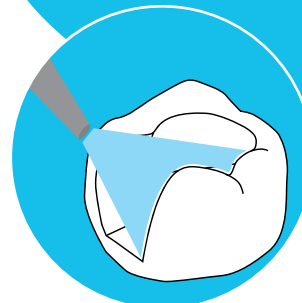
### Properties and advantages

- Low film thickness
- Practically insoluble
- Improved mechanical properties
- Very low shrinkage
- Custom-made by three types of curing:  
Light-cure + Self-cure + conventional glass ionomer cement reaction

### Indications

- Cementing of crown, bridges, inlays and onlays made of metal, metal-ceramics, composites and ceramics
- As liner under composite fillings

Custom made curing by additional light cure.



HDI ■ Harvard Ionoresin Cem Extra Handmix  
GC ■ GC FUJI PLUS EWT Handmix

## BasicLine

### Harvard Ionoglas Cem LC

Light cure resin-reinforced glass ionomer cement for luting crowns & bridges.

- Radiopaque
- Moisture tolerant
- For long-term restorations
- Easy to mix and convenient to apply
- Good marginal fit and sealing
- Practically insoluble



The smart & clever  
solution in only  
10 seconds.



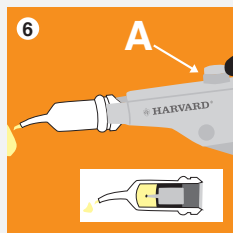
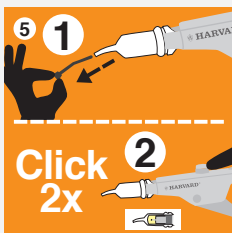
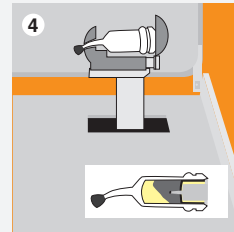
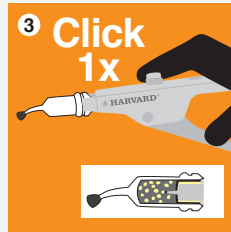
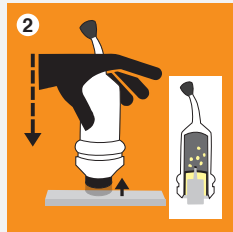
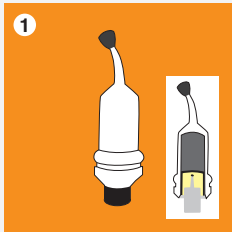


# Harvard OptiCaps®

Comfortable and fast application ...



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



1. OptiCaps® before activation.
2. Activation: press the plunger to the end into the capsule.
3. Insert the OptiCaps® into the applicator and click once to standardize.
4. Mix the OptiCaps®.
5. Insert the OptiCaps® into the applicator. Remove the pin. Pull the lever twice (2 clicks) to prime the OptiCaps®.
6. Unlock the gun (push button A) and remove the OptiCaps®.

## Optional products for further optimization:

### Harvard Ionocoat LC

Light-cure protective varnish for conventional glass ionomer cements

#### Properties and advantages

- Easy to use
- Methacrylate-free
- Protects the filling during the first hours from washouts



5 ml

### Harvard Ionoresin Prime LC

Light-cure primer for resin-reinforced glass ionomer cements

#### Properties and advantages

- For further improve of the adhesive force
- Easy application
- Only one component



5 ml

## Article information

	Bestell-Nr.	
<b>For filling</b>		
<b>Harvard Ionoglas Fill Extra</b> 15 g powder / 8 ml liquid, dosage spoon, mixing pad		
Shade A2	7052112	conventional GIC
Shade A3	7052113	
Shade A3.5	7052135	
50 OptiCaps® ea. 0.5 g		
Shade A2	7052252	
Shade A3	7052253	
Shade A3.5	7052254	
<b>Harvard Ionoglas Fill</b>		
10 g powder in the shade A2 / 5.6 ml liquid, dosage spoon, mixing pad	7051110	
15 g powder in the shade A2 / 8 ml liquid, dosage spoon, mixing pad	7051115	
15 g powder in the shade A3 / 8 ml liquid, dosage spoon, mixing pad	7051116	
<b>Harvard Ionoresin Fill Extra</b> 15 g powder / 8 ml liquid, dosage spoon, mixing pad		
Shade A2	7071118	resin-reinforced GIC
Shade A3	7071119	
Shade A3.5	7071120	
50 OptiCaps® ea. 0.5 g		
Shade A2	7071253	
Shade A3	7071254	
Shade A3.5	7071255	
<b>Harvard Ionoglas Fill LC</b>	7052115	
15 g powder in the shade A3 / 8 ml liquid, dosage spoon, mixing pad		
<b>For luting</b>		
<b>Harvard Ionoglas Cem Extra</b>	7042115	conventional GIC
15 g powder in the shade universal / 10 ml liquid, dosage spoon, mixing pad		
50 OptiCaps® ea. 0.4 g in the shade universal	7042250	
<b>Harvard Ionoglas Cem</b>		
15 g powder in the shade universal / 10 ml liquid, dosage spoon, mixing pad	7041115	
35 g powder in the shade white / 20 ml liquid, dosage spoon, mixing pad	7041130	
35 g powder in the shade universal / 20 ml liquid, dosage spoon, mixing pad	7041135	
<b>Harvard Ionoresin Cem Extra</b>	7061116	resin-reinforced GIC
15 g powder in the shade universal / 10 ml liquid, dosage spoon, mixing pad		
50 OptiCaps® ea. 0.4 g in the shade universal	7061251	
<b>Harvard Ionoglas Cem LC</b>	7041215	
15 g powder in the shade universal / 10 ml liquid, dosage spoon, mixing pad		
<b>Bestell-Nr.</b>		
<b>Harvard Applier OptiCaps®</b>	7092000	
<b>Harvard Ionocoat LC</b>	7052000	
5 ml bottle		
<b>Harvard Ionoresin Prime LC</b>	7051000	
5 ml bottle		



# HARVARD®

Marke und Qualität seit 1892

Harvard Dental International GmbH  
Margaretenstr. 2 - 4, 15366 Hoppegarten, Germany  
Phone: + 49 (0) 30/99 28 978-0  
Fax: + 49 (0) 30/99 28 978-19  
info@harvard-dental-international.de

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