Science.
Applied to Life.™

3M™ Impregum™ Super Quick Polyether Impression Material

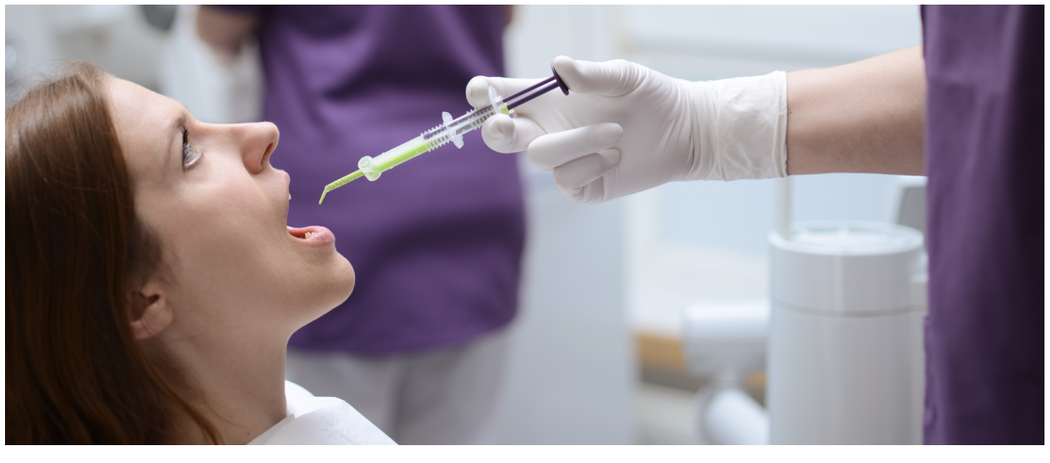
Technical Data Sheet

3M™ Impregum™ Polyether Material. Proven benefits for accuracy you can trust.

With its unique material properties 3M™ Impregum™ Polyether Impression Material has always been the trusted solution for complex situations and implants.

In the past, the longer setting time of polyether has been one of the reasons to choose VPS materials for smaller cases.

New 3M™ Impregum™ Super Quick Polyether Impression Material – the first true superfast polyether - unites the unsurpassed accuracy of polyether with the speed of a VPS.



Superior moisture tolerance.
With its superior moisture tolerance, Impregum Polyether Material displaces blood and saliva right from the first contact with tissue for excellent, void-free detail reproduction.

Unmatched precision.
Excellent flow properties let dentists capture the finest details: Impregum polyether material flows smoothly, even in the toughest spots, producing void-free, high-precision impressions.

Take all the time you need.
Unlike VPS materials, polyether shows consistently great flow behavior. The indicated working time can reliably be used to full capacity – inaccuracies associated with premature setting are avoided. Once the working time is over, setting starts immediately.

Clinical Solutions & Products

3M™ Impregum™ Super Quick Polyether Impression Material

Portfolio/indications 3M™ Impregum™ Polyether Materials

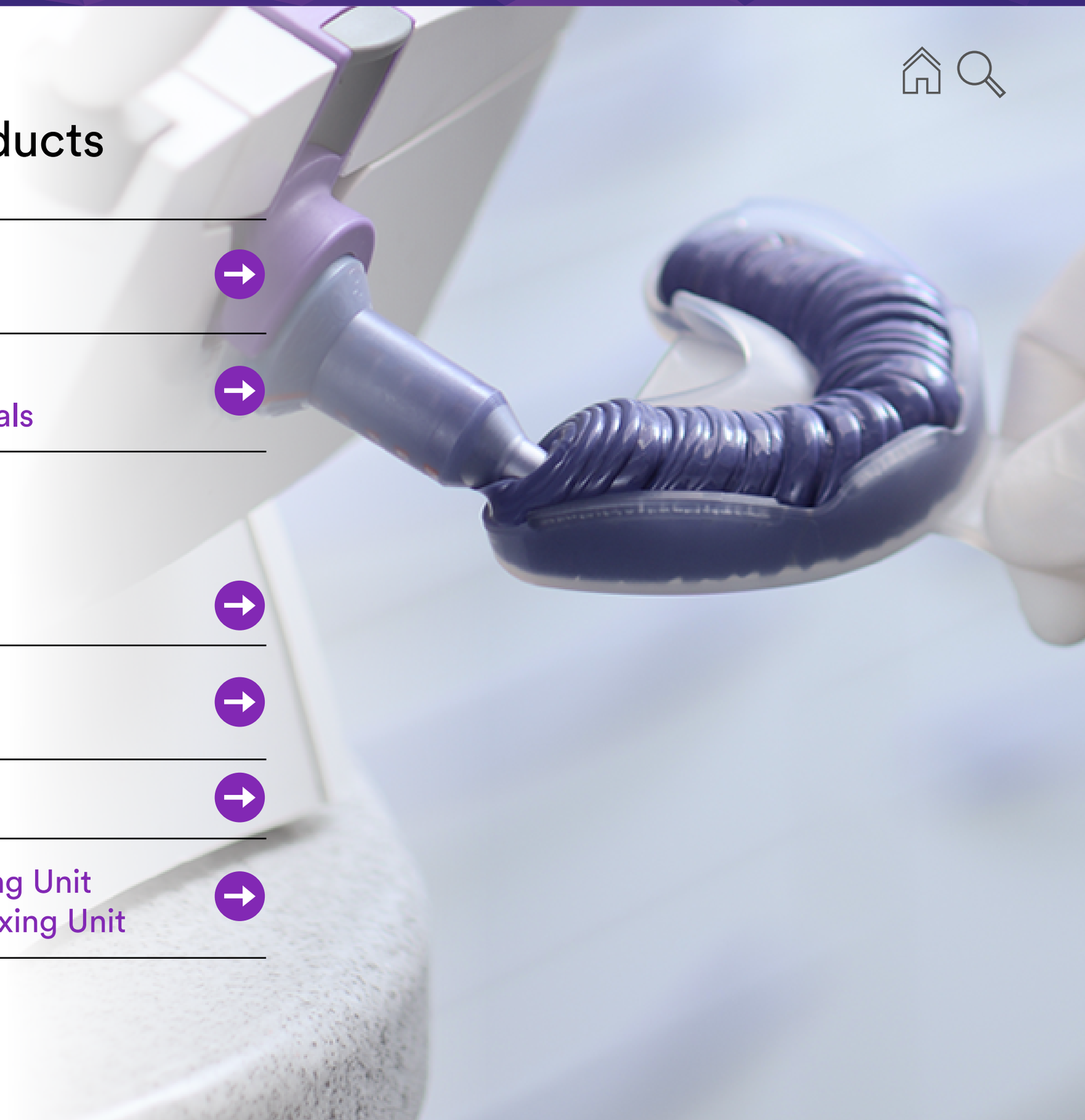
Related Products:

3M™ Astringent Retraction Paste

3M™ Intra-oral Syringe Purple
3M™ Garant™ Mixing Tips Purple

3M™ Impression Tray

3M™ Pentamix™ 3 Automatic Mixing Unit
3M™ Pentamix™ Lite Automatic Mixing Unit



Clinical Solutions & Products

3M™ Impregum™ Super Quick

Polyether Impression Material

Indications

Recommended for precision impression taking using the monophase or 1-step technique for smaller cases like single-unit crowns, implants, bridges up to three units, inlays/onlays, veneers.

Features & benefits

Fast like a VPS.
The first superfast polyether with 45 seconds working time and quick 2-minute setting. Specially recommended for single-unit impressions.

100% Polyether. Trusted precision.
A brand new chemistry offers well-known polyether reliability and accuracy.

Patient comfort.
An improved taste together with a short time in the mouth significantly increase patient comfort.

Chemical background

The use of a new initiator required some changes in the material composition. The aziridino-polyether and triglycerides are the beating heart of every polyether impression material. These relatively small, but by no means simple changes led to the desired result: A faster setting reaction and a more neutral taste for increased productivity and more patient comfort.

Composition base/initiator paste +

Ordering information +

Video +

Back to overview

Chemical background

3M™ Impregum™ Soft

Base paste

Aziridino-Polyether

Triglycerides

Fillers

Pigments

Aroma

NEW: Stabilizer

Accelerator

Plasticizers

Initiator paste

NEW: Initiator

NEW: Plasticizers

Fillers

NEW: Pigments

CLOSE

An improved taste and a short time in the mouth significantly increase patient comfort.

Back to overview

Order code	Introductory Kits for 3M™ Pentamix™ 3 Automatic Mixing Unit
69383	**3M™ Impregum™ Penta™ Super Quick Medium Body** 1 base paste MB – 300 ml, 1 catalyst MB – 60 ml, 1 3M™ Penta™ Cartridge MB, 10 3M™ Penta™ Mixing Tips – Red, 1 3M™ Penta™ Elastomer Syringe, 1 Polyether Tray Adhesive – 17 ml, 3 3M™ Astringent Retraction Paste capsules
69381	**3M™ Impregum™ Penta™ Super Quick Medium Body/Light Body** 1 base paste MB – 300 ml, 1 catalyst MB – 60 ml, 2 cartridges LB – 50 ml each, 1 3M™ Penta™ Cartridge MB, 10 3M™ Penta™ Mixing Tips – Red, 5 3M™ Intra-oral Syringes Purple, 5 3M™ Garant™ Mixing Tips purple, 5 3M™ Garant™ Intra-oral Tips white, 1 Polyether Tray Adhesive – 17 ml, 3 3M™ Astringent Retraction Paste capsules, 6 3M™ Impression Trays
69413	**3M™ Impregum™ Penta™ Super Quick Heavy Body/Light Body** 1 base paste HB – 300 ml, 1 catalyst HB – 60 ml, 2 3M™ Impregum™ Super Quick LB cartridges – 50 ml each, 1 3M™ Impregum™ Penta™ HB Cartridge for 3M™ Pentamix™ 3 Automatic Mixing Unit, 10 3M™ Penta™ Mixing Tips – Red, 5 3M™ Intra-oral Syringes Purple, 5 3M™ Garant™ Mixing Tips purple, 5 3M™ Garant™ Intra-oral Tips white, 1 3M™ Polyether Tray Adhesive – 17 ml, 3 3M™ Astringent Retraction Paste capsules, 6 3M™ Impression Trays

Order code	Refills	Order code	Accessories
69385	**3M™ Impregum™ Penta™ Super Quick Medium Body** 2 base pastes – 300 ml each, 2 catalysts – 60 ml each	69387	**3M™ Impregum™ Penta™ Super Quick Medium Body Cartridge**
69379	**3M™ Impregum™ Super Quick Light Body** 4 cartridges – 50 ml each, 5 3M™ Intra-oral Syringes Purple, 5 3M™ Garant™ Mixing Tips purple	69401	**3M™ Impregum™ Penta™ Super Quick Heavy Body Cartridge**
69406	**3M™ Impregum™ Penta™ Super Quick Heavy Body** 2 base pastes HB – 300 ml each, 2 catalysts HB – 60 ml each	71454	**3M™ Garant™ Mixing Tips purple** 50 pieces

Order code	Value Packs	Order code	
69405	**3M™ Impregum™ Penta™ Super Quick Medium Body Value Pack** 6 base pastes MB – 300 ml each, 6 catalyst MB – 60 ml each	69412	**3M™ Impregum™ Penta™ Super Quick Heavy Body Value Pack** 6 base pastes HB – 300 ml each, 6 catalyst HB – 60 ml each

CLOSE

Video

3M™ Impregum™ Super Quick

The fastest way to polyether precision.
00:02:14

CLOSE

An improved taste and a short time in the mouth significantly increase patient comfort.

Back to overview

Clinical Solutions & Products

Portfolio overview

	Dispensing system	Viscosity low – high	Impression technique	Recommended max. working time (min:sec)	Intra-oral setting time at 37°C (min:sec)
Super Quick Setting Materials					
3M™ Impregum™ Penta™ Super Quick (Medium Body)			Monophase or 1-step	0:45	2:00
3M™ Impregum™ Penta™ Super Quick (Heavy Body)			1-step	0:45	2:00
3M™ Impregum™ Super Quick (Light Body)			1-step	0:45	2:00
Quick Setting Materials					
3M™ Impregum™ Penta™ H DuoSoft™ Quick (Heavy Body)			1-step	1:00	3:00
3M™ Impregum™ Penta™ Soft Quick (Medium Body)			Monophase	1:00	3:00
3M™ Impregum™ L DuoSoft™ Quick (Light Body)			1-step	1:00	3:00
Regular Setting Materials*					
3M™ Impregum™ Penta™ Soft (Medium Body)			Monophase	1:45	4:15
3M™ Impregum™ Penta™ (Medium Body)			Monophase	1:45	4:15
3M™ Impregum™ Penta™ H DuoSoft™ (Heavy Body)			1-step	1:45	4:15
3M™ Impregum™ Penta™ L DuoSoft™ (Light Body)			1-step	1:45	4:15
3M™ Impregum™ Garant™ L DuoSoft™ (Light Body)			1-step	1:45	4:15

Recommended indications

Indications	Impression technique	Single-unit crown	Small implant (≤ 2 units)	Inlay/onlay (≤ 2 units)	Small bridge (≤ 3 units)	Veneers	Bridge (> 3 units)	Implant (> 2 units)	Pick-up impression	Functional impression
Super Quick Setting Materials										
3M™ Impregum™ Penta™ Super Quick (Medium Body)	Monophase	✓	✓	✓	✓					
3M™ Impregum™ Penta™ Super Quick (Medium or Heavy Body) 3M™ Impregum™ Super Quick (Light Body)	1-step									
Quick Setting Materials										
3M™ Impregum™ Penta™ Soft Quick (Medium Body)	Monophase	✓	✓	✓	✓	✓				
3M™ Impregum™ Penta™ H DuoSoft™ Quick (Heavy Body) 3M™ Impregum™ L DuoSoft™ Quick (Light Body)	1-step									
Regular Setting Materials										
3M™ Impregum™ Penta™ Soft (Medium Body)	Monophase					✓	✓	✓	✓	✓
3M™ Impregum™ Penta™ H DuoSoft™ (Heavy Body) 3M™ Impregum™ Penta™ L DuoSoft™ (Light Body) 3M™ Impregum™ Garant™ L DuoSoft™ (Light Body)	1-step									
3M™ Impregum™ Penta™ (Medium Body)	Monophase					✓	✓	✓	✓	✓

Portfolio overview

3M™ Impregum™ Polyether Impression Material

	Dispensing system	Viscosity low – high	Impression technique	Recommended max. working time (min:sec)	Intra-oral setting time at 37°C (min:sec)
Super Quick Setting Materials					
3M™ Impregum™ Penta™ Super Quick (Medium Body)			Monophase or 1-step	0:45	2:00
3M™ Impregum™ Penta™ Super Quick (Heavy Body)			1-step	0:45	2:00
3M™ Impregum™ Super Quick (Light Body)			1-step	0:45	2:00
Quick Setting Materials					
3M™ Impregum™ Penta™ H DuoSoft™ Quick (Heavy Body)			1-step	1:00	3:00
3M™ Impregum™ Penta™ Soft Quick (Medium Body)			Monophase	1:00	3:00
3M™ Impregum™ L DuoSoft™ Quick (Light Body)			1-step	1:00	3:00
Regular Setting Materials*					
3M™ Impregum™ Penta™ Soft (Medium Body)			Monophase	1:45	4:15
3M™ Impregum™ Penta™ (Medium Body)			Monophase	1:45	4:15
3M™ Impregum™ Penta™ H DuoSoft™ (Heavy Body)			1-step	1:45	4:15
3M™ Impregum™ Penta™ L DuoSoft™ (Light Body)			1-step	1:45	4:15
3M™ Impregum™ Garant™ L DuoSoft™ (Light Body)			1-step	1:45	4:15

* Setting time from start of mixing 6:00 min.

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Recommended indications

3M™ Impregum™ Polyether Impression Material

Indications	Impression technique	Single-unit crown	Small implant (≤ 2 units)	Inlay/onlay (≤ 2 units)	Small bridge (≤ 3 units)	Veneers	Bridge (> 3 units)	Implant (> 2 units)	Pick-up impression	Functional impression
Super Quick Setting Materials										
3M™ Impregum™ Penta™ Super Quick (Medium Body)	Monophase	✓	✓	✓	✓					
3M™ Impregum™ Penta™ Super Quick (Medium or Heavy Body) 3M™ Impregum™ Super Quick (Light Body)	1-step									
Quick Setting Materials										
3M™ Impregum™ Penta™ Soft Quick (Medium Body)	Monophase	✓	✓	✓	✓	✓				
3M™ Impregum™ Penta™ H DuoSoft™ Quick (Heavy Body) 3M™ Impregum™ L DuoSoft™ Quick (Light Body)	1-step									
Regular Setting Materials										
3M™ Impregum™ Penta™ Soft (Medium Body)	Monophase					✓	✓	✓	✓	✓
3M™ Impregum™ Penta™ H DuoSoft™ (Heavy Body) 3M™ Impregum™ Penta™ L DuoSoft™ (Light Body) 3M™ Impregum™ Garant™ L DuoSoft™ (Light Body)	1-step									
3M™ Impregum™ Penta™ (Medium Body)	Monophase					✓	✓	✓	✓	✓

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Clinical Solutions & Products

3M™ Astringent Retraction Paste

Product description

The faster, gentler way to retract tissue and control bleeding.

Indications

Can be used in a healthy periodontium for indications such as:

- Taking impressions (material-based/digital)
- Preparation of temporary casts
- Preparation of class II and V fillings

Features & benefits

- Extra-fine tip delivers paste right into the sulcus
- Easy access to tight interproximal areas
- Long lasting hemostasis achieved from 15% aluminum chloride paste
- Less risk of tissue trauma and hemorrhage
- Hygienic unit-dose delivery
- Time-saving process and up to 50% faster (vs. cords)
- Gentle on tissue for more patient comfort
- Compatible with most composite dispensers

Ordering information

How to use 3M™ Astringent Retraction Paste

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Ordering information

3M™ Astringent Retraction Paste

Order code	Product information
56944	25 capsules 3M™ Astringent Retraction Paste - 0.3 g each
56945	50 capsules 3M™ Astringent Retraction Paste - 0.3 g each

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How-to-video 3M™ Astringent Retraction Paste

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3M™ Astringent Retraction Paste

How to use 3M™ Astringent Retraction Paste
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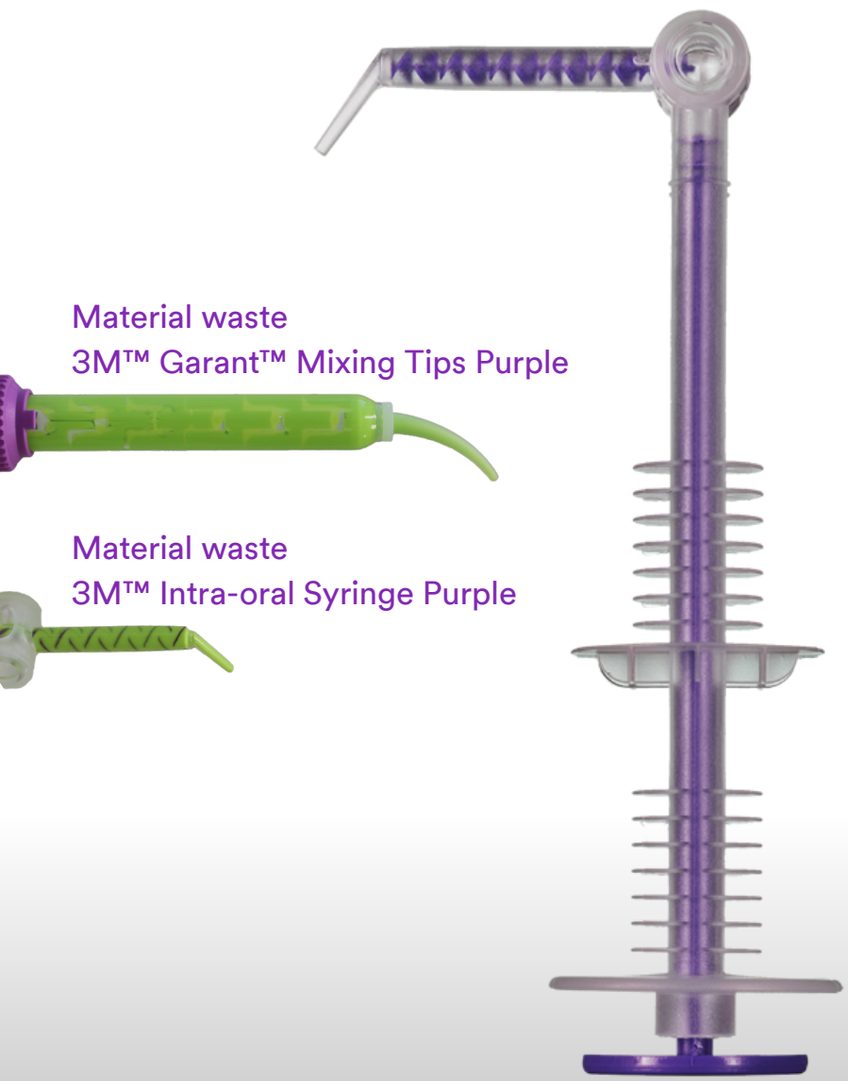
Clinical Solutions & Products

3M™ Intra-oral Syringe Purple



Product description

Convenient wash material application with extreme accuracy and less waste.

Indications

Syringing preparations with polyether precision impression materials in accordance with ISO 4823 Type 3 and Type 2, provided the polyether impression materials are intended for syringing.

Features & benefits

- Smooth and easy access to the sulcus and hard-to-reach areas of the mouth
- Easy handling due to small, ergonomic design
- Hygienic single-use syringe: No disinfection, no messy clean-up
- Less waste of impression material
- Can be (pre)filled directly from the hand dispenser cartridge up to 12 hours in advance

Exclusively designed for use with 3M™ Impregum™ Super Quick Polyether Material only!

3M™ Garant™ Mixing Tips Purple

Shorter and wider mixing tips which optimize the dispensing pressure and allow for more precise syringing.

Ordering information

How to use the 3M™ Intra-oral Syringe Purple

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Ordering information

3M™ Intra-oral Syringe Purple
3M™ Garant™ Mixing Tips Purple

Order code	Product information
71507	3M™ Intra-oral Syringes Purple, 20 pieces
71508	3M™ Intra-oral Syringes Purple, 50 pieces
71454	3M™ Garant™ Mixing Tips purple, 50 pieces
71461N	3M™ Garant™ Intra-oral Tips white, 50 pieces

CLOSE

hand dispenser cartridge up to
12 hours in advance

Intra-oral Syringe Purple

Video

3M™ Intra-oral Syringe Purple

How to use the 3M™ Intra-oral Syringe Purple
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Clinical Solutions & Products

3M™ Impression Tray

Disposable Impression Tray

Product description

Easy to customize full arch tray that eliminates the need for a tray adhesive and simplifies both preliminary and final impression procedures.

Indications

- Precision impressions
- Implant impressions
- Provisional crown/bridge impressions
- Opposing jaw/study model impressions
- Orthodontic impressions
- Impressions for bleaching trays/mouth guards
- Fabrication of splints

Features & benefits

- Saves time with integrated self-retentive fleece strip and no need for a tray adhesive
- Higher accuracy thanks to optimized tray design
- Hygienic single-use for full infection control
- High patient comfort with design features to reduce gagging

Ordering information

Ordering information

3M™ Impression Tray

Order code	Product information
71615	10 trays, size S, upper jaw
71616	10 trays, size M, upper jaw
71617	10 trays, size L, upper jaw
71618	10 trays, size S, lower jaw
71619	10 trays, size M, lower jaw
71620	10 trays, size L, lower jaw

CLOSE

Clinical Solutions & Products

3M™ Pentamix™ 3 Automatic Mixing Unit
3M™ Pentamix™ Lite Automatic Mixing Unit

Product description

Adds speed and accuracy to the impression procedure through automixing.

Indications

Suitable for VPS and polyether impression materials.

Features & benefits

- Homogeneous, void-free and reproducible mixing quality
- Time-saving procedure at high speed
- Higher productivity
- Easy and intuitive operation
- Hygienic and clean workflow
- Robust, state-of-the-art design

Ordering information

Order code	3M™ Pentamix™ 3 Automatic Mixing Unit
77871	3M™ Pentamix™ 3 Automatic Mixing Unit
77949	50 3M™ Penta™ Mixing Tips – Red
77601	3M™ Pentamix™ 3 Wall-Mount Kit
69387	3M™ Impregum™ Penta™ Super Quick Medium Body Cartridge
69401	3M™ Impregum™ Penta™ Super Quick Heavy Body Cartridge
P3792	3M™ Impregum™ Penta™ Cartridge
P3775	3M™ Impregum™ Penta™ Soft Quick Cartridge
P3793	3M™ Impregum™ Penta™ H DuoSoft™ Cartridge
P3773	3M™ Impregum™ Penta™ H DuoSoft™ Quick Cartridge
P3795	3M™ Impregum™ Penta™ L DuoSoft™ Cartridge

Order code	3M™ Pentamix™ Lite Automatic Mixing Unit
77903	3M™ Pentamix™ Lite Automatic Mixing Unit – 230 V/50 Hz (INT) incl. 1 Penta™ Cartridge
77906	3M™ Pentamix™ Lite Automatic Mixing Unit – 230 V/50 Hz (CH) incl. 1 Penta™ Cartridge
77944	3M™ Penta™ Cartridge for 3M™ Pentamix™ Lite Mixing Unit
77949	50 3M™ Penta™ Mixing Tips – Red

CLOSE

Indications & Clinical Application

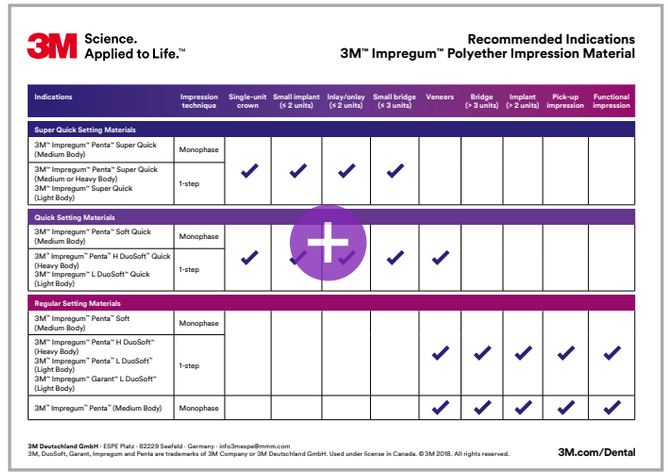
Operatory guides

- Impression tray preparation
- Monophase technique
- 1-step full arch technique
- 1-step dual-arch technique
- Lab handling guidelines for polyether impressions

Case reports

- 1-step heavy/light body impression
  Replacement of a partial crown
- 1-step medium/light body impression
  Replacement of a partial crown
- Dual-arch bite impression
  Replacement of a all-ceramic crown
- Monophase impression
  Replacement of a single-unit crown
- Closed implant impression
  Production of a crown on implant

Recommended indications
3M™ Impregum™ Polyether Material



3M Science. Applied to Life.™

Recommended Indications
3M™ Impregum™ Polyether Impression Material

Indications	Impression technique	Single-unit crown	Small implant (≤ 2 units)	Inlay/onlay (≤ 2 units)	Small bridge (≤ 3 units)	Veneers	Bridge (> 3 units)	Implant (> 2 units)	Pick-up impression	Functional impression
Super Quick Setting Materials										
3M™ Impregum™ Penta™ Super Quick (Medium Body)	Monophase	✓	✓	✓	✓					
3M™ Impregum™ Penta™ Super Quick (Medium or Heavy Body) 3M™ Impregum™ Super Quick (Light Body)	1-step									
Quick Setting Materials										
3M™ Impregum™ Penta™ Soft Quick (Medium Body)	Monophase	✓	✓	✓	✓	✓				
3M™ Impregum™ Penta™ H DuoSoft™ Quick (Heavy Body) 3M™ Impregum™ L DuoSoft™ Quick (Light Body)	1-step									
Regular Setting Materials										
3M™ Impregum™ Penta™ Soft (Medium Body)	Monophase					✓	✓	✓	✓	✓
3M™ Impregum™ Penta™ H DuoSoft™ (Heavy Body) 3M™ Impregum™ Penta™ L DuoSoft™ (Light Body) 3M™ Impregum™ Garant™ L DuoSoft™ (Light Body)	1-step									
3M™ Impregum™ Penta™ (Medium Body)	Monophase					✓	✓	✓	✓	✓

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3M.com/Dental

Case reports

Indications

Recommended indications

Indications	Impression technique	Single-unit crown	Small implant (≤ 2 units)	Inlay/onlay (≤ 2 units)	Small bridge (≤ 3 units)	Veneers	Bridge (> 3 units)	Implant (> 2 units)	Pick-up impression	Functional impression
Super Quick Setting Materials										
3M™ Impregum™ Penta™ Super Quick (Medium Body)	Monophase	✓	✓	✓	✓					
3M™ Impregum™ Penta™ Super Quick (Medium or Heavy Body) 3M™ Impregum™ Super Quick (Light Body)	1-step									
Quick Setting Materials										
3M™ Impregum™ Penta™ Soft Quick (Medium Body)	Monophase	✓	✓	✓	✓	✓				
3M™ Impregum™ Penta™ H DuoSoft™ Quick (Heavy Body) 3M™ Impregum™ L DuoSoft™ Quick (Light Body)	1-step									
Regular Setting Materials										
3M™ Impregum™ Penta™ Soft (Medium Body)	Monophase					✓	✓	✓	✓	✓
3M™ Impregum™ Penta™ H DuoSoft™ (Heavy Body) 3M™ Impregum™ Penta™ L DuoSoft™ (Light Body) 3M™ Impregum™ Garant™ L DuoSoft™ (Light Body)	1-step									
3M™ Impregum™ Penta™ (Medium Body)	Monophase					✓	✓	✓	✓	✓

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Closed implant impression
Production of a crown on implant

Case report

1-step impression technique using 3M™ Impregum™ Super Quick Polyether Impression Material
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Impression tray preparation

Operatory guides

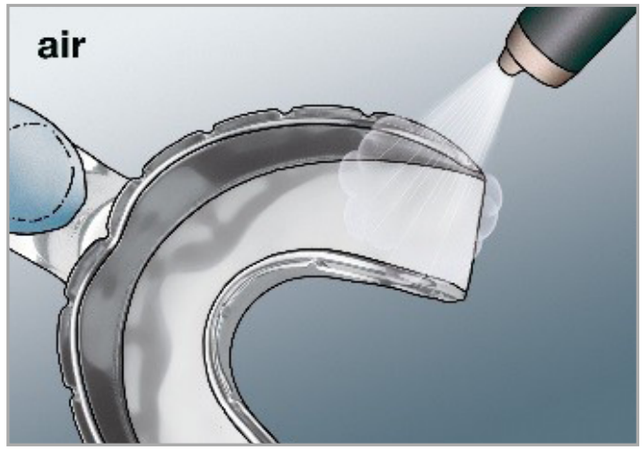
- Impression tray preparation
- Monophase technique
- 1-step full arch technique
- 1-step dual-arch technique
- Lab handling guidelines for polyether impressions

Case reports

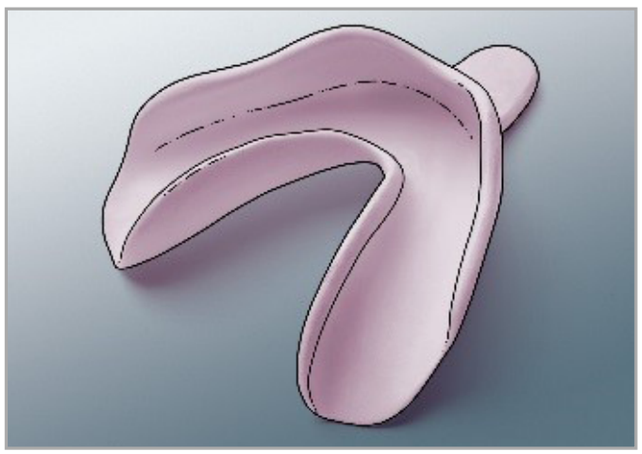
- 1-step heavy/light body impression
  Replacement of a partial crown
- 1-step medium/light body impression
  Replacement of a partial crown
- Dual-arch bite impression
  Replacement of a all-ceramic crown
- Monophase impression
  Replacement of a single-unit crown
- Closed implant impression
  Production of a crown on implant

3M™ Impression Tray

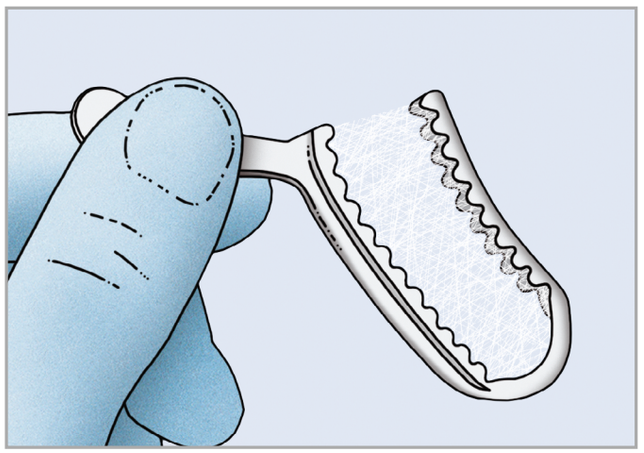
Metal stock tray



Custom tray



Dual-arch tray



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1-step r
Replace

Dual-ar
Replace

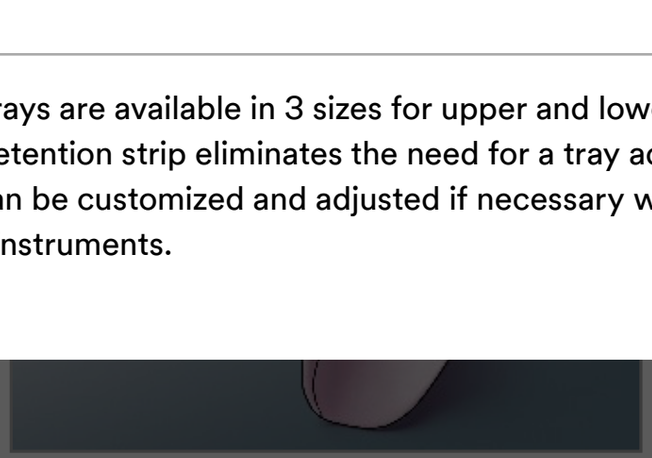
Monop
Replace

Closed implant impression
Production of a crown on implant

3M™ Impression Tray

Operatory guides

3M™ Impression Trays are available in 3 sizes for upper and lower jaw. The included retention strip eliminates the need for a tray adhesive. The trays can be customized and adjusted if necessary with grinding or drilling instruments.



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Due to the design of the 3M™ Impression Tray, less impression material is needed compared to conventional full-arch trays. Directed flow design minimizes flow defects and distal voids for more accurate impressions. Built-in reservoir prevents material overflow to help reduce gagging for better patient comfort.

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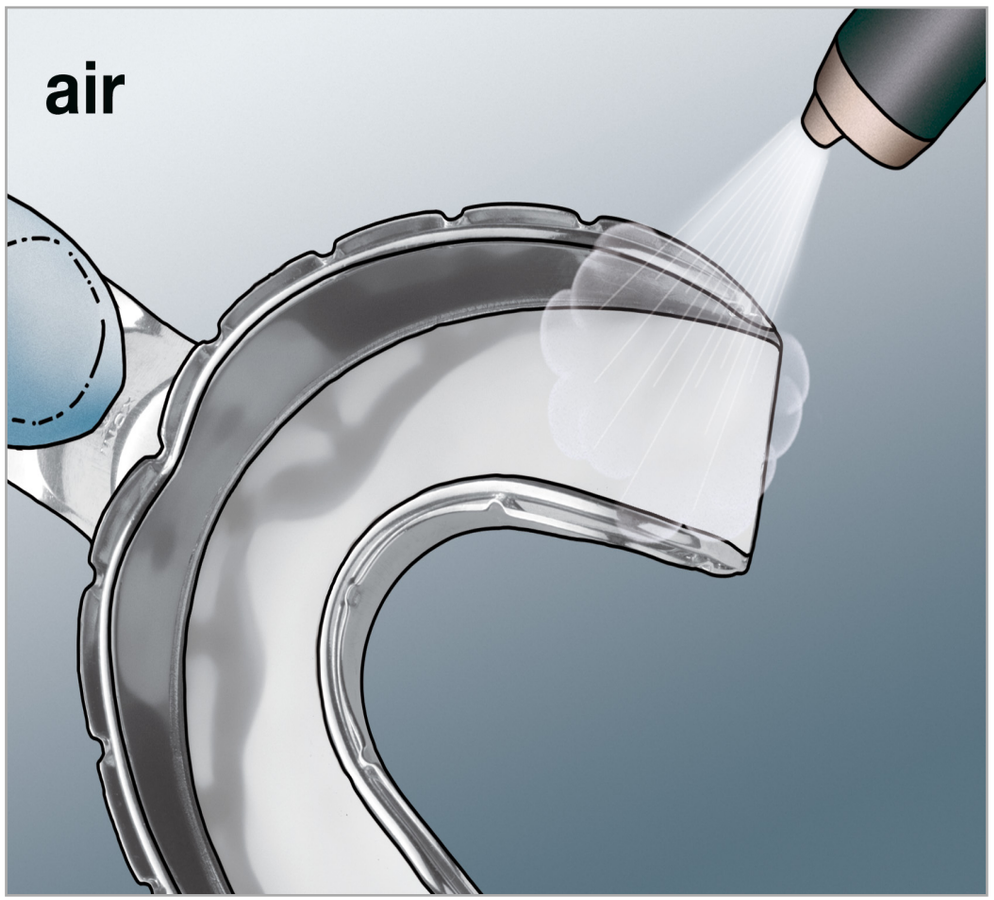
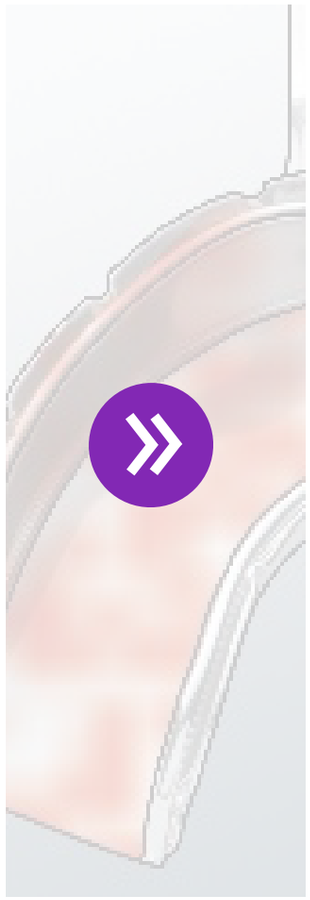
Closed implant impression
Production of a crown on implant

Metal stock tray





Step 1:
Clean and dry the metal tray after try-in.

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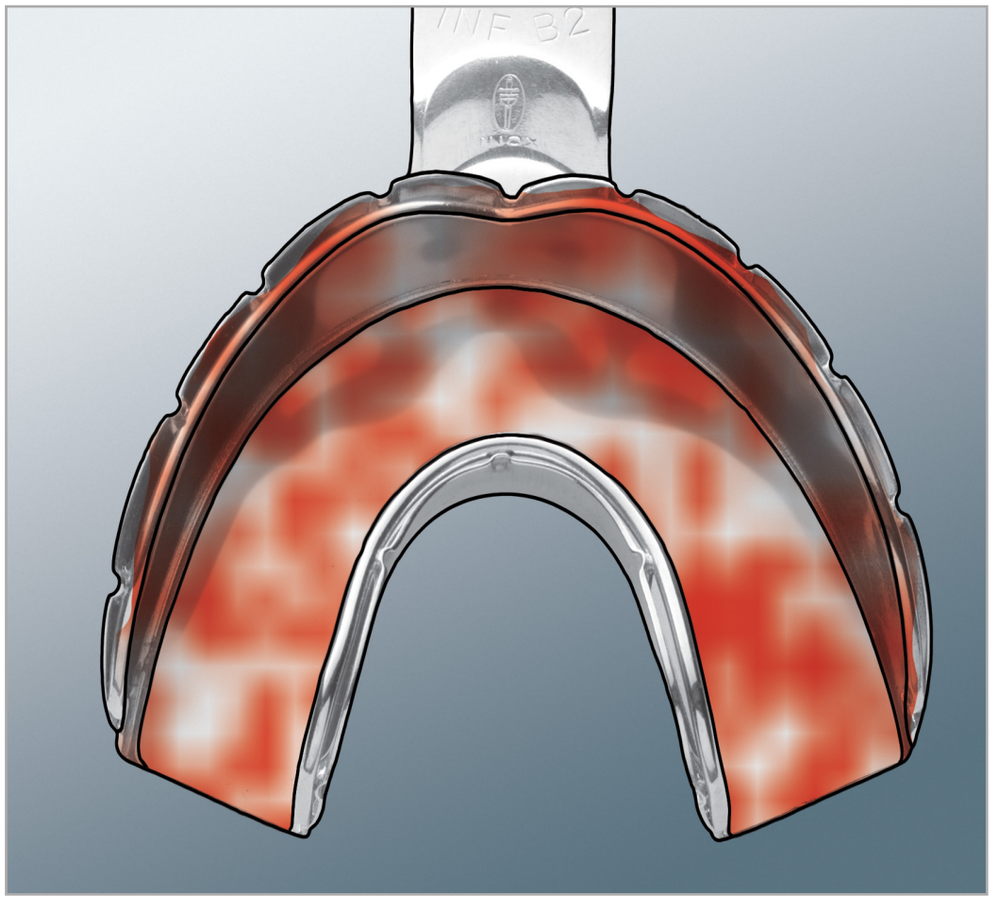
Closed implant impression
Production of a crown on implant

Metal stock tray

Operatory guides



Step 2:
Apply a thin homogeneous adhesive layer of uniform red color. Begin at one end of the tray and work towards the other. Let the adhesive fully dry. The required time is dependent on the thickness of the layer. Even for thick layers, two minutes is sufficient.

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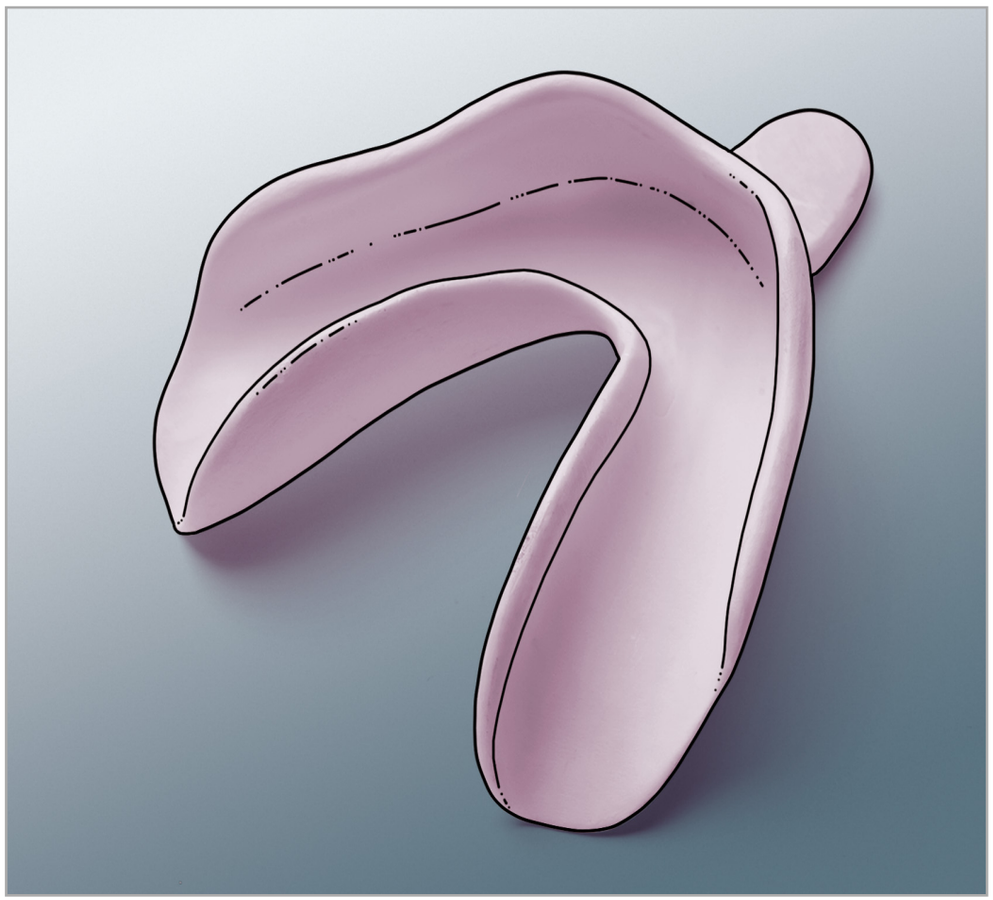
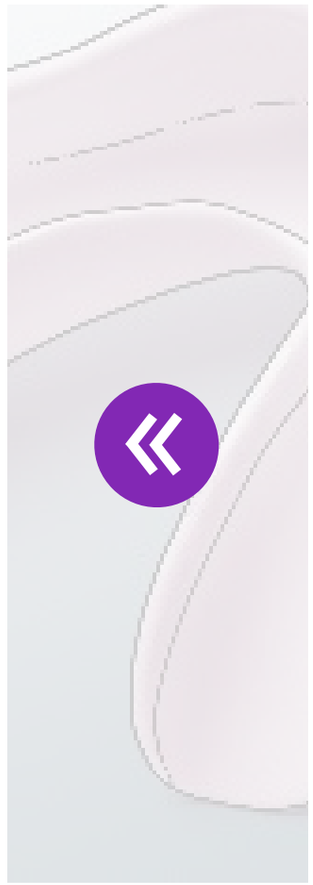
Custom tray

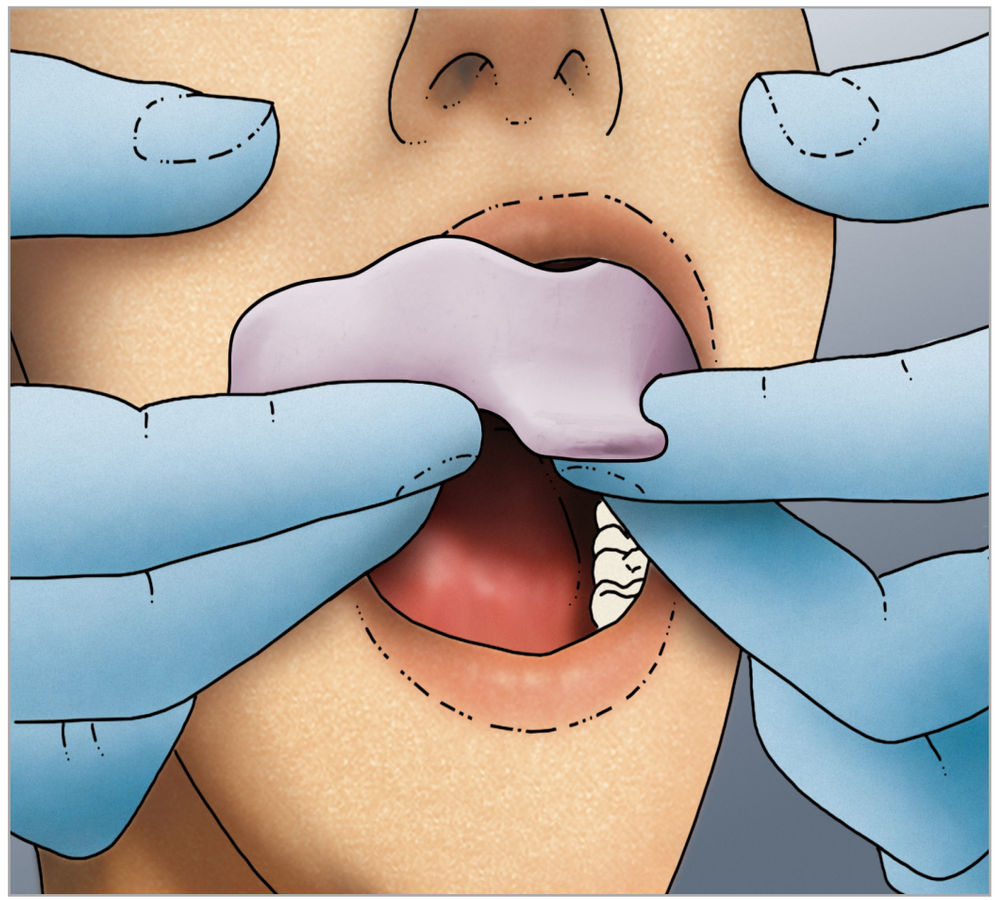
Operatory guides



Step 1:
To ensure optimal adhesion remove smear layer and roughen surface.
Optional: Add retention elements.

CLOSE

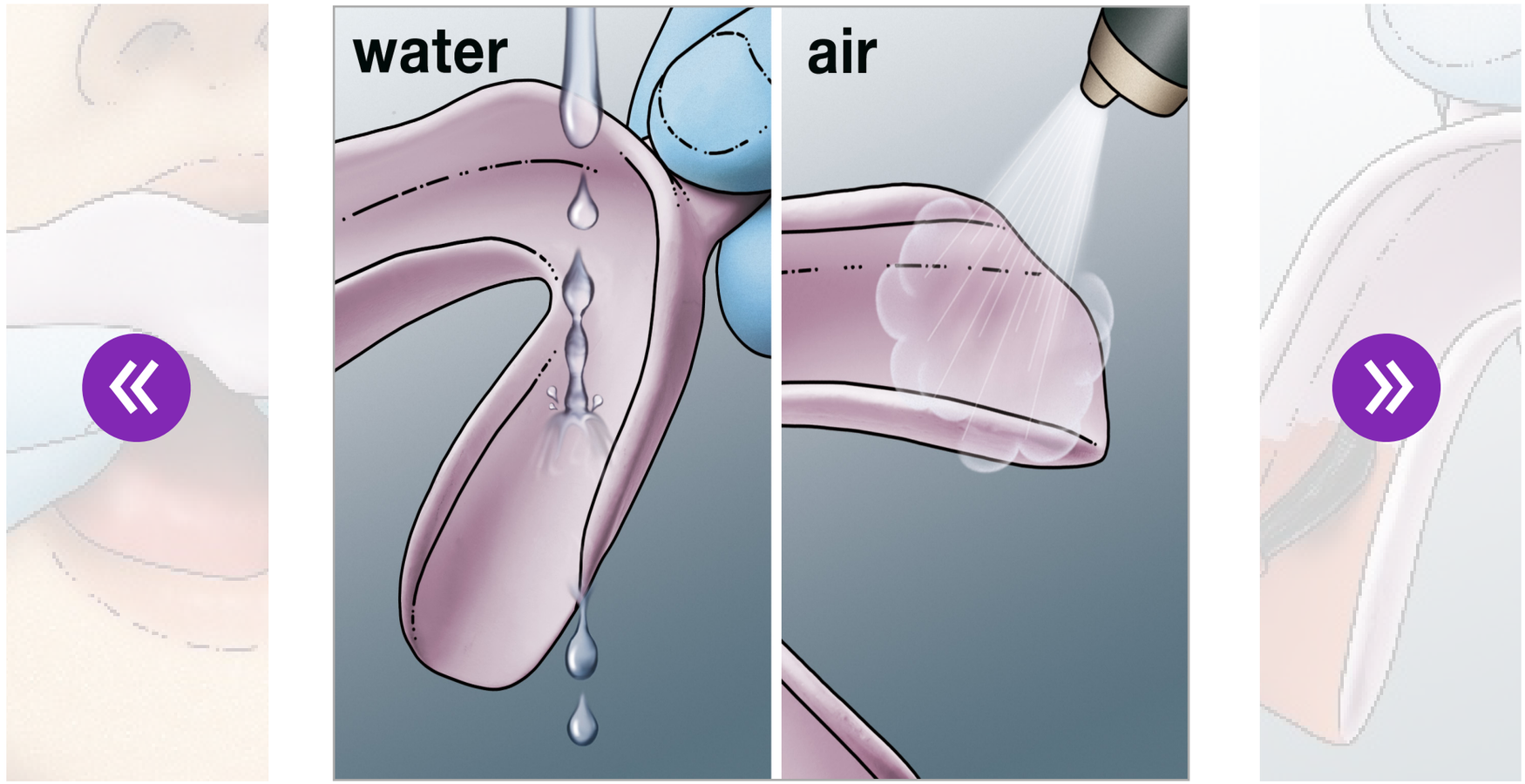




Step 2:
Try-in.

Custom tray

Operatory guides



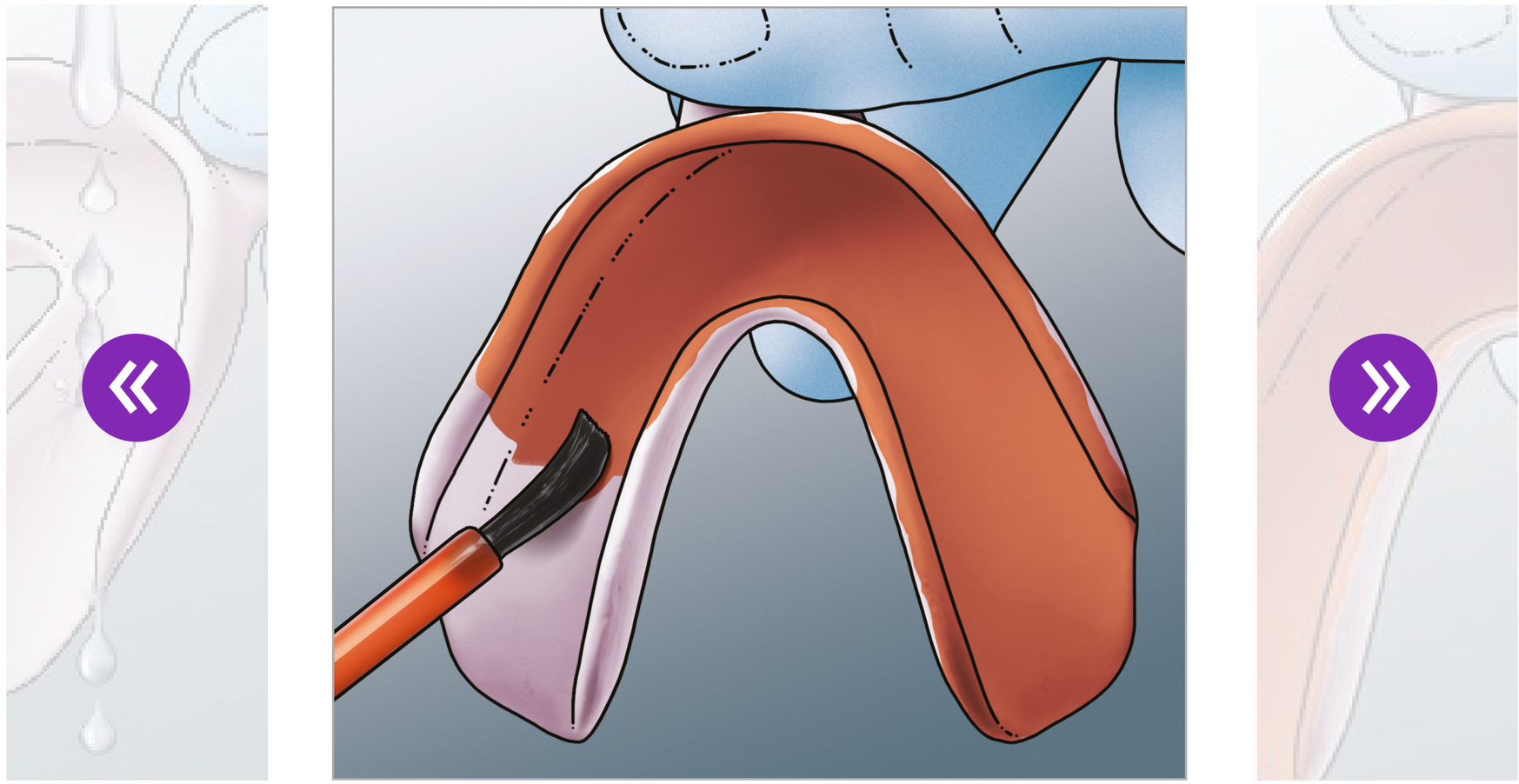
Step 3:
Clean the tray after try-in. Thoroughly dry the tray.

CLOSE

Closed implant impression
Production of a crown on implant

Custom tray

Operatory guides

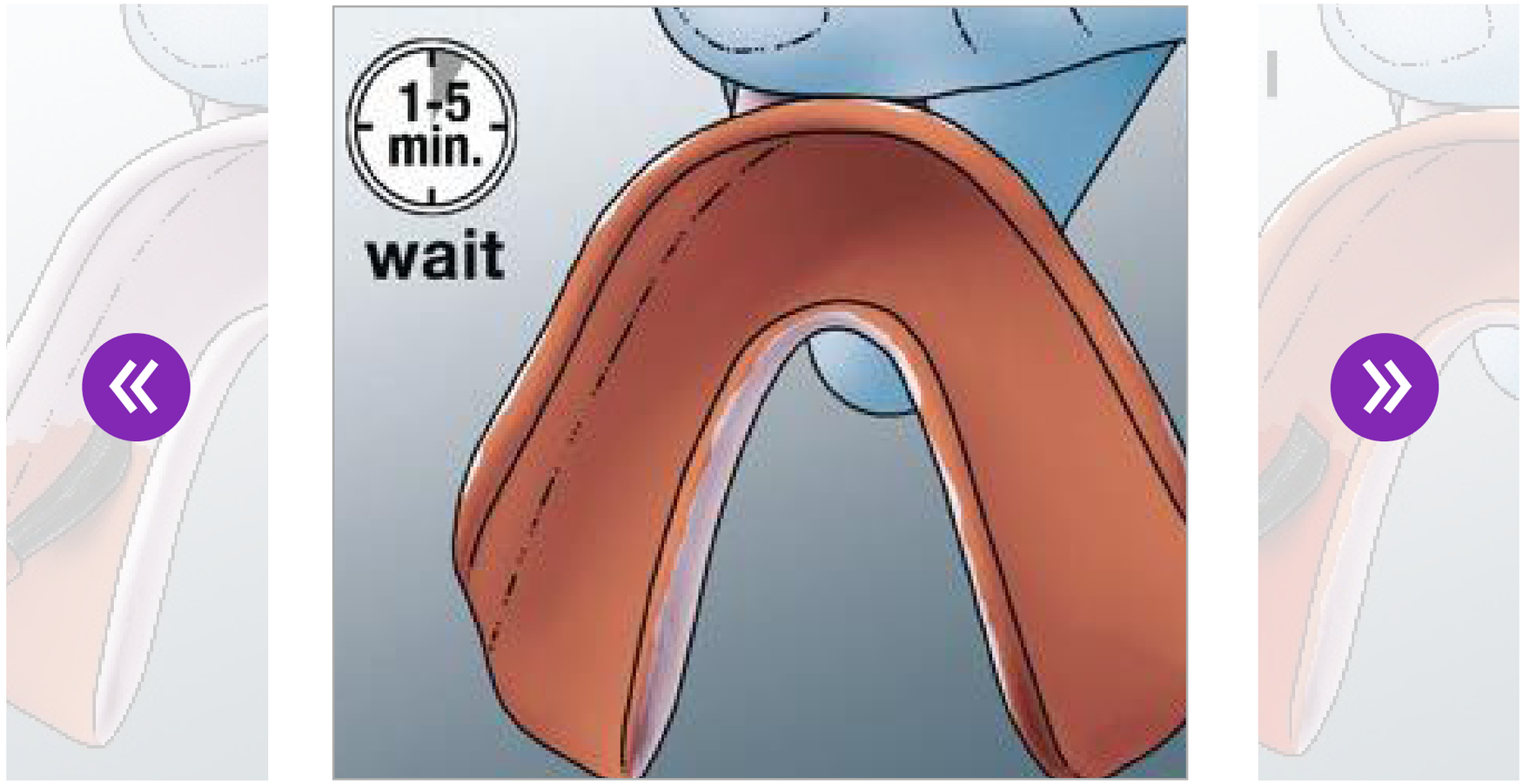


Step 4:
Apply a thin, homogeneous adhesive layer of uniform red color, beginning from one end of the tray and working towards the other.

CLOSE

Custom tray

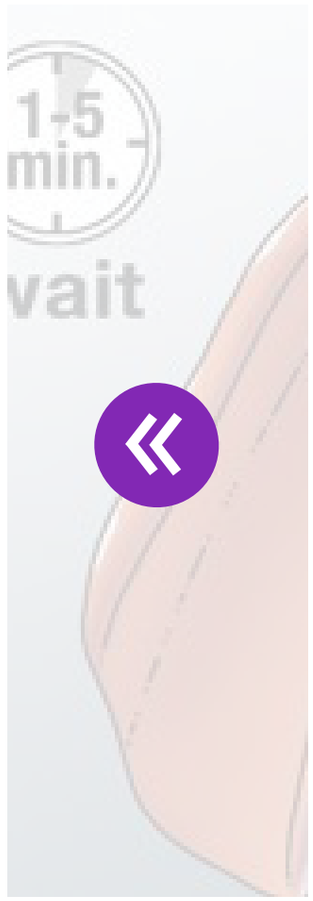
Operatory guides

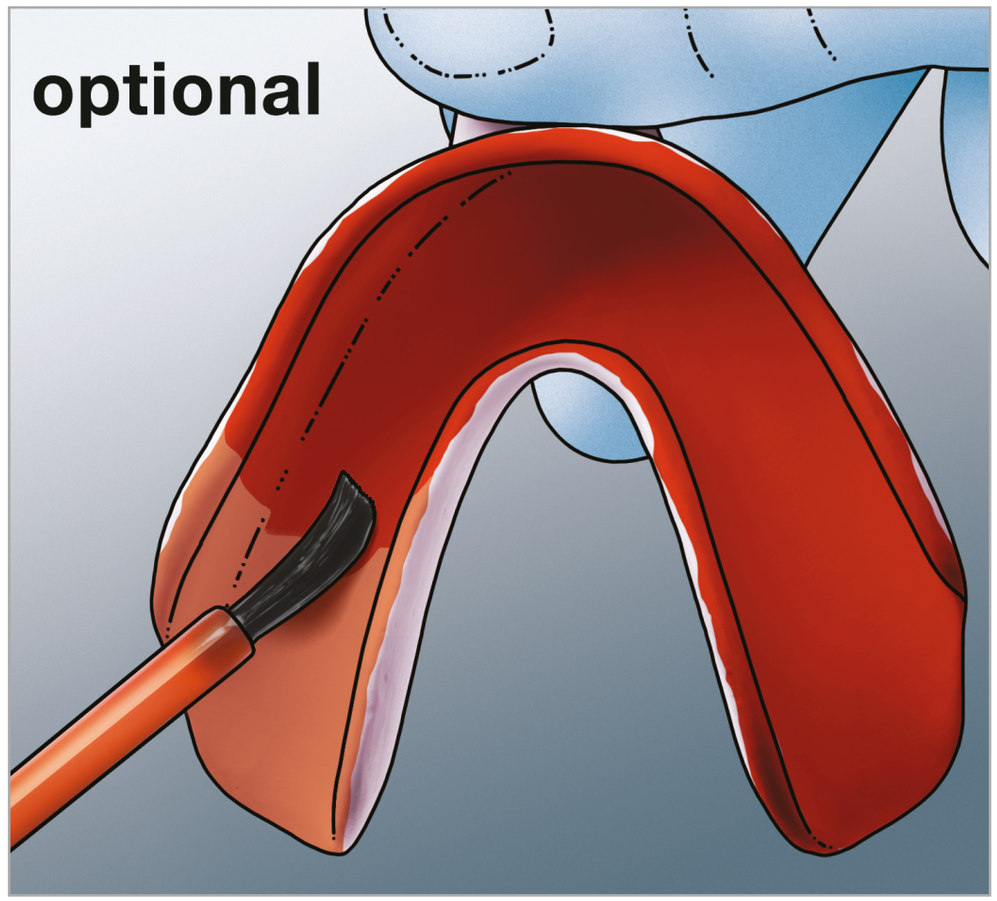


Step 5:
Let the adhesive fully dry. The required time is dependent on the thickness of the layer and may vary for different custom tray materials. Even for thick layers, five minutes should be sufficient.

CLOSE

Custom tray



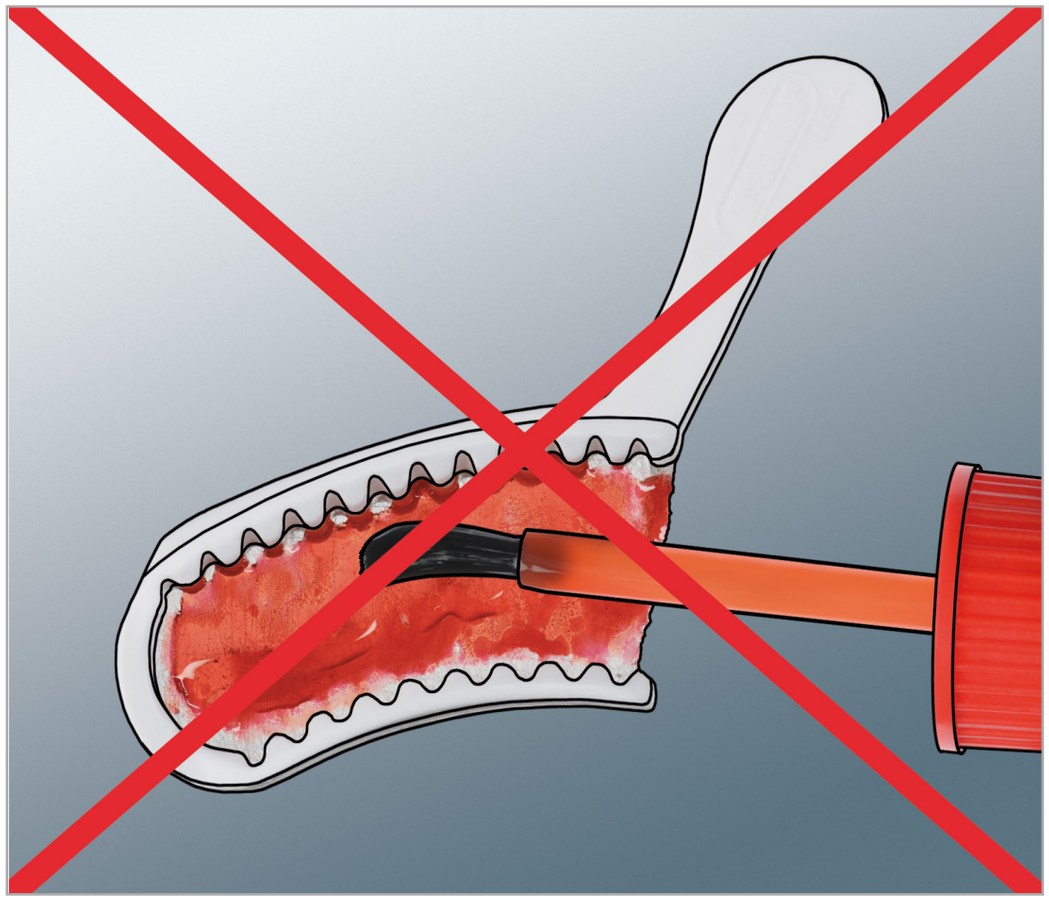


Step 6:
Let a thin adhesive layer fully dry (at least two minutes) and apply a second thin layer. Let the second layer also dry for at least three minutes.

CLOSE

Dual-arch tray

Operatory guides



Clean and dry the tray after try-in.
Please follow tray manufacturer's instructions. If required, apply a thin homogeneous adhesive layerof uniform red color at the frame.
In all cases, **Polyether Tray Adhesive must not be applied on the mesh.**

CLOSE

Indications & Clinical Applications

Operatory guides

Impression tray preparation
Monophase technique
1-step full arch technique
1-step dual-arch technique
Lab handling guidelines for polyether impressions

Case reports

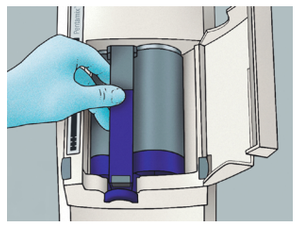
1-step heavy/light body impression
Replacement of a partial crown
1-step medium/light body impression
Replacement of a partial crown
Dual-arch bite impression
Replacement of a all-ceramic crown
Monophase impression
Replacement of a single-unit crown
Closed implant impression
Production of a crown on implant

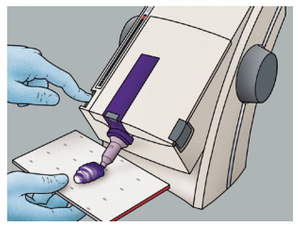
Monophase technique

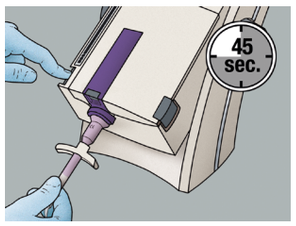
3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material

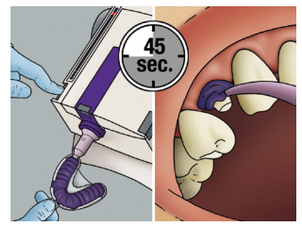
Click on images to enlarge

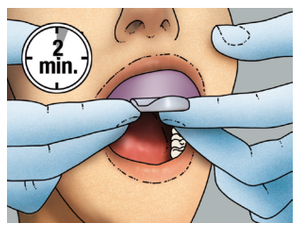
Gallery

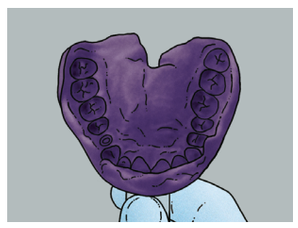






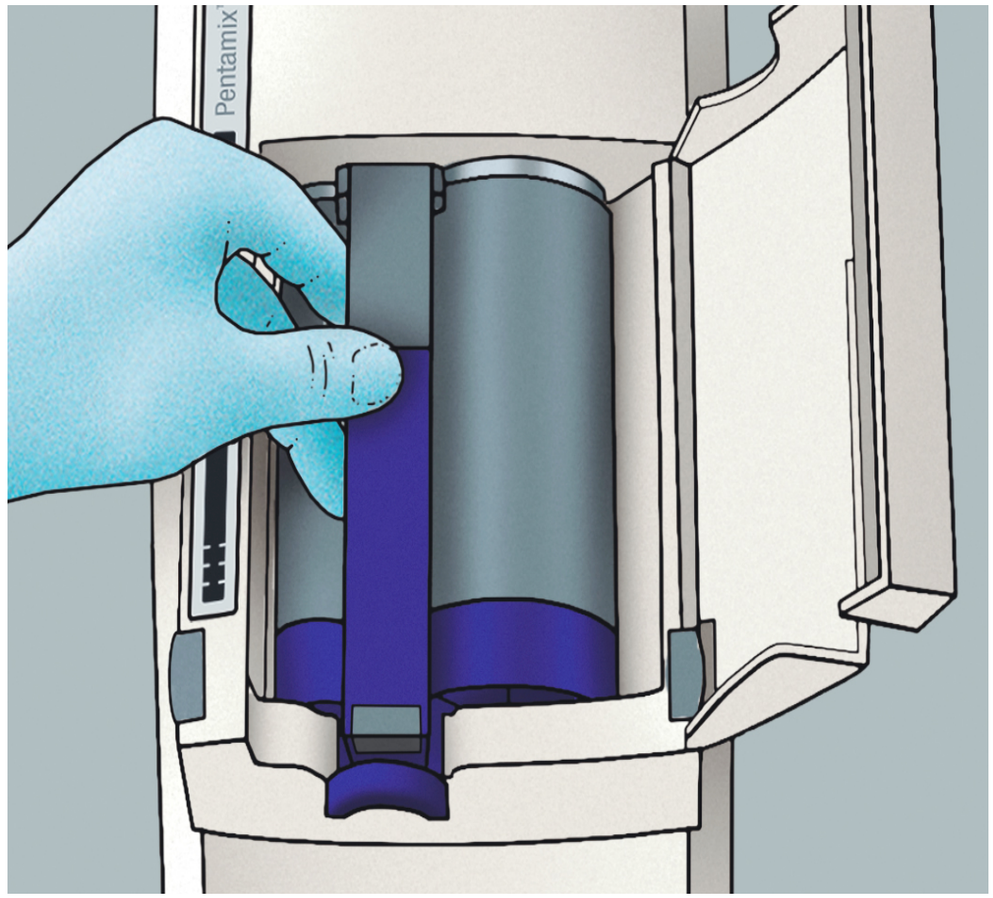


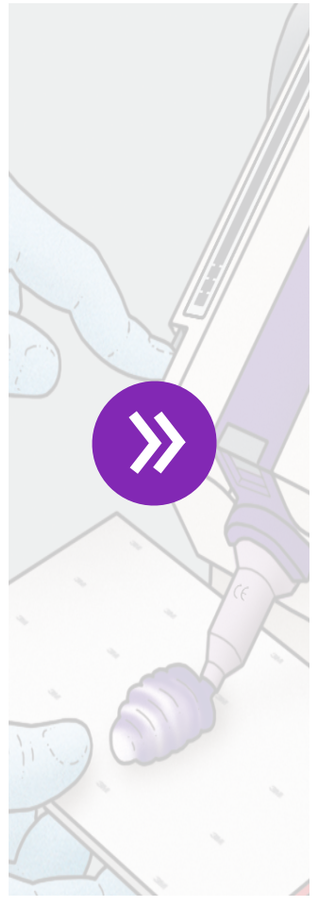




Monophase technique

Operatory guides





Step 1:
Insert the 3M™ Impregum™ Penta™ Super Quick cartridge into the 3M™ Pentamix™ 3 Automatic Mixing Unit. With the cartridge loaded, you are ready to mix impression material.

CLOSE

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Replace
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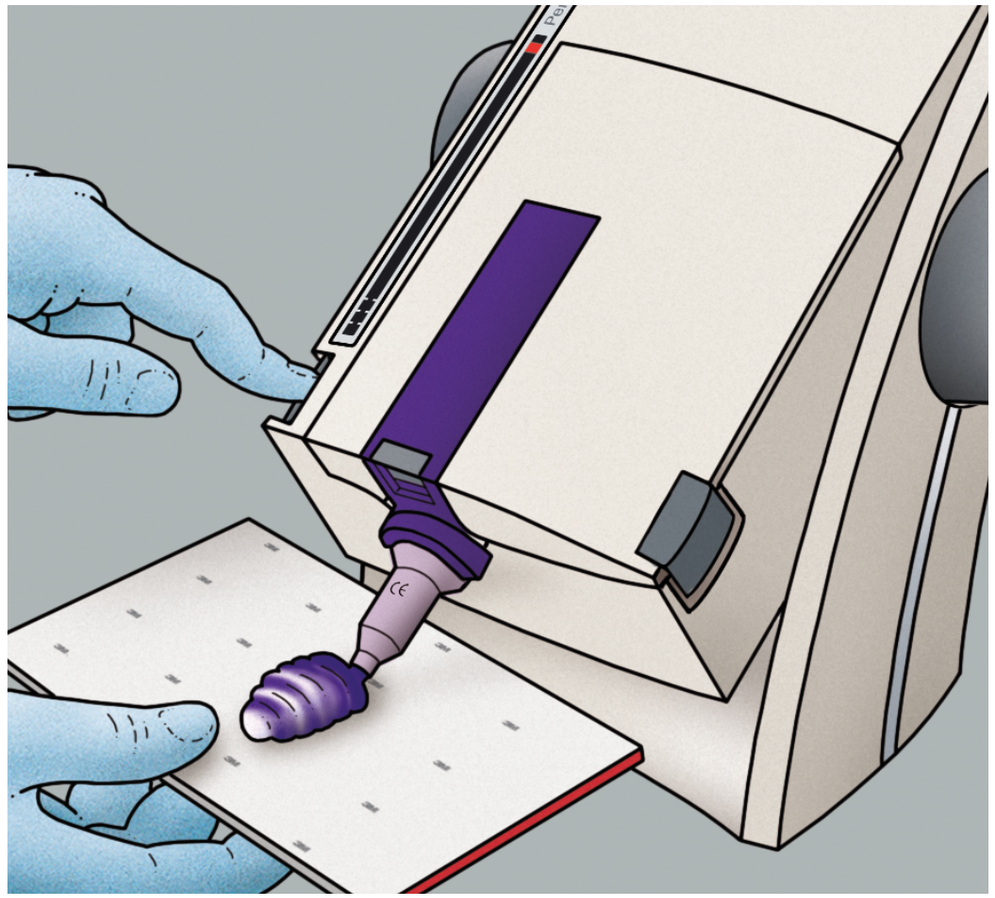
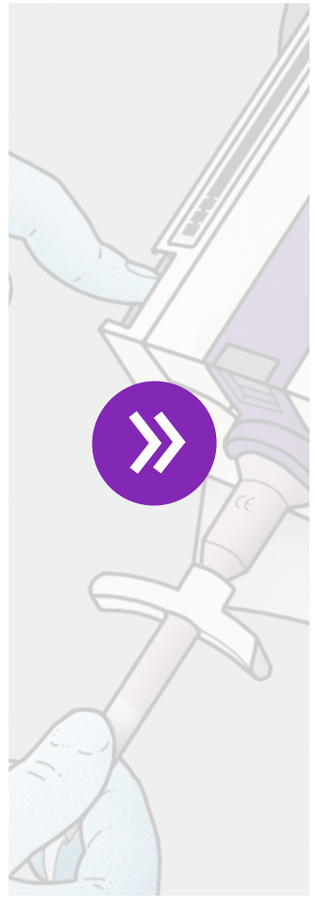
Dual-ar
Replace
Monop
Replace
Closed implant impression
Production of a crown on implant

Monophase technique

Operatory guides

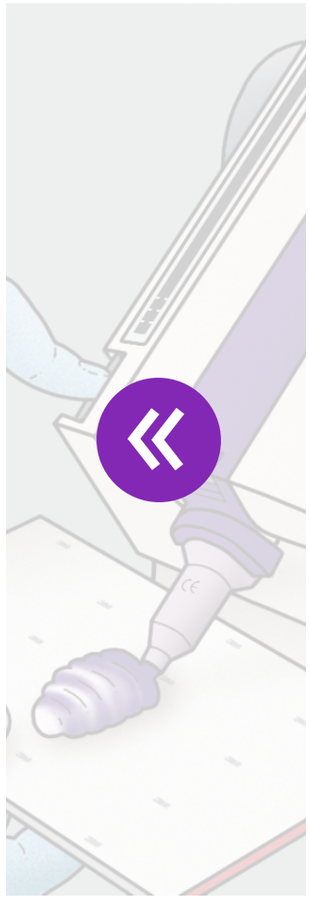


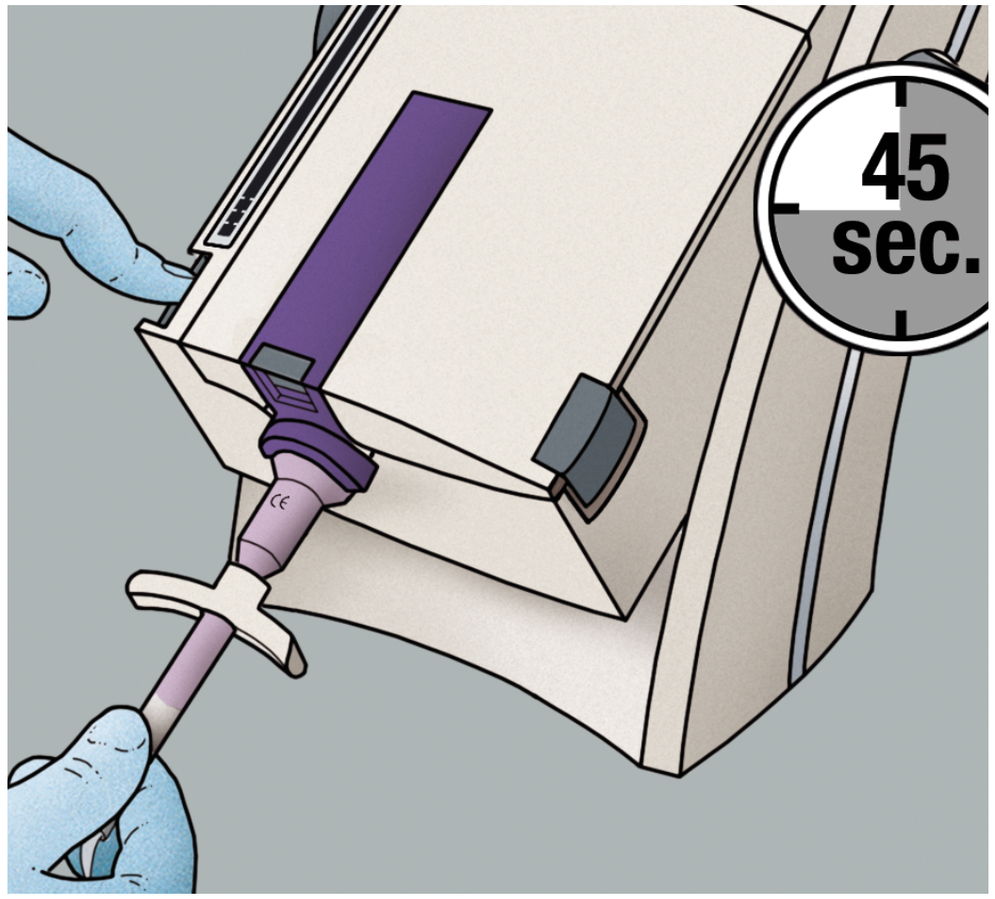


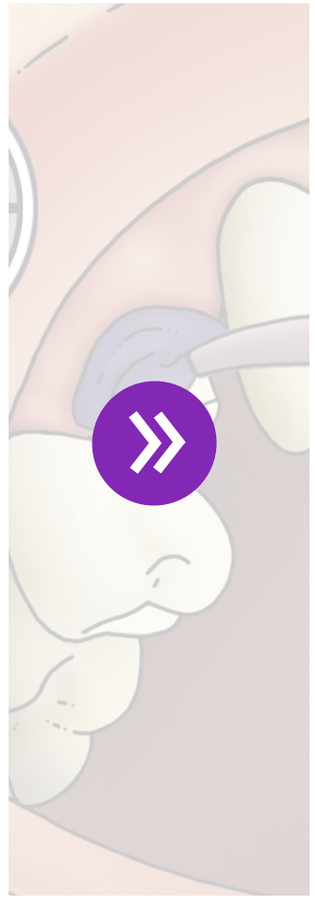
Step 2:
Dispense a small amount of impression material on a mixing pad to ensure a homogeneous mix.

CLOSE

Monophase technique
Operatory guides





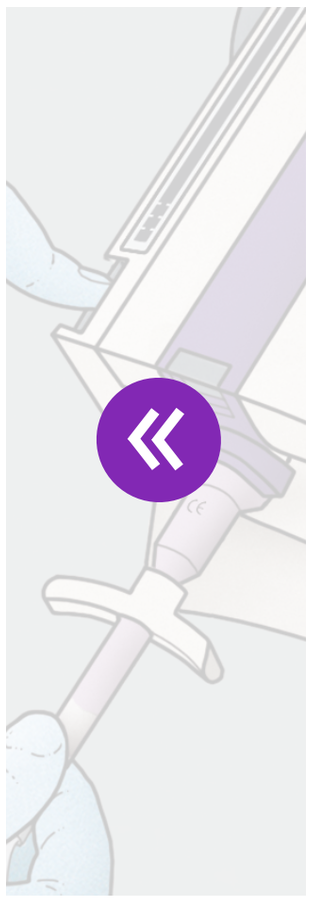


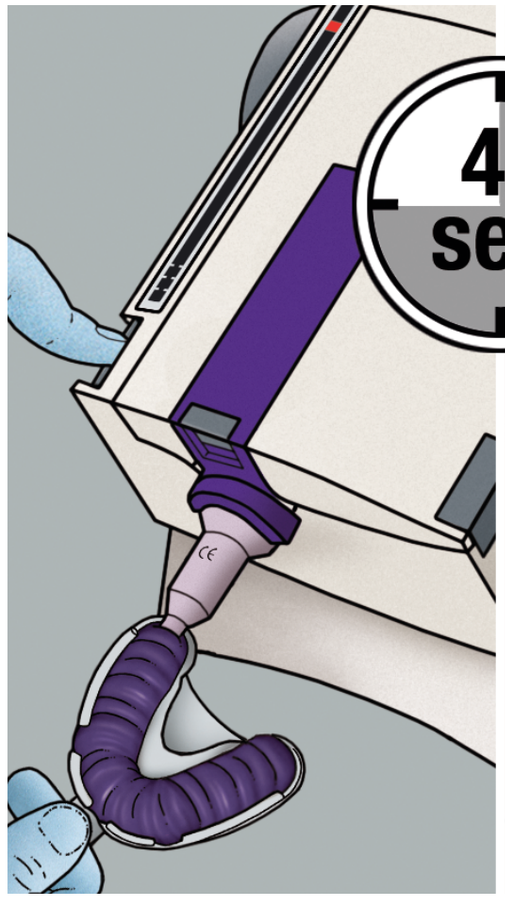
Step 3:
Fill the 3M™ Penta™ Elastomer Syringe directly by placing the syringe onto the mixing tip and start dispensing the impression material.

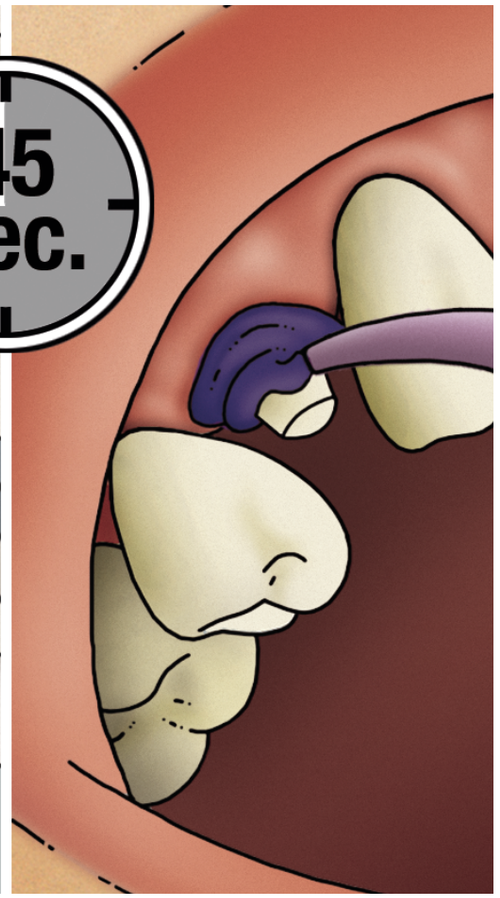
CLOSE

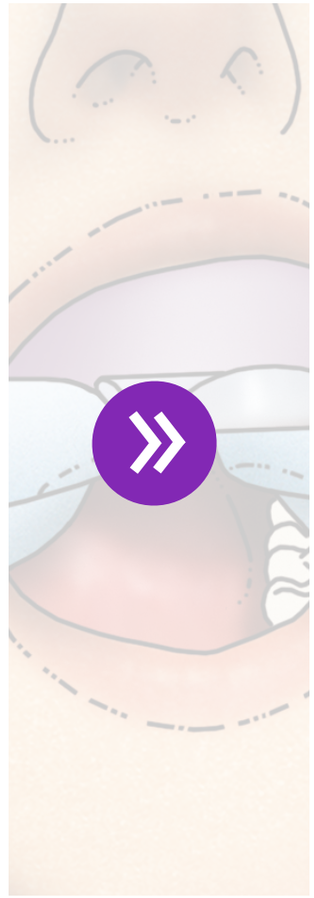
Closed implant impression
Production of a crown on implant

Monophase technique
Operatory guides





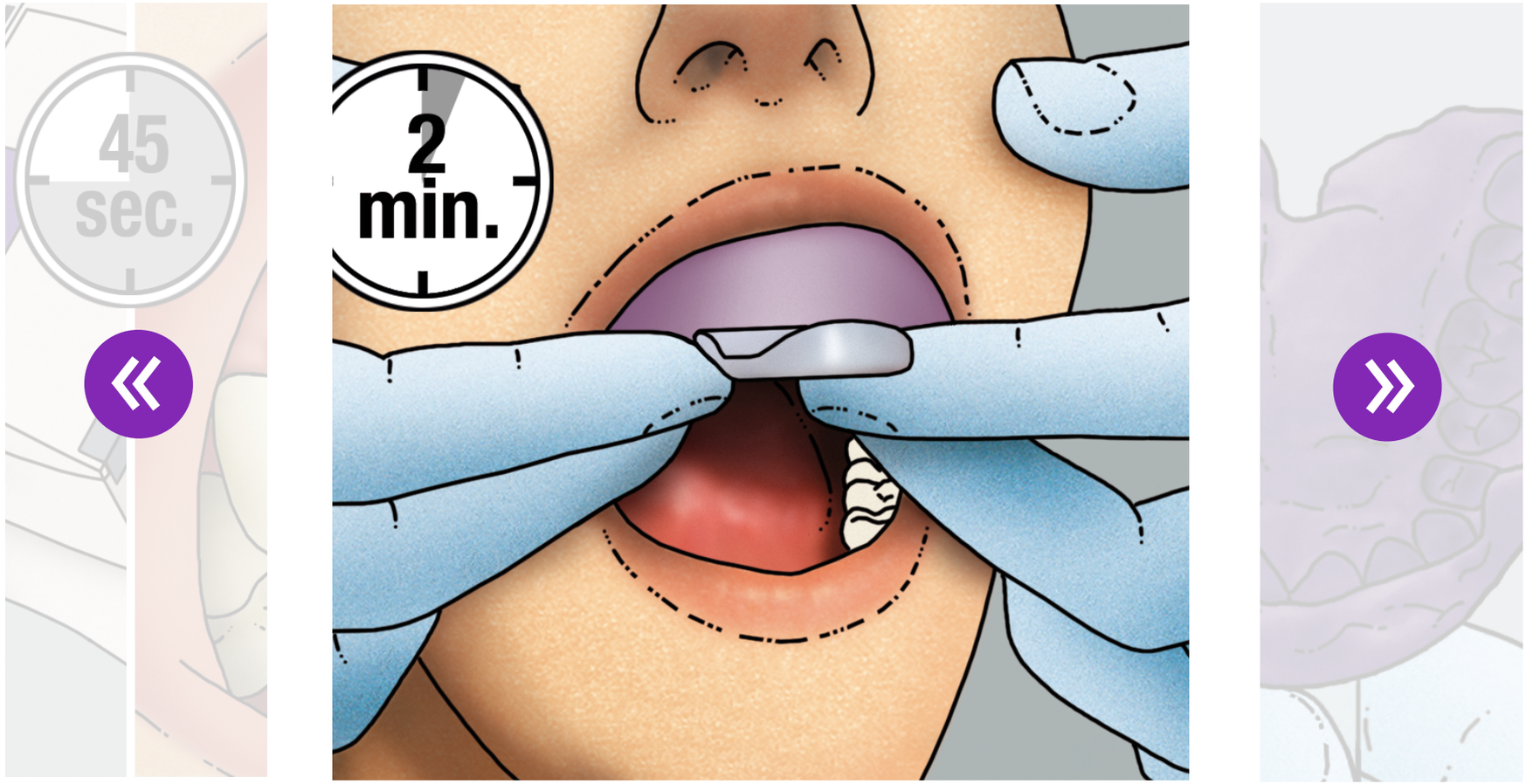




Step 4:
Fill the tray completely while keeping the mixing tip immersed in the material. Syringe the preparation simultaneously.
Working time of 3M™ Impregum™ Penta™ Super Quick Material: 45 sec.

CLOSE

Monophase technique
Operatory guides



Step 5:
Place the filled tray into the mouth.
Intra-oral setting time of 3M™ Impregum™ Penta™ Super Quick Material: 2 min.

CLOSE

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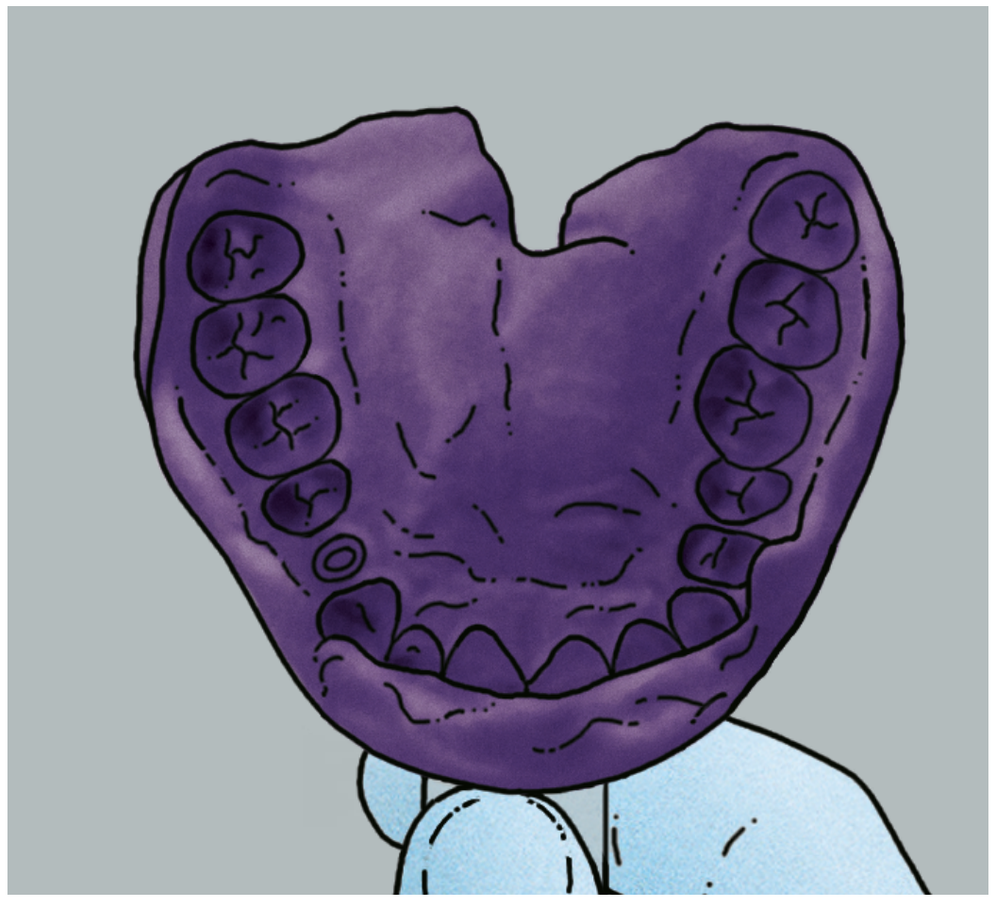
1-step c
Lab har
polyeth
Case re
1-step h
Replace
1-step n
Replace
Dual-ar
Replace
Monop
Replace
Closed implant impression
Production of a crown on implant

Monophase technique

Operatory guides



Step 6:
After 2 min. the impression can be removed from the mouth.

CLOSE

Indications & Clinical Applications

1-step full arch technique

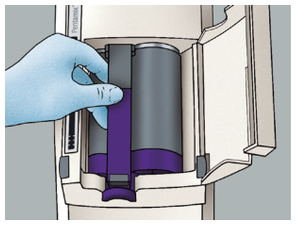
3M™ Impregum™ Penta™ Super Quick Heavy or Medium Body Polyether Impression Material

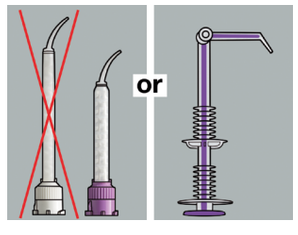
3M™ Impregum™ Super Quick Light Body Polyether Impression Material

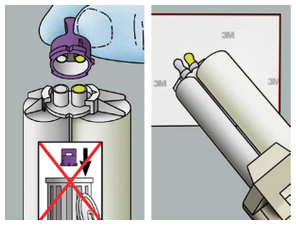
3M™ Intra-oral Syringe Purple

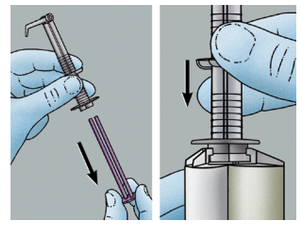
Click on images to enlarge

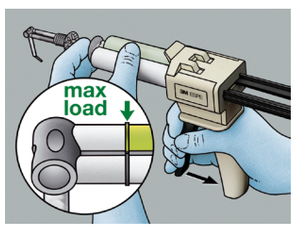
Gallery

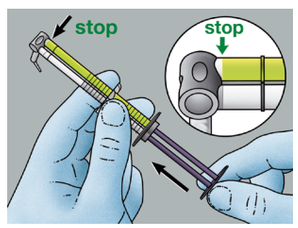


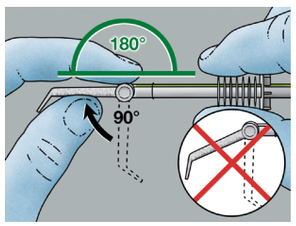


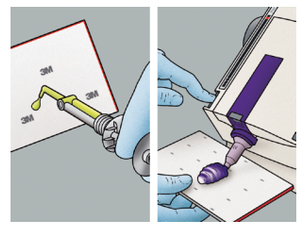


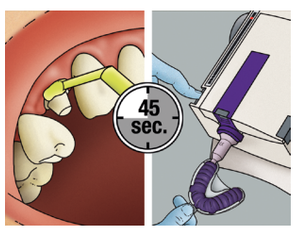


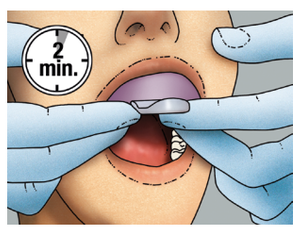


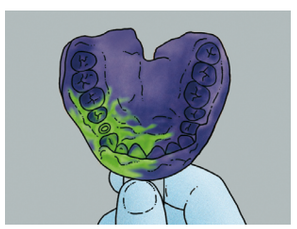












Operatory guides

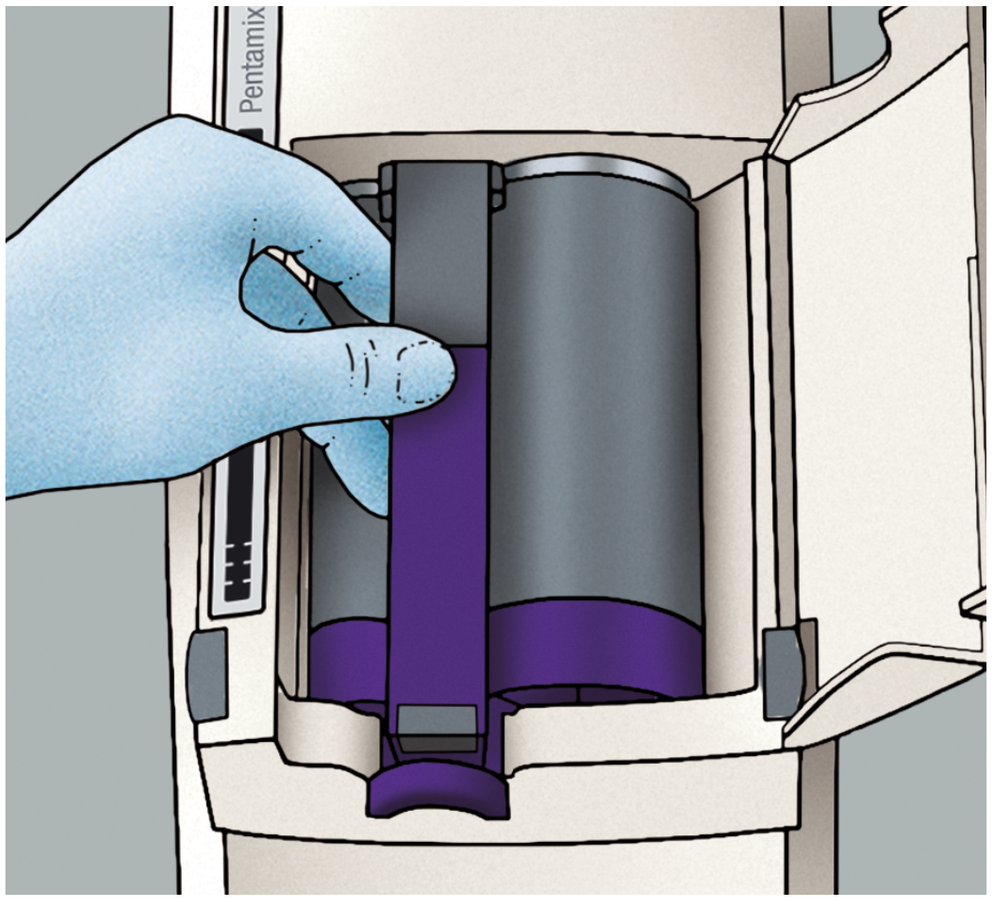
- Impression tray preparation
- Monophase technique
- 1-step full arch technique
- 1-step dual-arch technique
- Lab handling guidelines for polyether Impressions

Case reports

- 1-step heavy/light body impression
  Replacement of a partial crown
- 1-step medium/light body impression
  Replacement of a partial crown
- Dual-arch bite impression
  Replacement of a all-ceramic crown
- Monophase impression
  Replacement of a single-unit crown
- Closed implant impression
  Production of a crown on implant

1-step full arch technique

Operatory guides



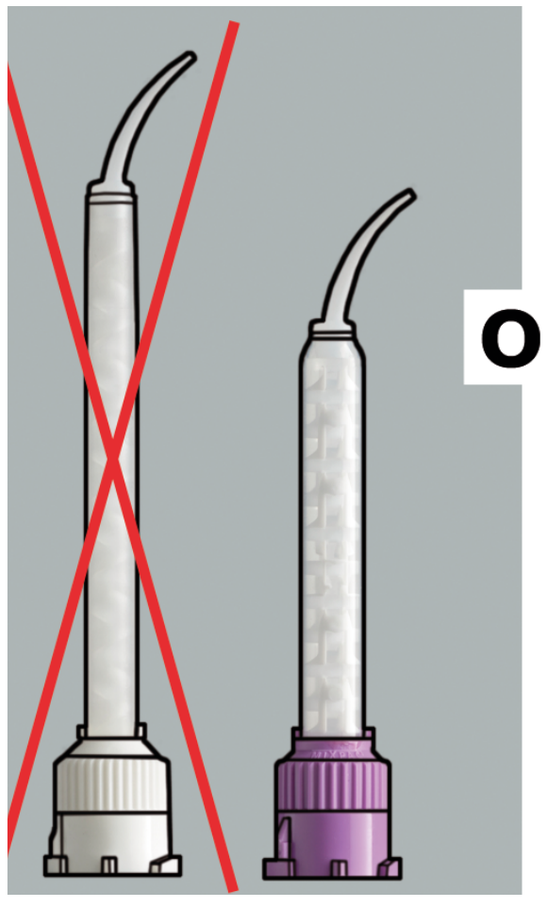
Step 1:
Insert the 3M™ Impregum™ Penta™ Super Quick Heavy or Medium Body Material cartridge into the 3M™ Pentamix™ 3 Automatic Mixing Unit.
With the cartridge loaded, you are ready to mix impression material.

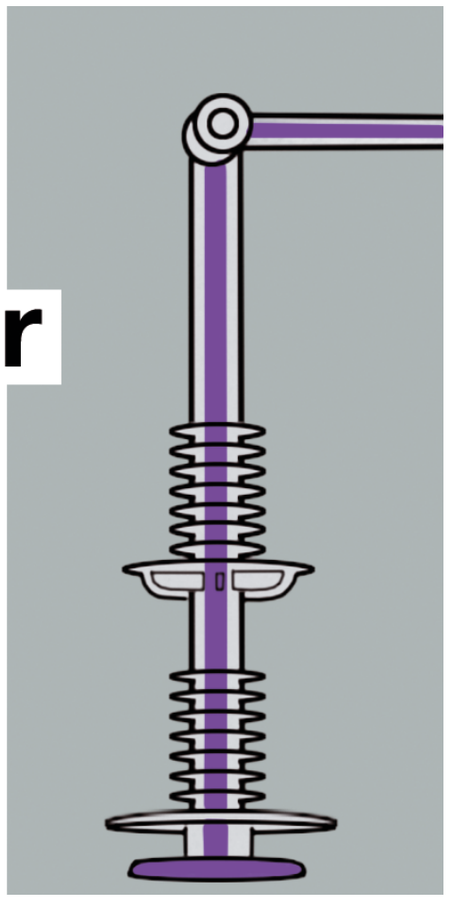
CLOSE

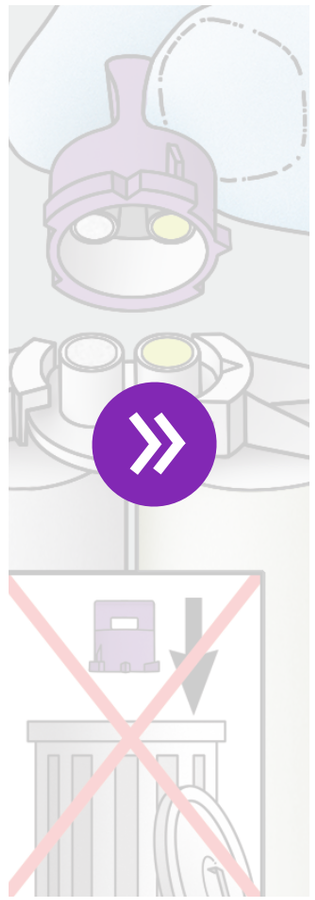
Closed implant impression
Production of a crown on implant

1-step full arch technique

Operatory guides







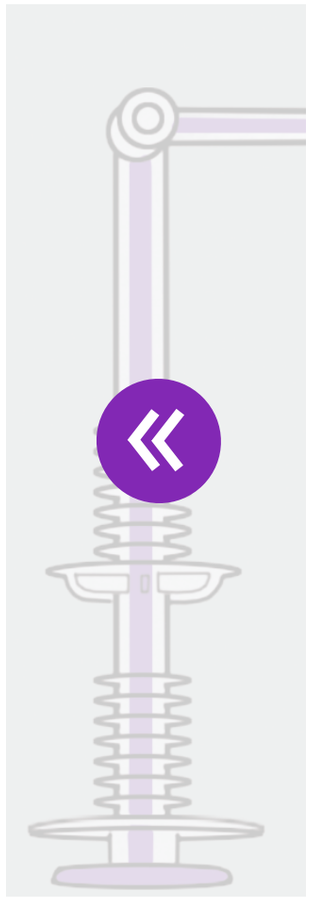
Step 2:
For the 3M™ Impregum™ Super Quick wash material cartridge either use the 3M™ Garant™ Mixing Tip Purple or the 3M™ Intra-oral Syringe Purple.

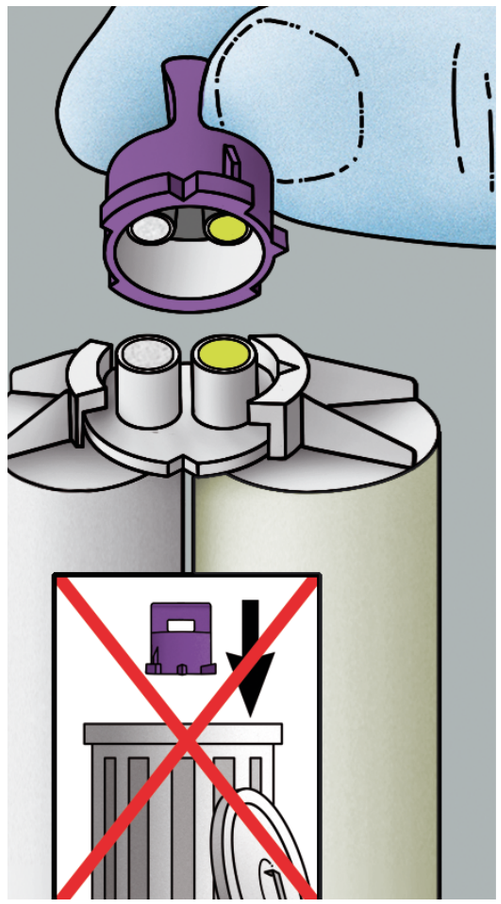
CLOSE

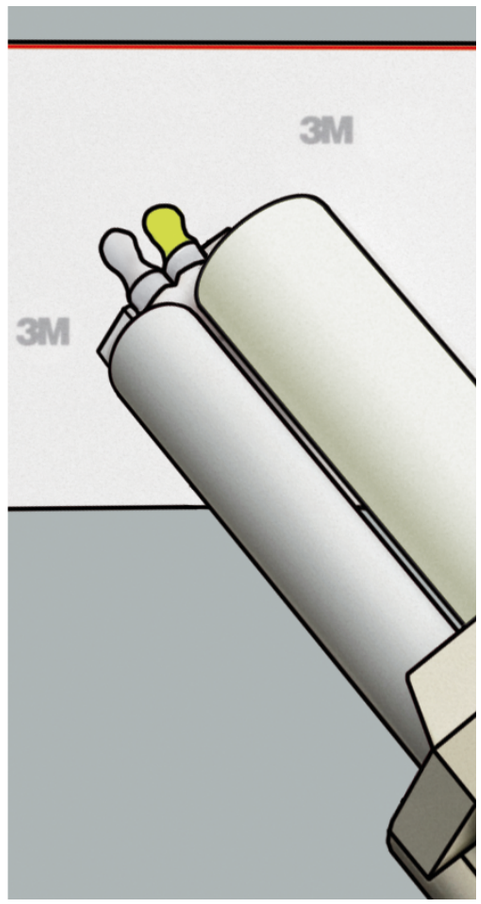
Closed implant impression
Production of a crown on implant

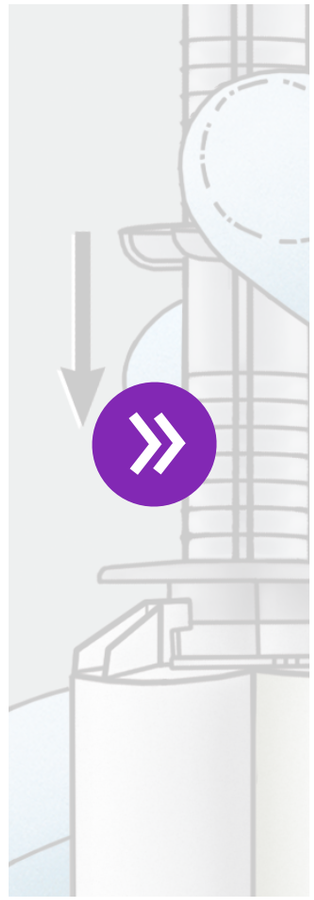
1-step full arch technique

Operatory guides









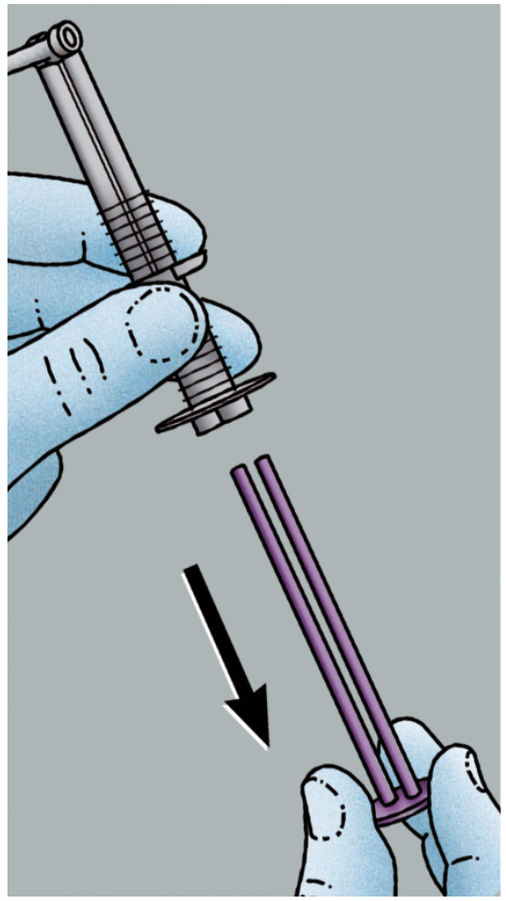
Step 3:
Dispense a small amount from the wash material cartridge on a mixing pad. Retain the cap of the cartridge to close it after usage.

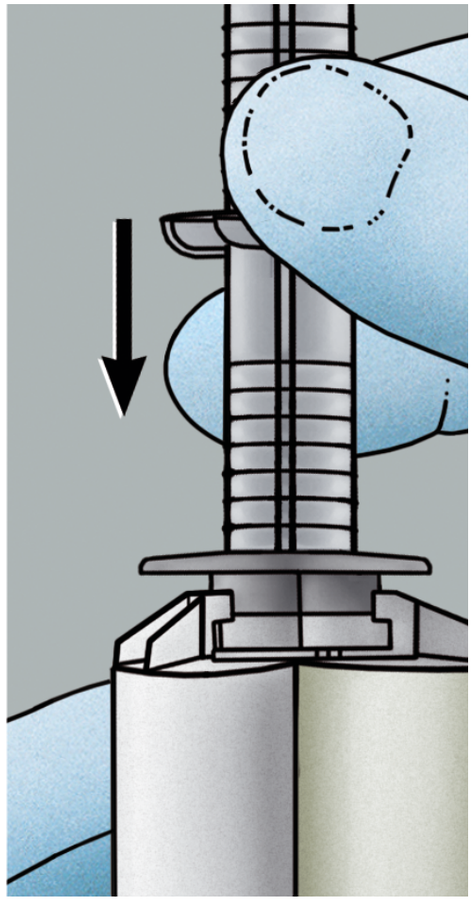
CLOSE

Closed implant impression
Production of a crown on implant

1-step full arch technique

Operatory guides





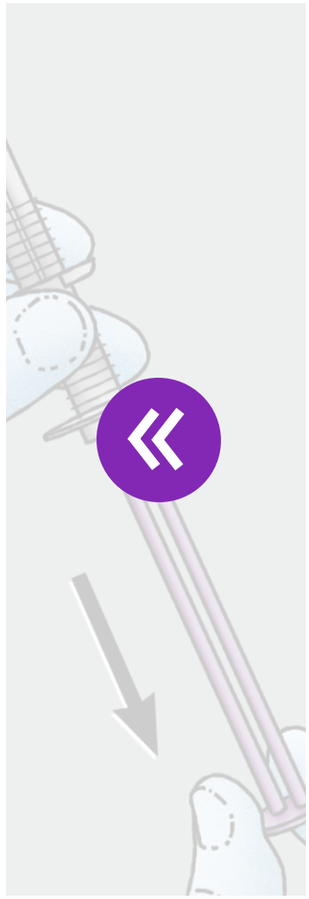
Step 4:
If using the 3M™ Intra-oral Syringe Purple, remove the plunger and place the syringe directly on the wash material cartridge. Pay attention to the index wedge which guides you to the correct position of the syringe on the cartridge.

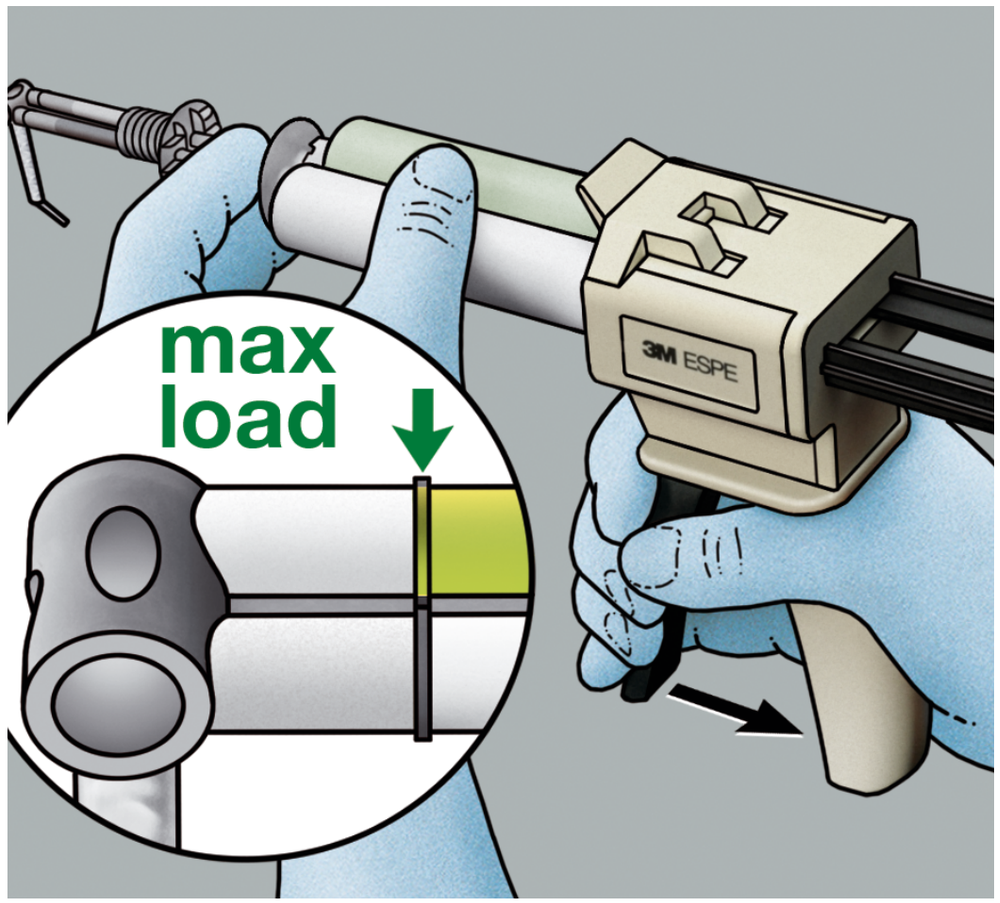
CLOSE

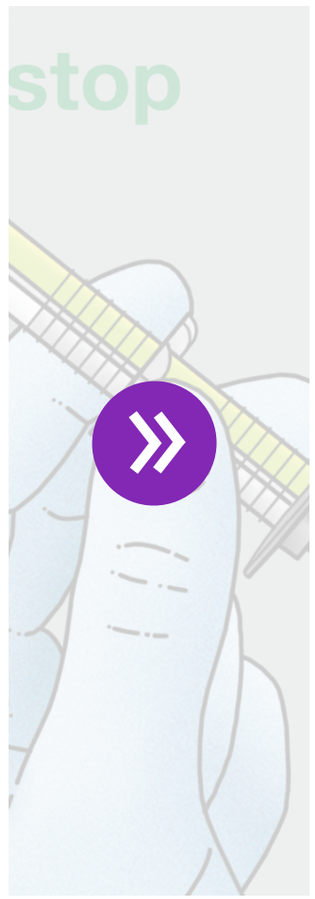
Closed implant impression
Production of a crown on implant

1-step full arch technique

Operatory guides







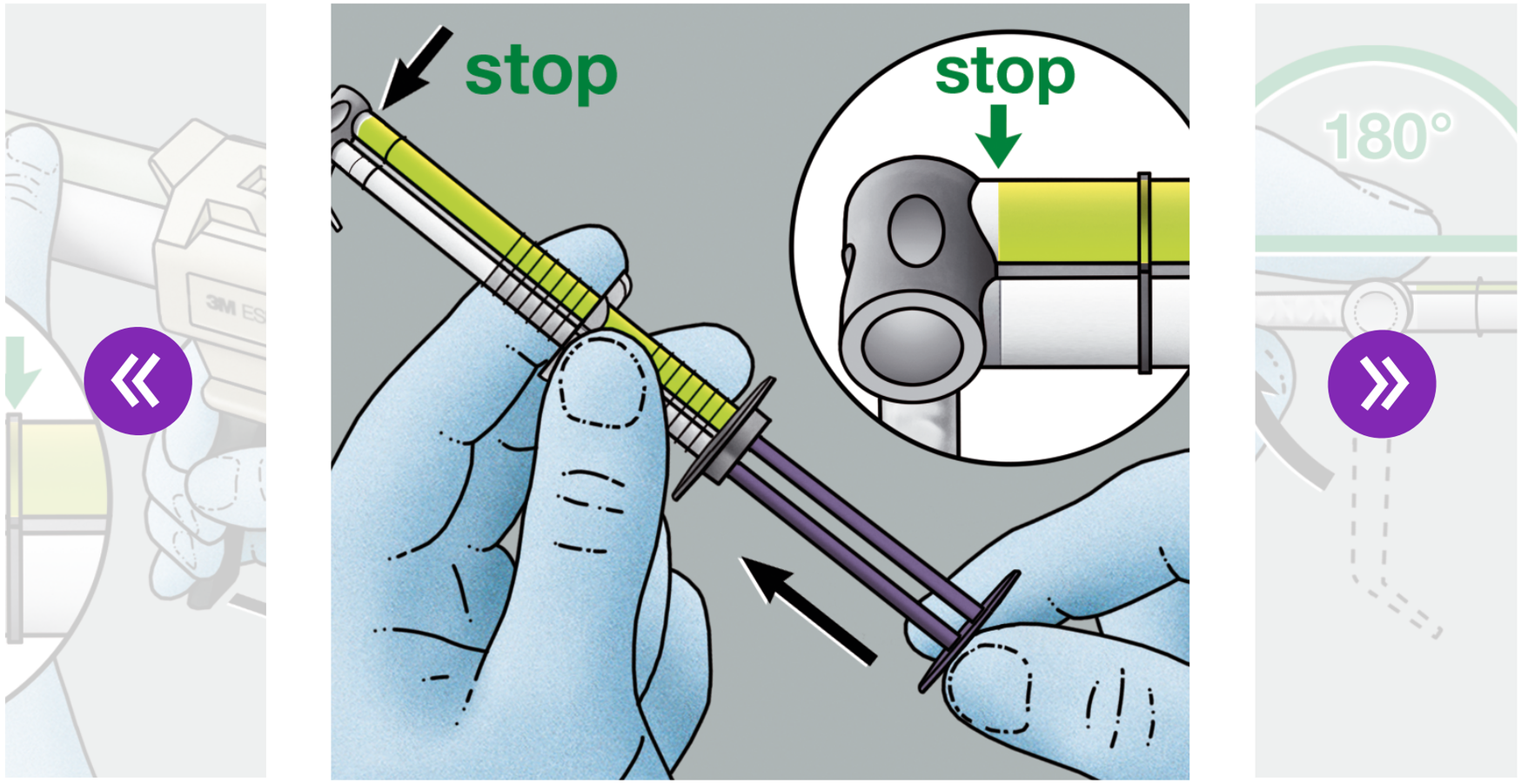
Step 5:
Load the 3M™ Intra-oral Syringe Purple with the required amount of wash material. Do not exceed the marking line (approx. 1 cm below the mixing tip joint). The loaded syringe can be pre-filled and stored up to 12 hours.

CLOSE

Closed implant impression
Production of a crown on implant

1-step full arch technique

Operatory guides



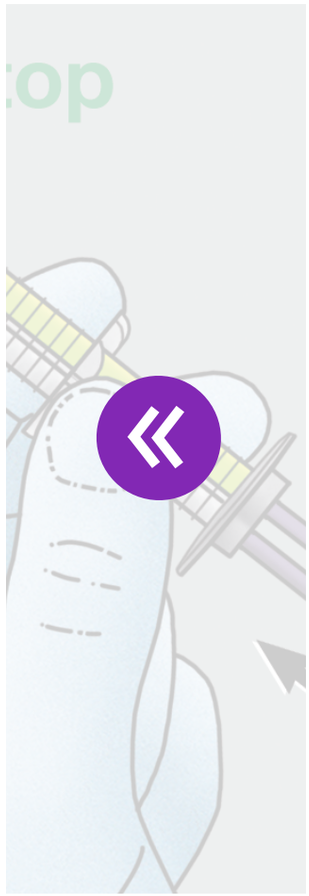
Step 6:
After having removed the 3M™ Intra-oral Syringe Purple from the wash material cartridge, insert the plunger and start pushing the paste no further than to the joint of the mixing tip.

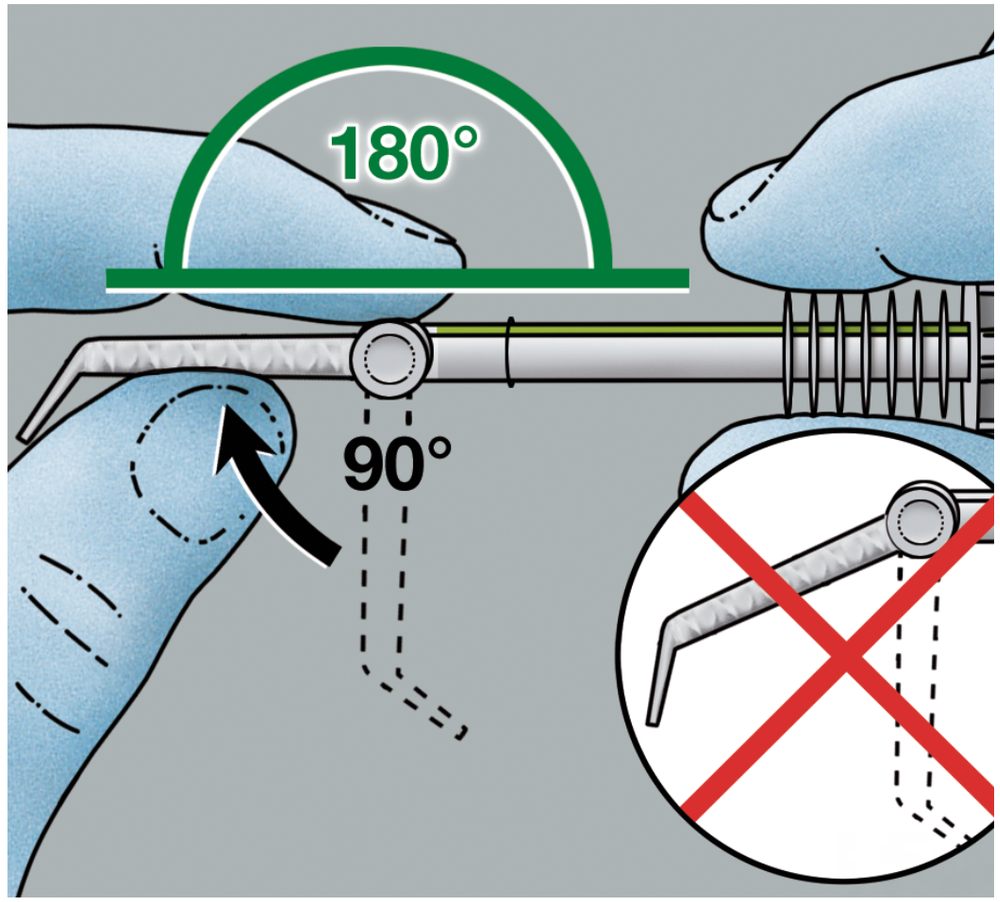
CLOSE

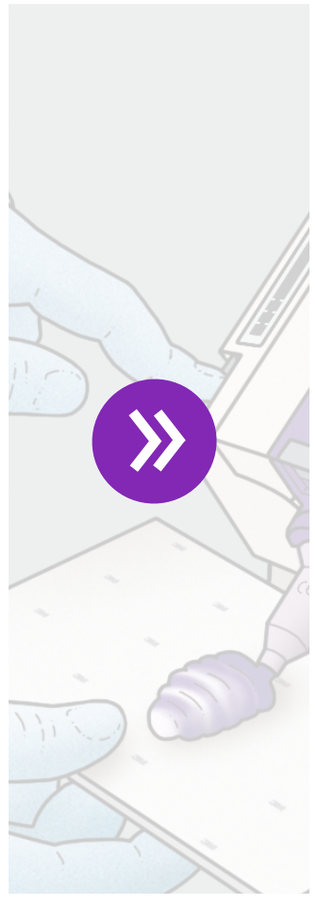
Closed implant impression
Production of a crown on implant

1-step full arch technique

Operatory guides



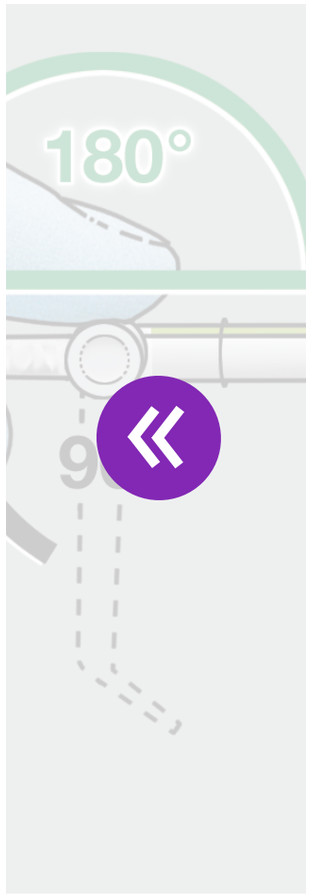


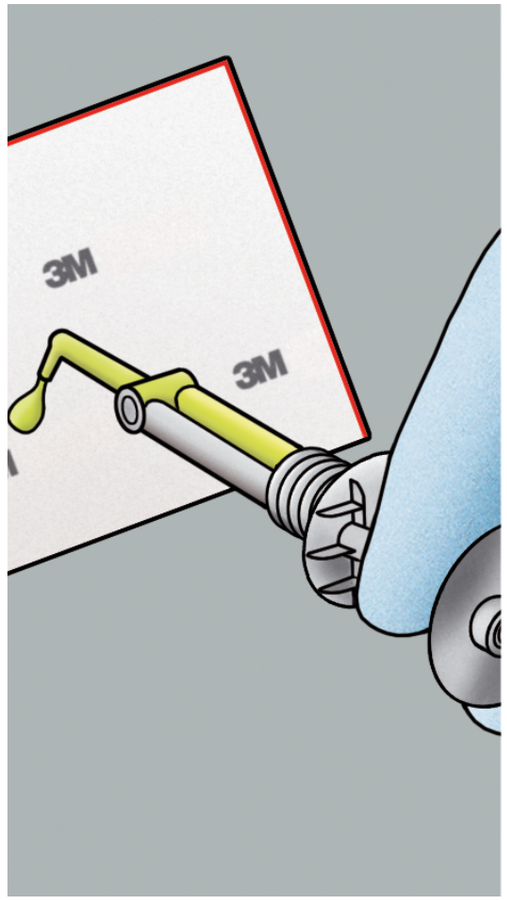


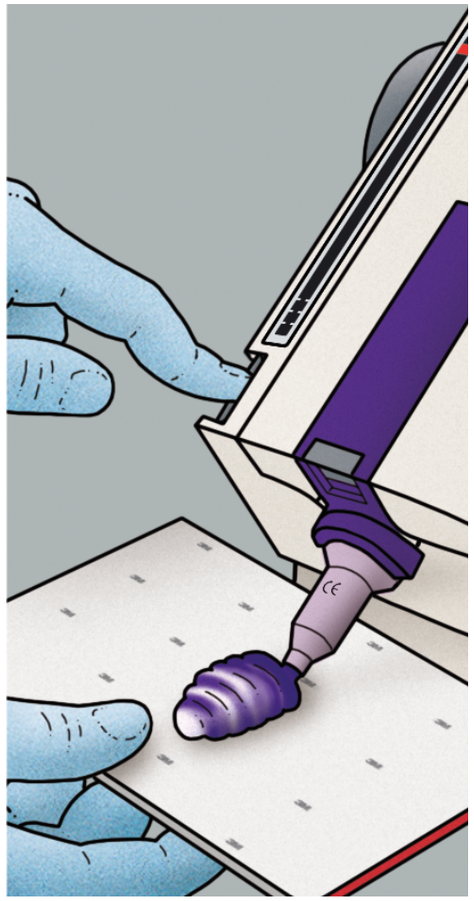
Step 7:
Immediately before wash material application, activate the 3M™ Intra-oral Syringe Purple by bringing the mixing tip into the 180° straight position.

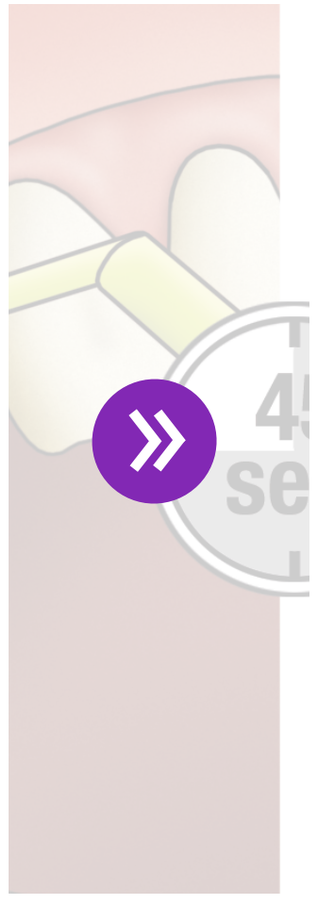
CLOSE

1-step full arch technique









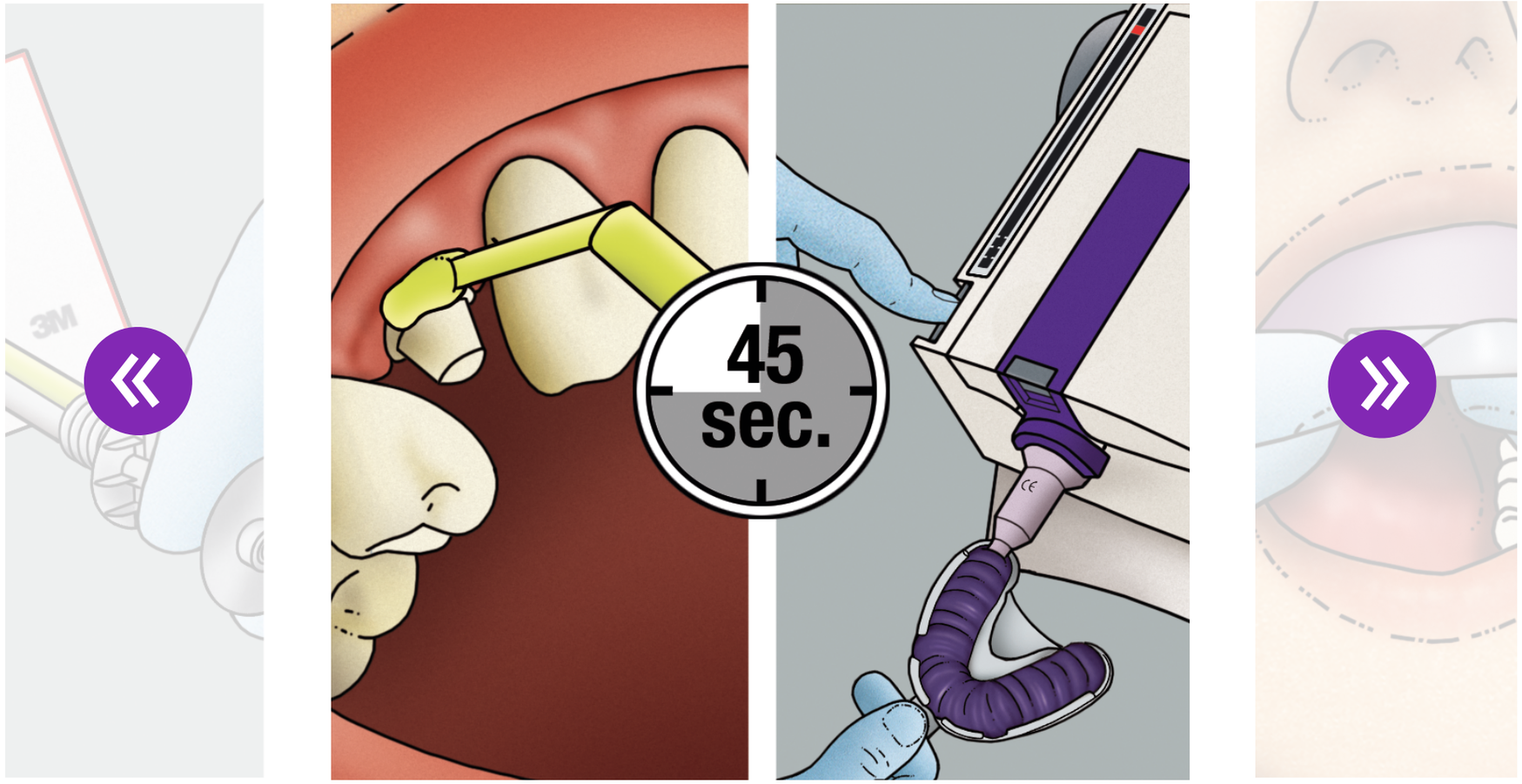
Step 8:
Dispense a small amount of impression material from both the 3M™ Intra-oral Syringe Purple and the 3M™ Pentamix™ 3 Automatic Mixing Unit on a mixing pad to ensure a homogeneous mix.

CLOSE

Closed implant impression
Production of a crown on implant

1-step full arch technique

Operatory guides

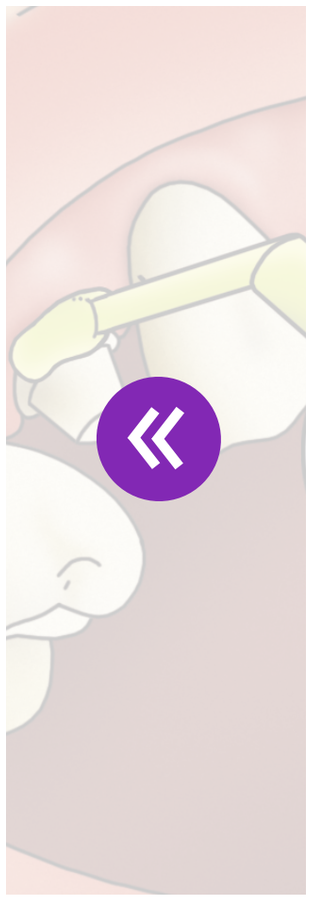


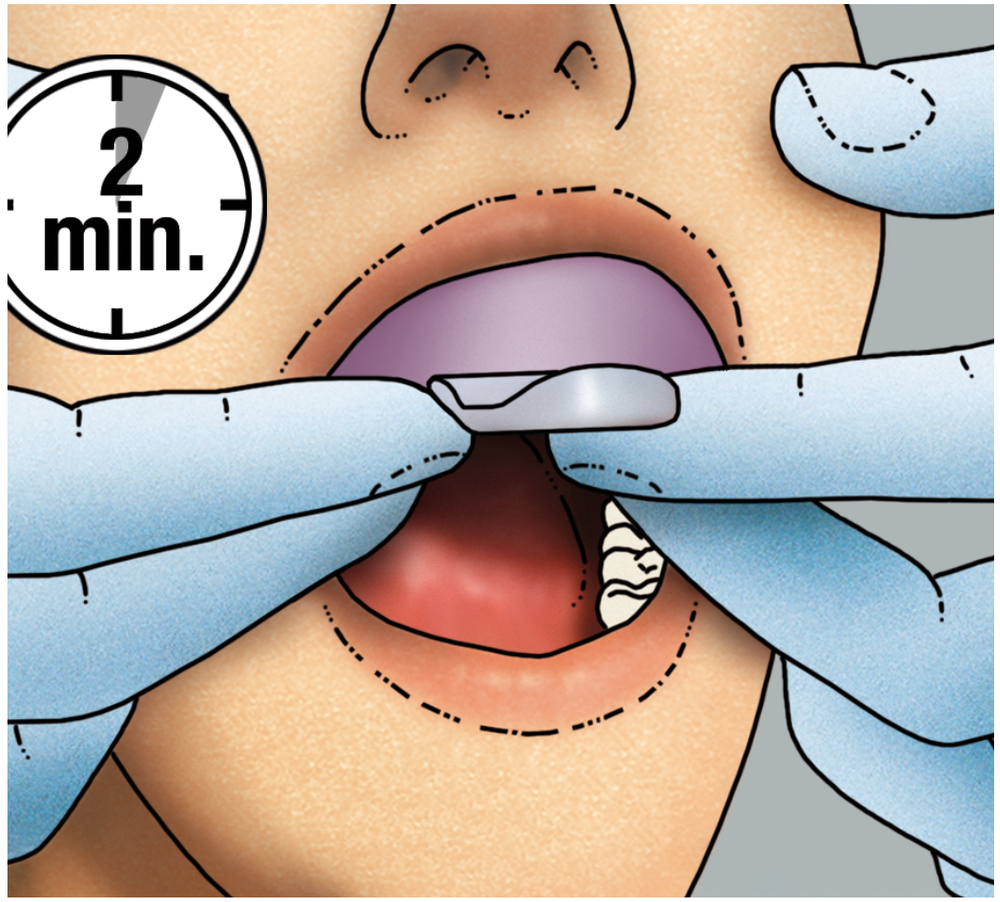
Step 9:
Fill the tray completely while keeping the mixing tip immersed in the material. Syringe the preparation simultaneously.
Working time of both 3M™ Impregum™ Super Quick tray and wash material: 45 sec.

CLOSE

1-step full arch technique

Operatory guides



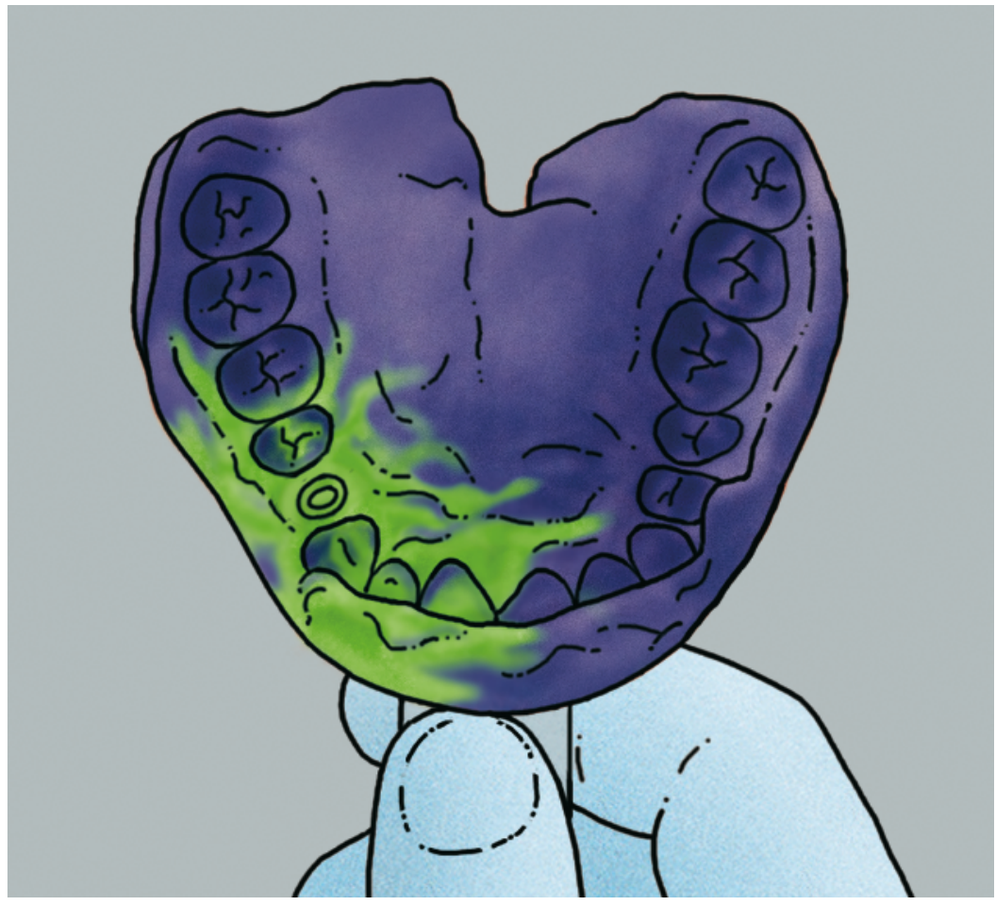


Step 10:
Place the filled tray into the mouth.
Intra-oral setting time of 3M™ Impregum™ Super Quick Material: 2 min.

CLOSE

1-step full arch technique

Operatory guides



Step 11:
After 2 min. the impression can be removed from the mouth.

CLOSE

Closed implant impression
Production of a crown on implant

Indications & Clinical Applications

1-step dual-arch technique

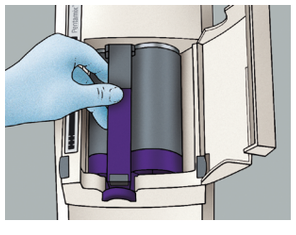
3M™ Impregum™ Penta™ Super Quick Heavy or Medium Body Polyether Impression Material

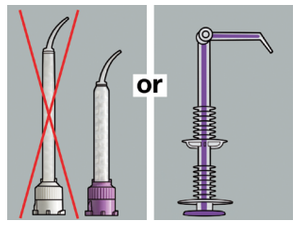
3M™ Impregum™ Super Quick Light Body Polyether Impression Material

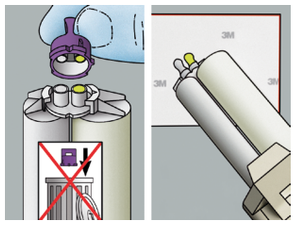
3M™ Intra-oral Syringe Purple

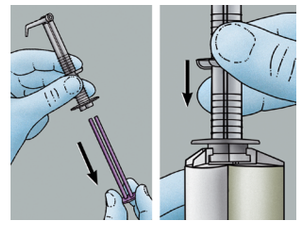
Click on images to enlarge

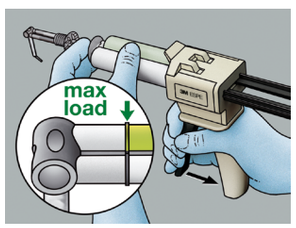
Gallery

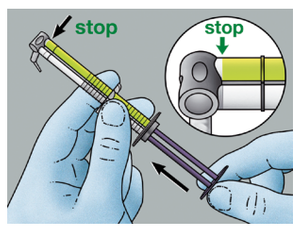


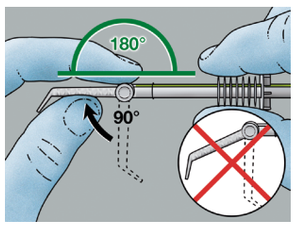


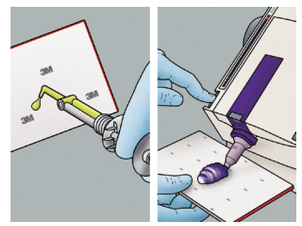


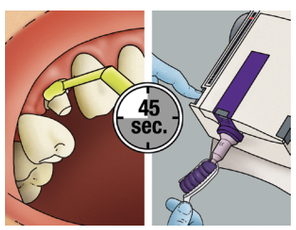


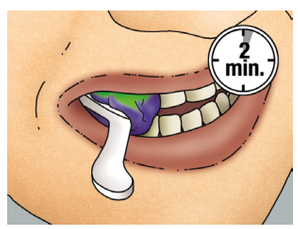


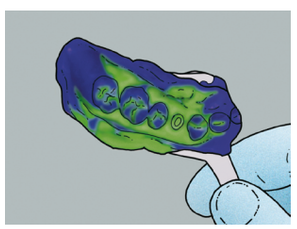












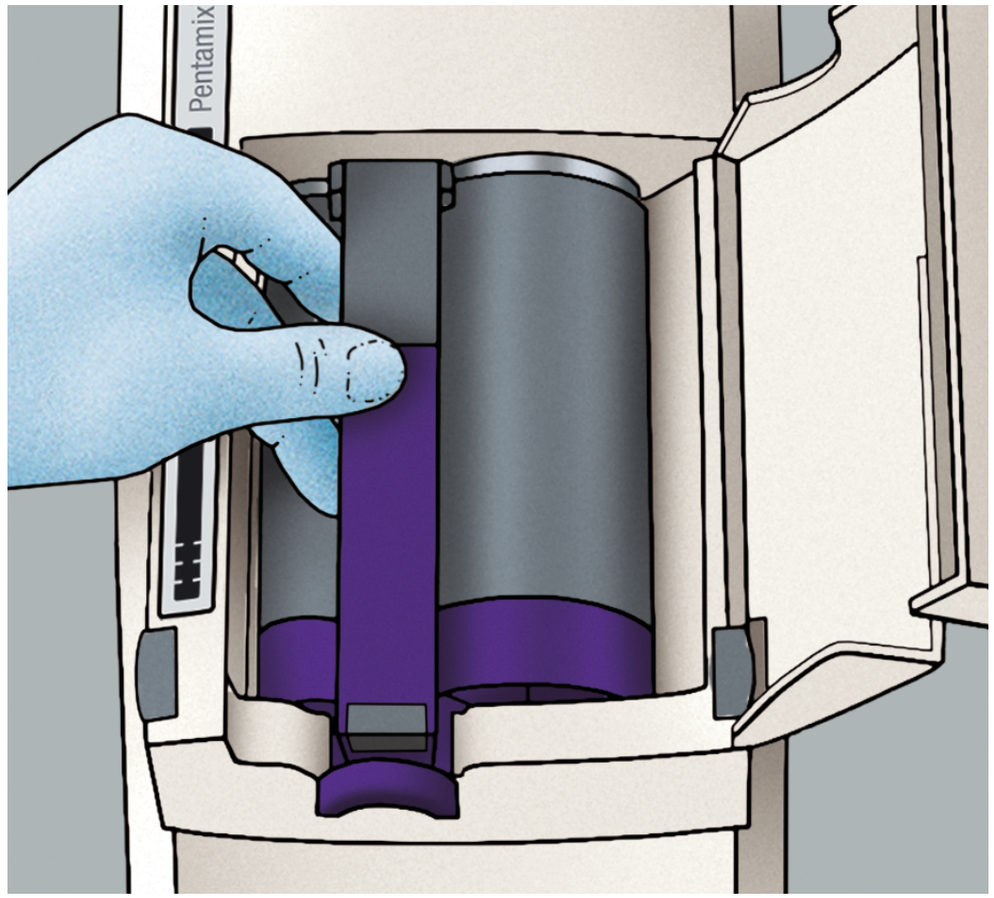
Operatory guides

- Impression tray preparation
- Monophase technique
- 1-step full arch technique
- 1-step dual-arch technique
- Lab handling guidelines for polyether impressions

Case reports

- 1-step heavy/light body impression
  Replacement of a partial crown
- 1-step medium/light body impression
  Replacement of a partial crown
- Dual-arch bite impression
  Replacement of a all-ceramic crown
- Monophase impression
  Replacement of a single-unit crown
- Closed implant impression
  Production of a crown on implant

1-step dual-arch technique



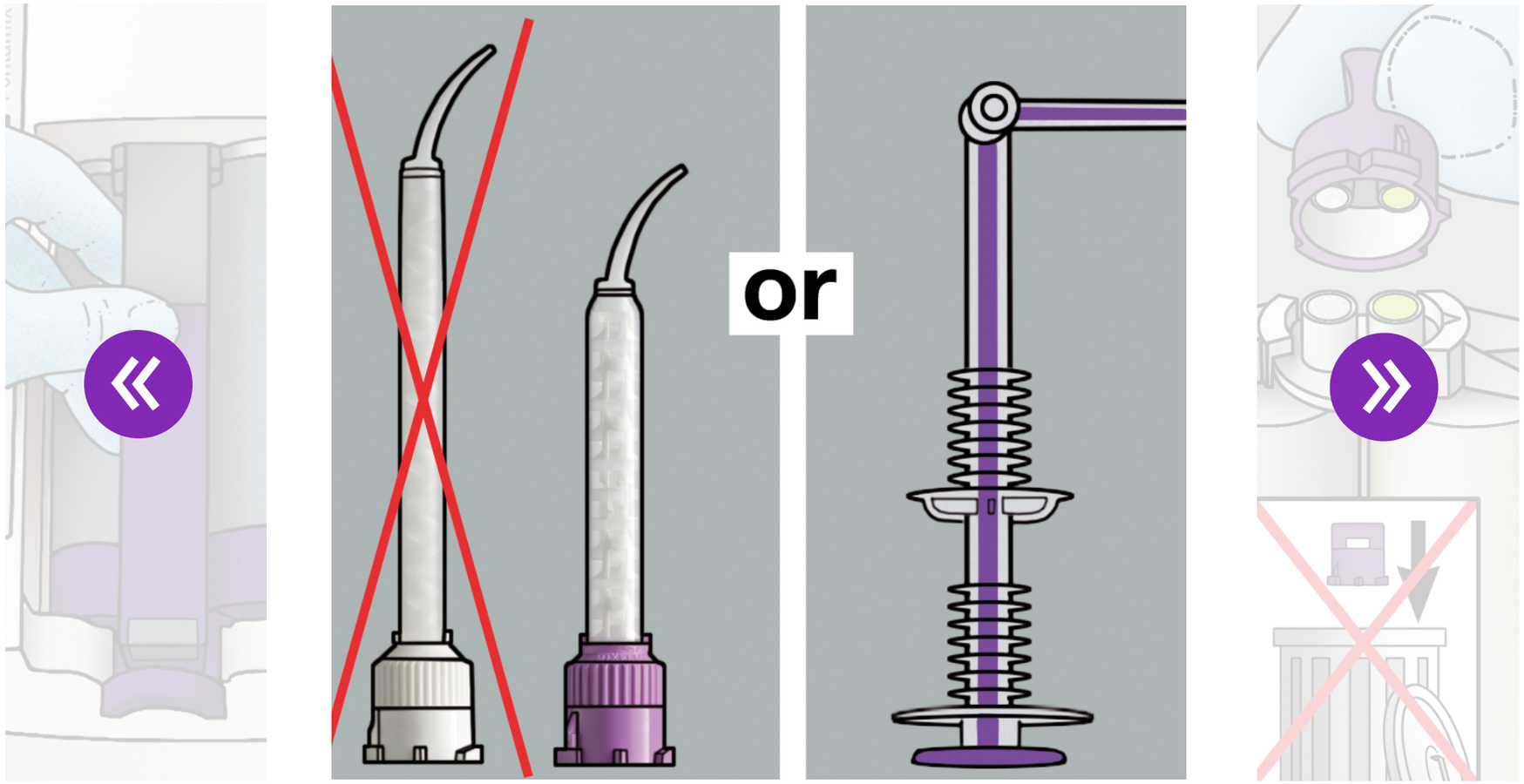
Step 1:
Insert the 3M™ Impregum™ Penta™ Super Quick Heavy or Medium Body Material cartridge into the 3M™ Pentamix™ 3 Automatic Mixing Unit. With the cartridge loaded, you are ready to mix impression material.

CLOSE

Closed implant impression
Production of a crown on implant

1-step dual-arch technique

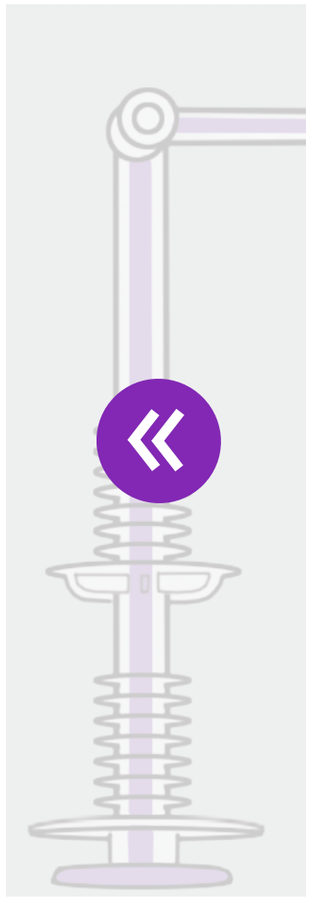
Operatory guides

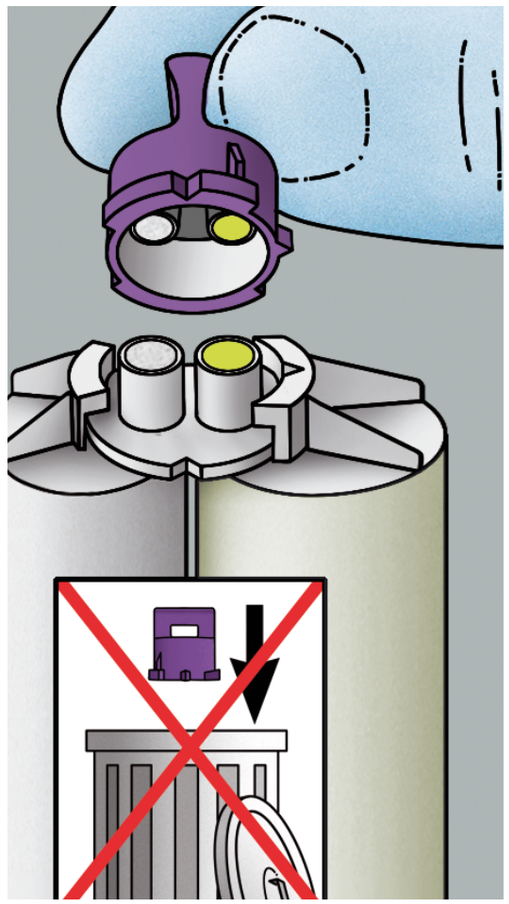


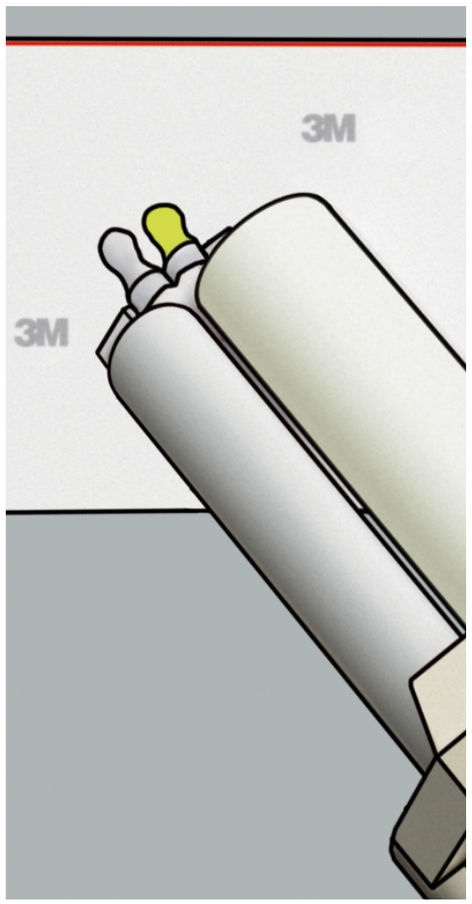
Step 2:
For the 3M™ Impregum™ Super Quick wash material cartridge either use the 3M™ Garant™ Mixing Tip Purple or the 3M™ Intra-oral Syringe Purple.

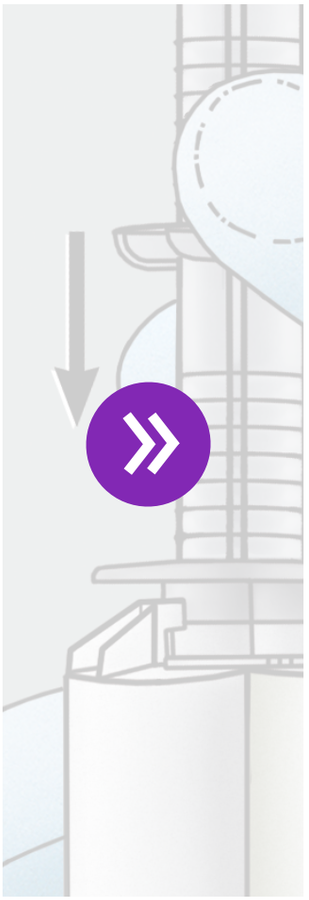
CLOSE

Closed implant impression
Production of a crown on implant









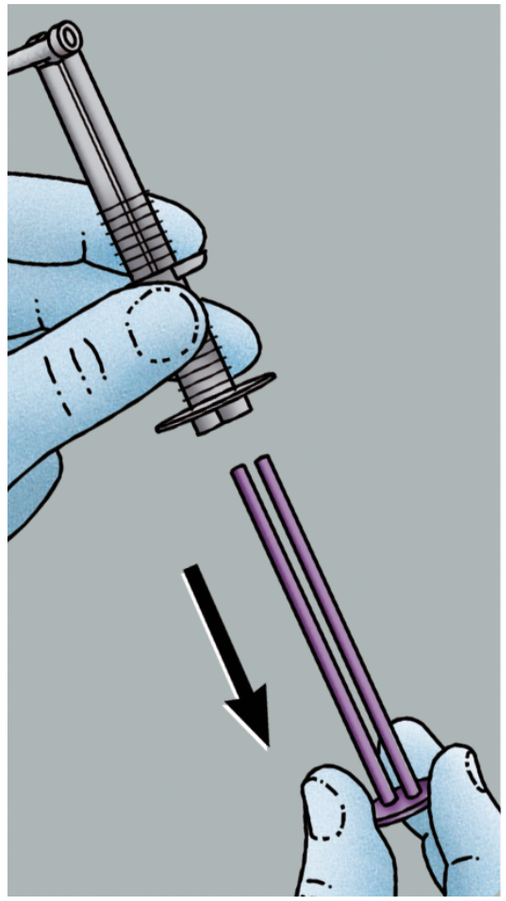
Step 3:
Dispense a small amount from the wash material cartridge on a mixing pad. Retain the cap of the cartridge to close it after usage.

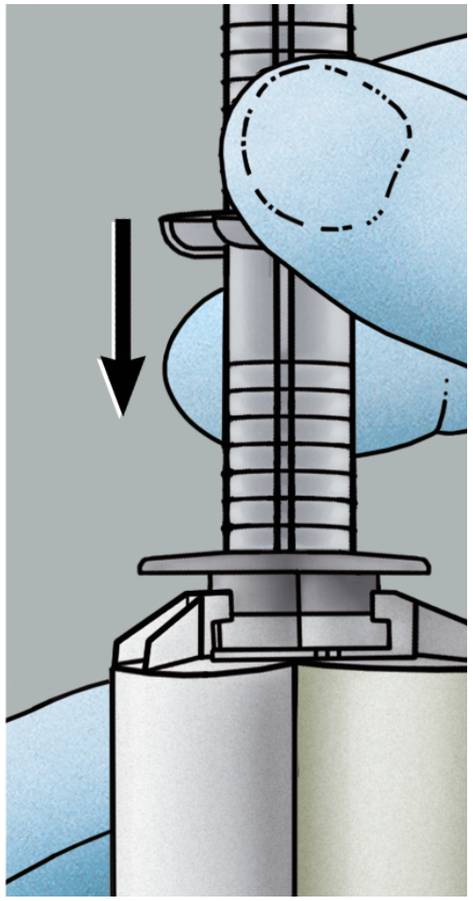
CLOSE

Closed implant impression
Production of a crown on implant

1-step dual-arch technique

Operatory guides

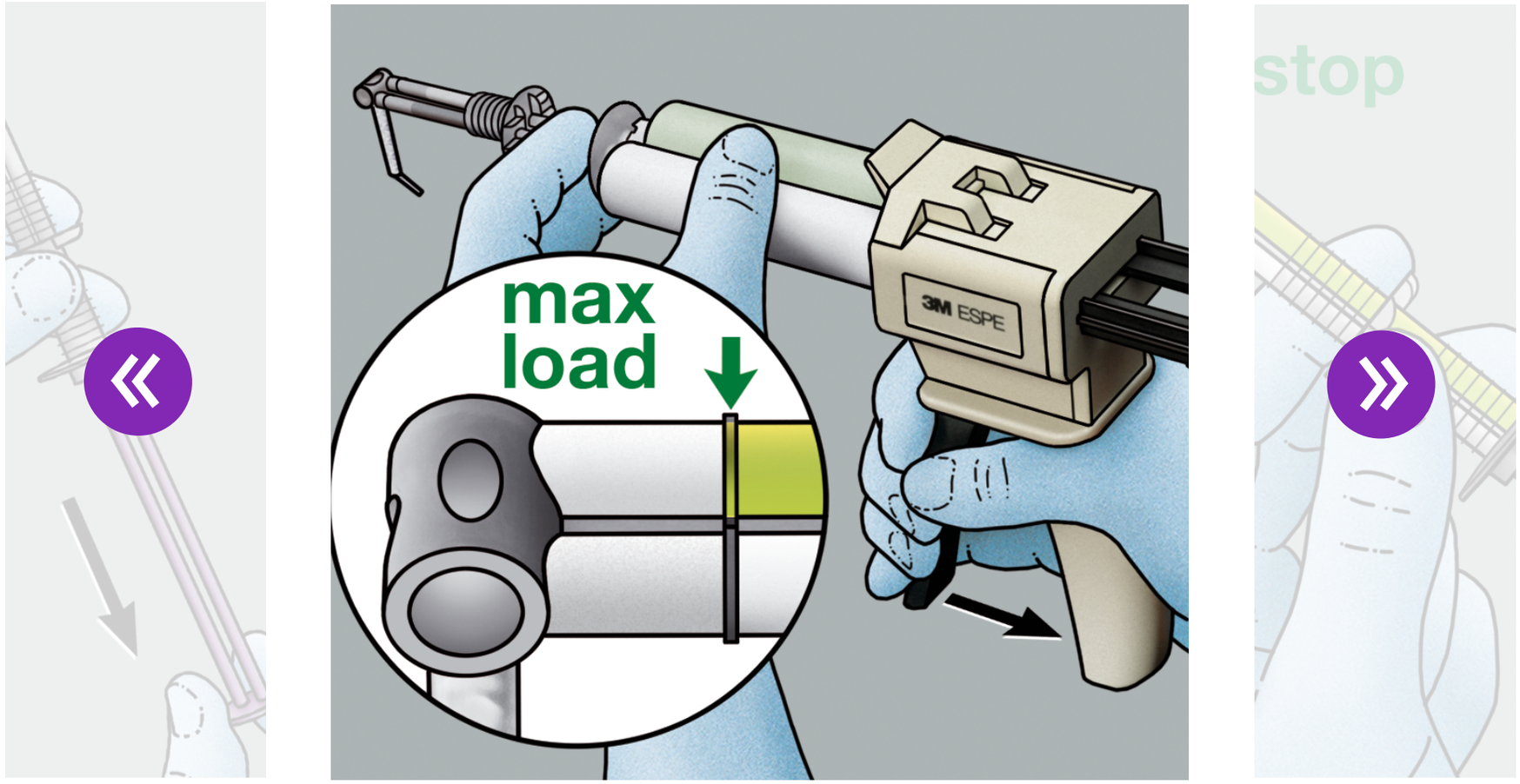




Step 4:
If using the 3M™ Intra-oral Syringe Purple, remove the plunger and place the syringe directly on the wash material cartridge. Pay attention to the index wedge which guides you to the correct position of the syringe on the cartridge.

CLOSE

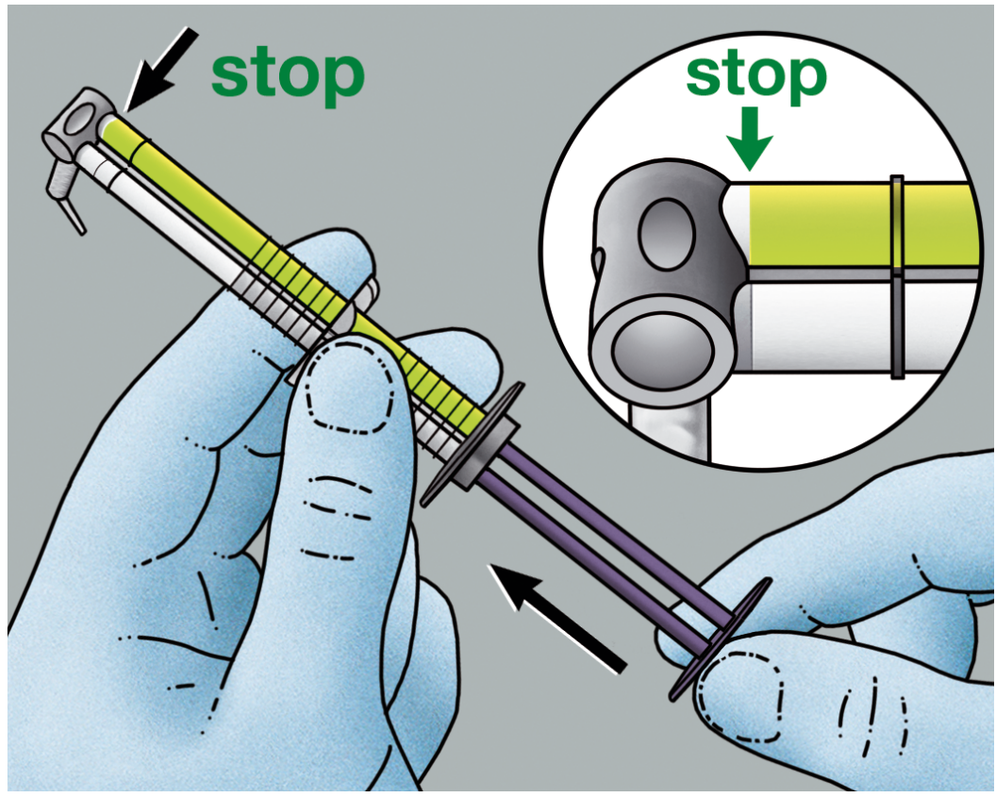
1-step dual-arch technique

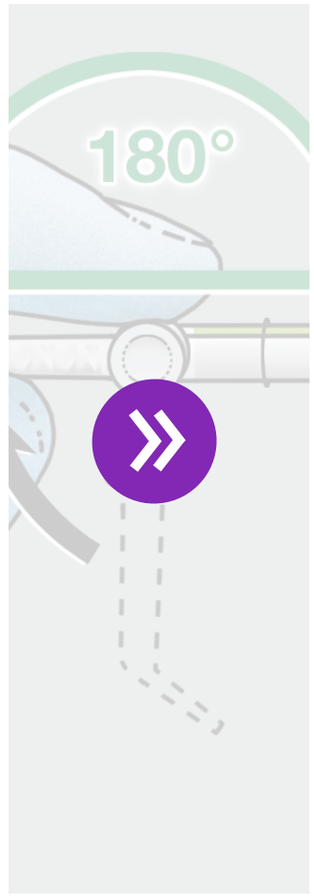


Step 5:
Load the 3M™ Intra-oral Syringe Purple with the required amount of wash material. Do not exceed the marking line (approx. 1 cm below the mixing tip joint). The loaded syringe can be pre-filled and stored up to 12 hours.

CLOSE

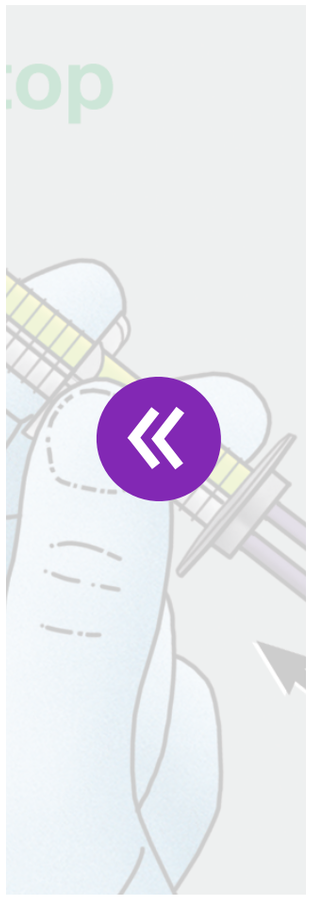
Closed implant impression
Production of a crown on implant

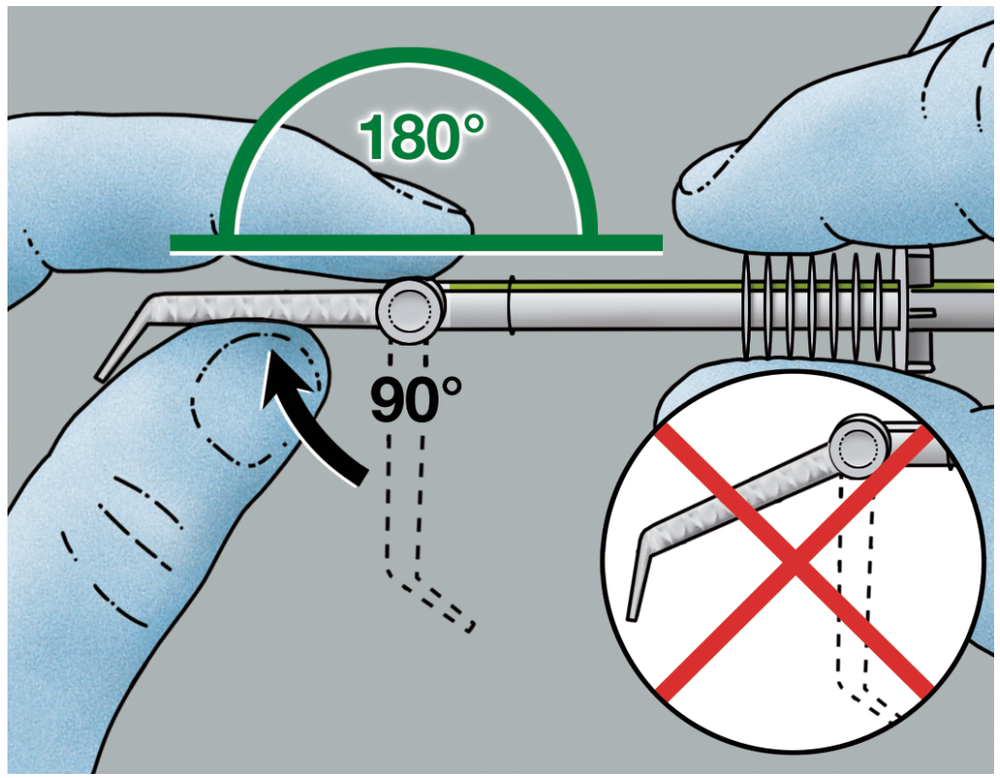


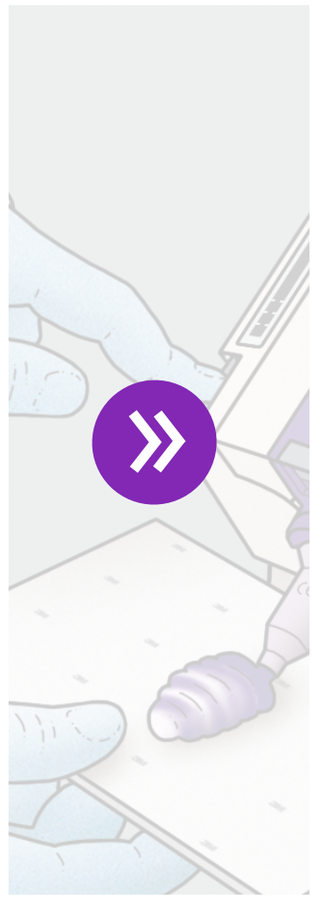


Step 6:
After having removed the 3M™ Intra-oral Syringe Purple from the wash material cartridge, insert the plunger and start pushing the paste no further than to the joint of the mixing tip.

CLOSE



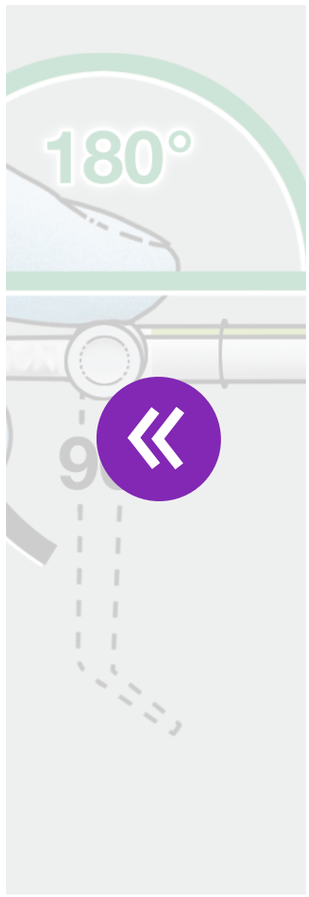


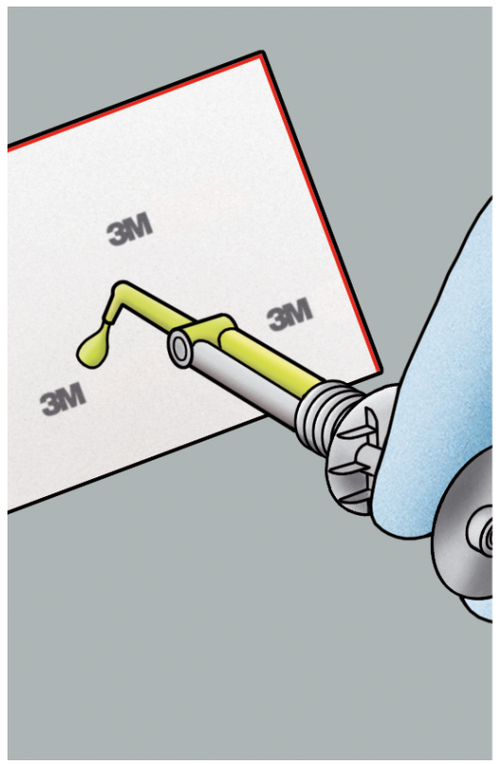


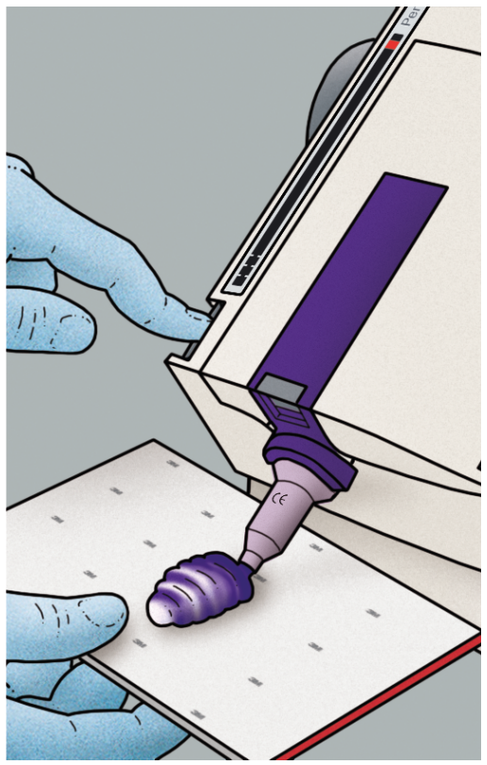
Step 7:
Immediately before wash material application, activate the 3M™ Intra-oral Syringe Purple by bringing the mixing tip into the 180° straight position.

1-step dual-arch technique

Operatory guides





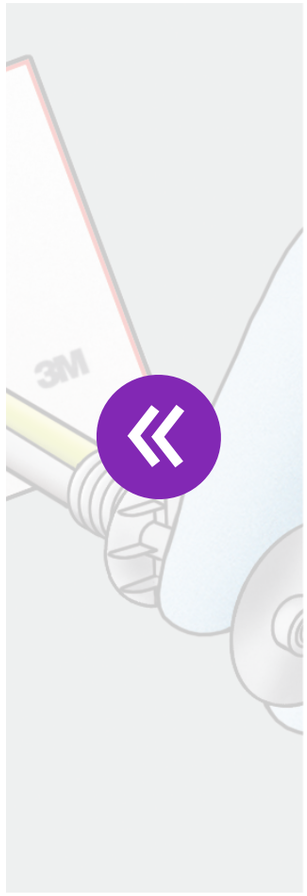


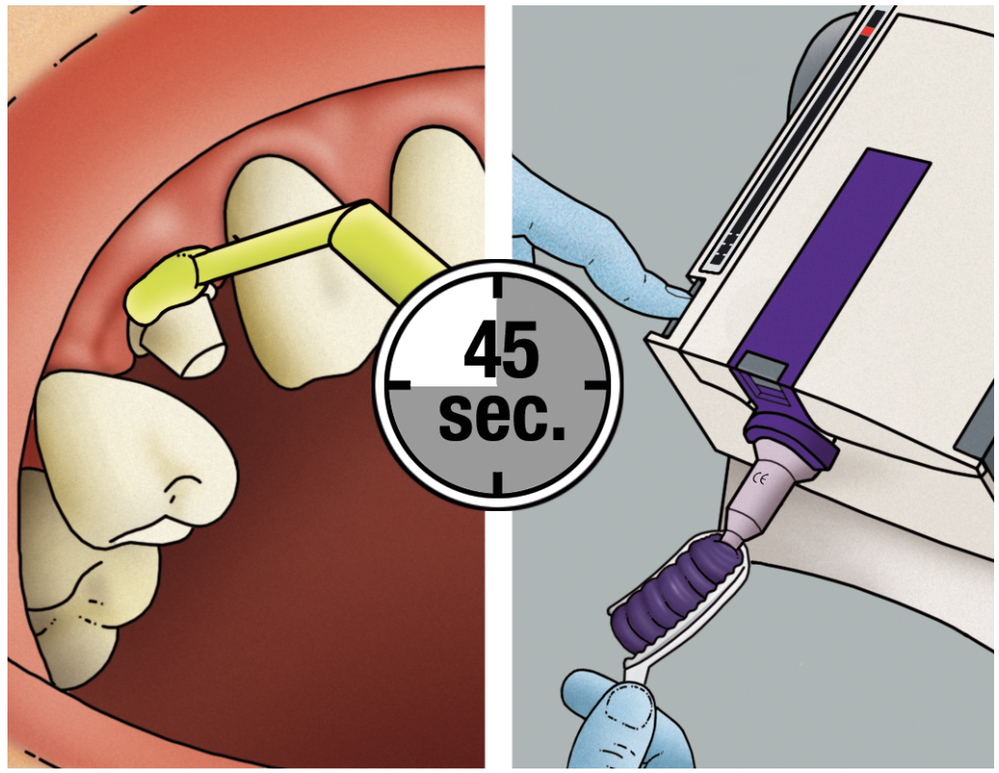
Step 8:
Dispense a small amount of impression material from both the 3M™ Intra-oral Syringe Purple and the 3M™ Pentamix™ 3 Automatic Mixing Unit on a mixing pad to ensure a homogeneous mix.

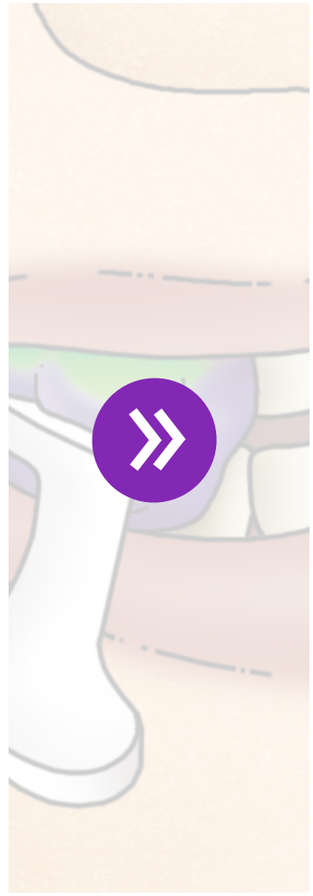
CLOSE

1-step dual-arch technique

Operatory guides





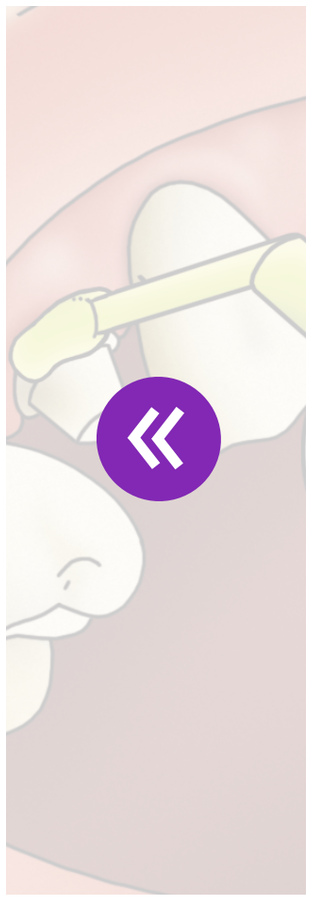


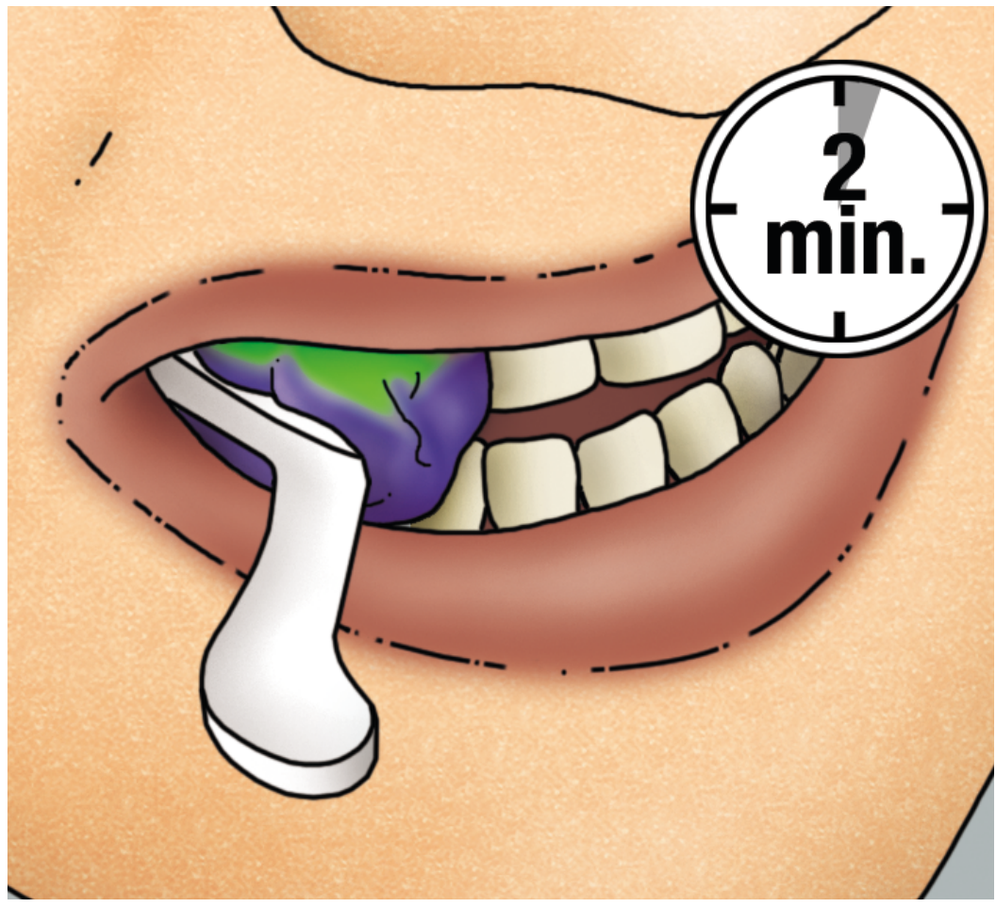
Step 9:
Fill both sides of the tray completely while keeping the mixing tip immersed in the material. Syringe the preparation simultaneously.
Working time of both 3M™ Impregum™ Super Quick tray and wash material: 45 sec.

CLOSE

1-step dual-arch technique

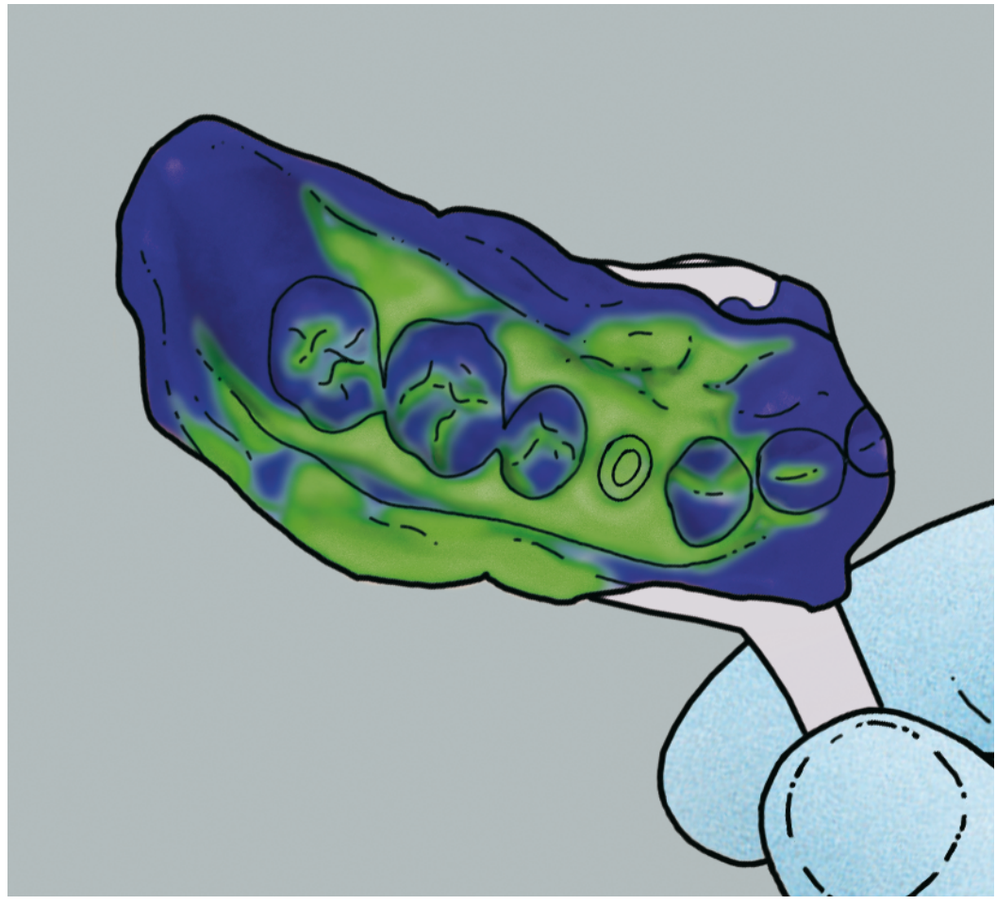
Operatory guides





Step 10:
Place the filled tray into the mouth.
Intra-oral setting time of 3M™ Impregum™ Super Quick Material: 2 min.

CLOSE



Step 11:
After 2 min. the impression can be removed from the mouth.

CLOSE

Indications & Clinical Applications

Lab handling guidelines for polyether impressions

Indications & Clinical Applications

Lab handling guidelines for polyether impressions

Operatory guides

Impress

Monopl

1-step f

1-step c

Lab har
polyeth

Case re

1-step h
Replace

1-step medium/light body impression
Replacement of a partial crown

Dual-arch bite impression
Replacement of a all-ceramic crown

Monophase impression
Replacement of a single-unit crown

Closed implant impression
Production of a crown on implant

Lab handling guidelines for polyether impressions

Control

Please inspect the surface quality of the impressions arriving in the lab, (no mushy, melted surfaces). Surfaces should appear detailed and crisp.

CLOSE

Indications & Clinical Applications

Lab handling guidelines for polyether impressions

Operatory guides

Impress
Monopl
1-step f
1-step c
Lab har
polyeth

Case re
1-step h
Replace
1-step n
Replacement of a partial crown
Dual-arch bite impression
Replacement of a all-ceramic crown
Monophase impression
Replacement of a single-unit crown
Closed implant impression
Production of a crown on implant

Lab handling guidelines for polyether impressions

Disinfection

Commercial water-based disinfectants indicated for dental impression materials can be used. Glutaraldehyde solutions are recommended for disinfection. Follow the manufacturer's instructions for use, time, and level of disinfection required. After disinfection, rinse impression well with water and blow dry. The impression should be kept dry when sent to the laboratory. Any temperatures exceeding 60°C/140°F will damage polyether impressions.

CLOSE

Indications & Clinical Applications

Lab handling guidelines for polyether impressions

Operatory guides

Impress
Monop
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Case re
1-step h
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1-step medium/light body impression
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Monophase impression
Replacement of a single-unit crown

Closed implant impression
Production of a crown on implant

Lab handling guidelines for polyether impressions
Pouring the cast

Surfactants (de-bubblizers) are not needed or recommended. Type 3 stone, type 4 or 5 die stone can be used to pour polyether impressions. When pouring polyether impressions with epoxy, or any urethane resin based materials, a separator must be used to prevent adhesion of the materials.

CLOSE

Indications & Clinical Applications

Lab handling guidelines for polyether impressions

Operatory guides

Impress

Monopl

1-step f

1-step c

Lab har
polyeth

Case re

1-step h
Replace

1-step n
Replace

Dual-arch bite impression
Replacement of a all-ceramic crown

Monophase impression
Replacement of a single-unit crown

Closed implant impression
Production of a crown on implant

Lab handling guidelines for polyether impressions

Improved removal

Heating the impression to approx. 40°C/104°F after the cast has set will help in the removal of the cast. Block out or minimize undercuts if information is not needed. Isolating or blocking out the palatal area will help in removal of the model on a maxillary impression with a deep vault. Custom trays are not required during conventional crown and bridge procedures. If you choose to use custom trays, make sure that you have 2 - 3 mm material thickness per 1 mm of undercut. You may section or cut the custom tray if it is “locked-on“ the model. Immersing the impression in hot water will soften the adhesive and allow for separation without damage.

CLOSE

Indications & Clinical Applications

Lab handling guidelines for

Operat
Impress
Monopl
1-step f
1-step c
Lab har
polyeth

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1-step h
Replace
1-step n
Replace
Dual-ar
Replacement of a all-ceramic crown
Monophase impression
Replacement of a single-unit crown
Closed implant impression
Production of a crown on implant

Lab handling guidelines for polyether impressions

Implant impressions

Choosing the gingival mask material in combination with the proper separating material is important:

a) 3M polyethers (Impregum™, Permadyne™ brands) can be used with common separators based on silicone, wax, or petrolatum (vaseline).
b) C-silicones (GI-MASK®, Coltène®) can be used without a separator.
c) Use caution with A-silicones (VPS), they can be used only with a separator that forms a sealed solid waxy layer (Sherasepal-U®, Shera®).

Separating materials can be applied with a brush.

CLOSE

Indications & Clinical Applications

Lab handling guidelines for polyether impressions

Operatory guides

Impress

Monopl

1-step f

1-step c

Lab har
polyeth

Case re

1-step h
Replace

1-step m
Replacement of a partial crown

Dual-arch bite impression
Replacement of a all-ceramic crown

Monophase impression
Replacement of a single-unit crown

Closed implant impression
Production of a crown on implant

Lab handling guidelines for polyether impressions

Storage

Do not store polyether impressions in sealed plastic bags while still moist. Avoid direct sunlight exposure. Store impressions dry and below 30 °C/86 °F in the dark.
Polyether impressions can be poured anytime within 14 days after they have been made if stored properly.

CLOSE

Indications & Clinical Applications

Lab handling guidelines for polyether impressions

Operatory guides

Impression tray preparation

Monop

1-step f

1-step c

Lab har
polyeth

Case re

1-step h
Replace

1-step medium/light body impression
Replacement of a partial crown

Dual-arch bite impression
Replacement of a all-ceramic crown

Monophase impression
Replacement of a single-unit crown

Closed implant impression
Production of a crown on implant

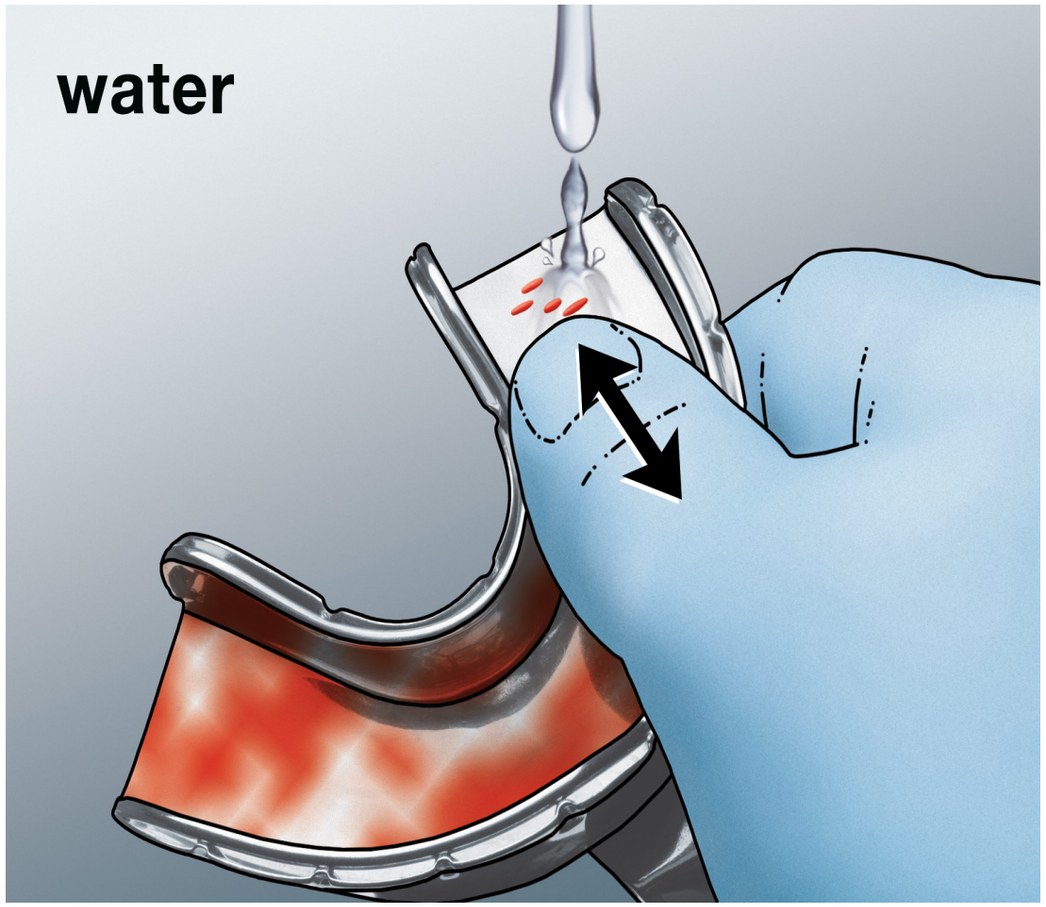
Lab handling guidelines for polyether impressions

Plating

Polyether impressions can be silver-plated, but cannot be copper-plated.

CLOSE

The adhesive layer can be removed from the metal tray with a finger. Peeling under water allows for a fast and easy removal. Alternatively, commercially available agents for cleaning impression trays (e.g. Pluraclean Orange (Pluradent) or Solitine (Kerr)) may be used.



Indications & Clinical Applications

Operatory guides

Impression tray preparation

Monophase technique

1-step full arch technique

1-step dual-arch technique

Lab handling guidelines for polyether impressions

Case reports

1-step heavy/light body impression
Replacement of a partial crown

1-step medium/light body impression
Replacement of a partial crown

Dual-arch bite impression
Replacement of a all-ceramic crown

Monophase impression
Replacement of a single-unit crown

Closed implant impression
Production of a crown on implant

Replacement of a partial crown

1-step impression technique using 3M™ Impregum™ Super Quick Polyether Impression Material (Heavy Body/Light Body)

Clinical dentistry and photography by: Dr. Gunnar Reich, Munich, Germany
Lab work by: MDT Nicole Freund, Tutzing, Germany

About the case:
Patient needed a replacement for an insufficient and perforated partial crown on first lower molar #46. Impression was made with 3M™ Impregum™ Penta™ Super Quick Heavy Body and 3M™ Impregum™ Super Quick Light Body Polyether Impression Material in the 1-step technique.

Click on images to enlarge

Gallery






Indi
Operat
Impress
Monop
1-step f
1-step c
Lab har
polyeth
Case re
1-step h
Replace
1-step n
Replace
Dual-ar
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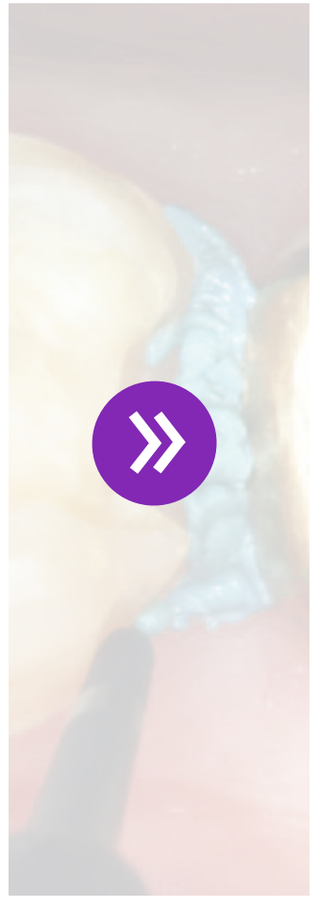
Replace
Closed implant impression
Production of a crown on implant

1-step heavy/light body impression

Replacement of a partial crown

Case reports



Initial situation: Insufficient and perforated gold alloy partial cast crown on first lower molar #46.

CLOSE

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1-step heavy/light body impression

Replacement of a partial crown

Case reports

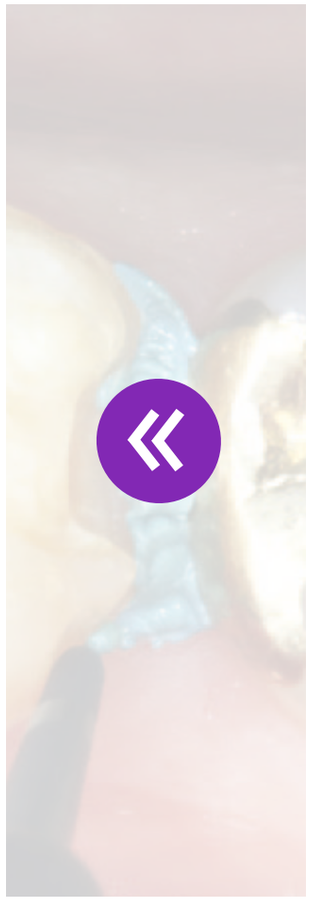
Tooth after minimal preparation with persistent discolored dentin; distal moisture control of subgingival margin achieved by 3M™ Astringent Retraction Paste.

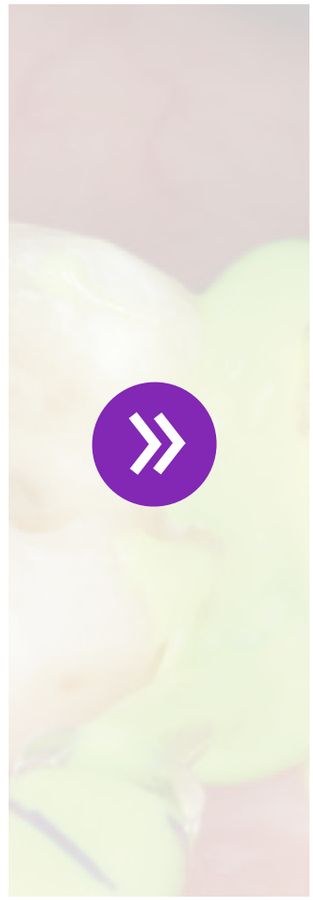
CLOSE

1-step heavy/light body impression

Replacement of a partial crown

Case reports





Situation prior to impression taking with clean and dry operative field.

CLOSE

1-step heavy/light body impression

Replacement of a partial crown

Case reports

Application of 3M™ Impregum™ Super Quick Light Body Polyether Impression Material using 3M™ Intra-oral Syringe Purple enabling easy interproximal access and void-free application of the wash material.

CLOSE

1-step heavy/light body impression

Replacement of a partial crown

Case reports

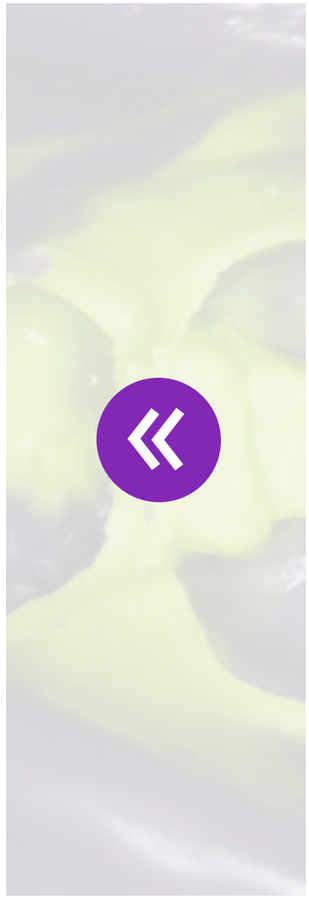
Detailed view of final impression showing superior detail reproduction of 3M™ Impregum™ Super Quick Polyether Impression Material. The color contrast ensures easy readability.

CLOSE

1-step heavy/light body impression

Replacement of a partial crown

Case reports



Final all-ceramic partial crown cemented with 3M™ RelyX™ Unicem 2 Self-Adhesive Universal Resin Cement.

CLOSE

Indications & Clinical Applications

Operatory guides

Impression tray preparation
Monophase technique
1-step full arch technique
1-step dual-arch technique
Lab handling guidelines for polyether impressions

Case reports

1-step heavy/light body impression
Replacement of a partial crown
1-step medium/light body impression
Replacement of a partial crown
Dual-arch bite impression
Replacement of a all-ceramic crown
Monophase impression
Replacement of a single-unit crown
Closed implant impression
Production of a crown on implant

Replacement of a partial crown

1-step impression technique using 3M™ Impregum™ Super Quick Polyether Impression Material

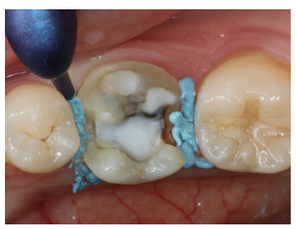
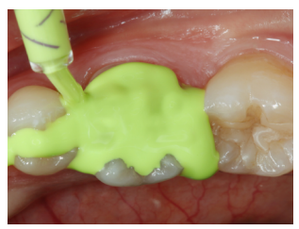
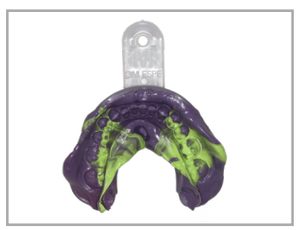
Clinical dentistry and photography by: Dr. Gunnar Reich, Munich, Germany
Lab work by: MDT Nicole Freund, Tutzing, Germany

About the case:
Patient with an insufficient partial crown on first lower molar #36: Impression made with 3M™ Impregum™ Penta™ Super Quick Medium Body and 3M™ Impregum™ Super Quick Light Body Polyether Impression Material in the 1-step impression technique.

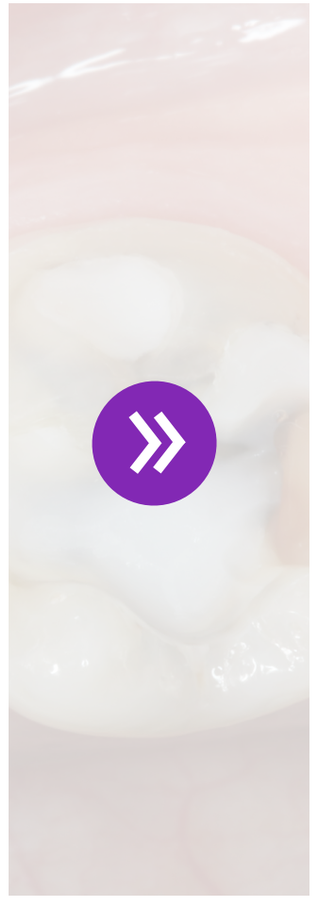
Click on images to enlarge

Gallery




1-step impression technique
Replacement of a partial crown
Case reports



Initial situation: Insufficient and perforated gold alloy partial cast crown on first lower molar #36.

CLOSE

1-step impression technique

Replacement of a partial crown

Case reports

Preparation with a partially subgingival preparation line.

CLOSE

Closed implant impression
Production of a crown on implant

1-step impression technique

Replacement of a partial crown

Case reports

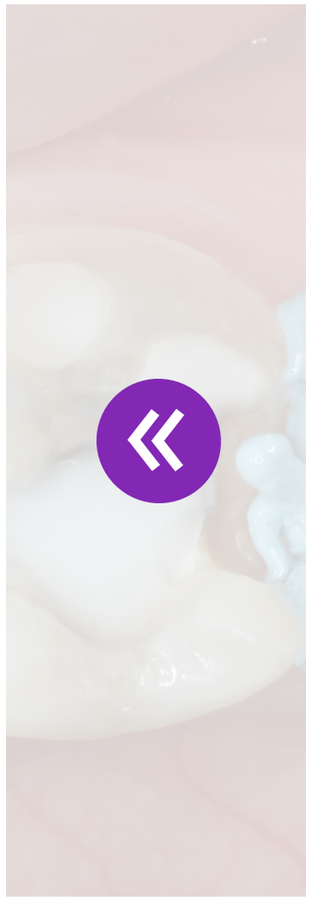
Interproximal moisture control of subgingival margin by using 3M™ Astringent Retraction Paste.

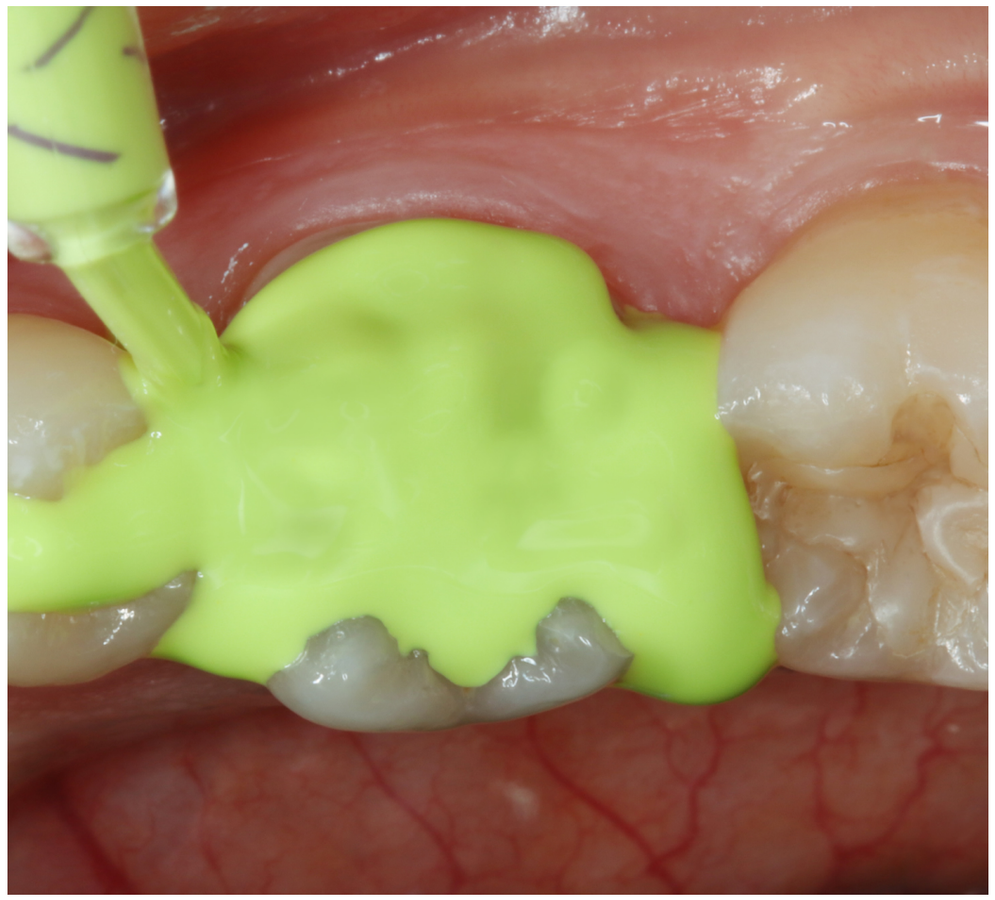
CLOSE

1-step impression technique

Replacement of a partial crown

Case reports





Impression was made using the 1-step technique: 3M™ Impregum™ Super Quick Light Body Polyether Impression Material was applied using 3M™ Intra-oral Syringe Purple enabling easy interproximal access and void-free application of the wash material.

CLOSE

1-step impression technique

Replacement of a partial crown

Case reports

Final 3M™ Impregum™ Super Quick Material impression made with a 3M™ Impression Tray. Due to its self-retentive fleece strip a separate tray adhesive is not required.

CLOSE

1-step impression technique

Replacement of a partial crown

Case reports

Final glass ceramic restoration cemented with 3M™ RelyX™ Unicem 2 Self-Adhesive Resin Cement.

CLOSE

Indications & Clinical Applications

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Impression tray preparation
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Case reports

1-step heavy/light body impression
Replacement of a partial crown

1-step medium/light body impression
Replacement of a partial crown

Dual-arch bite impression
Replacement of an all-ceramic crown

Monophase impression
Replacement of a single-unit crown

Closed implant impression
Production of a crown on implant

Replacement of an all-ceramic crown

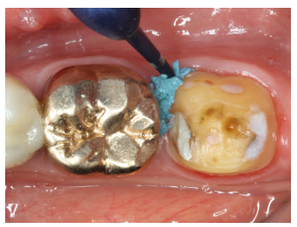
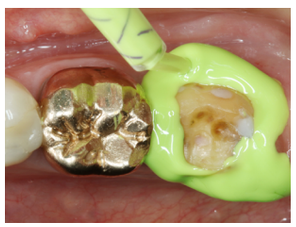
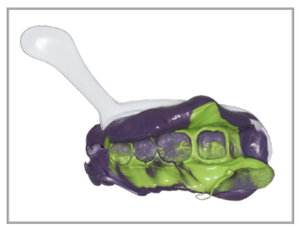
Dual-arch bite impression technique using 3M™ Impregum™ Super Quick Polyether Impression Material

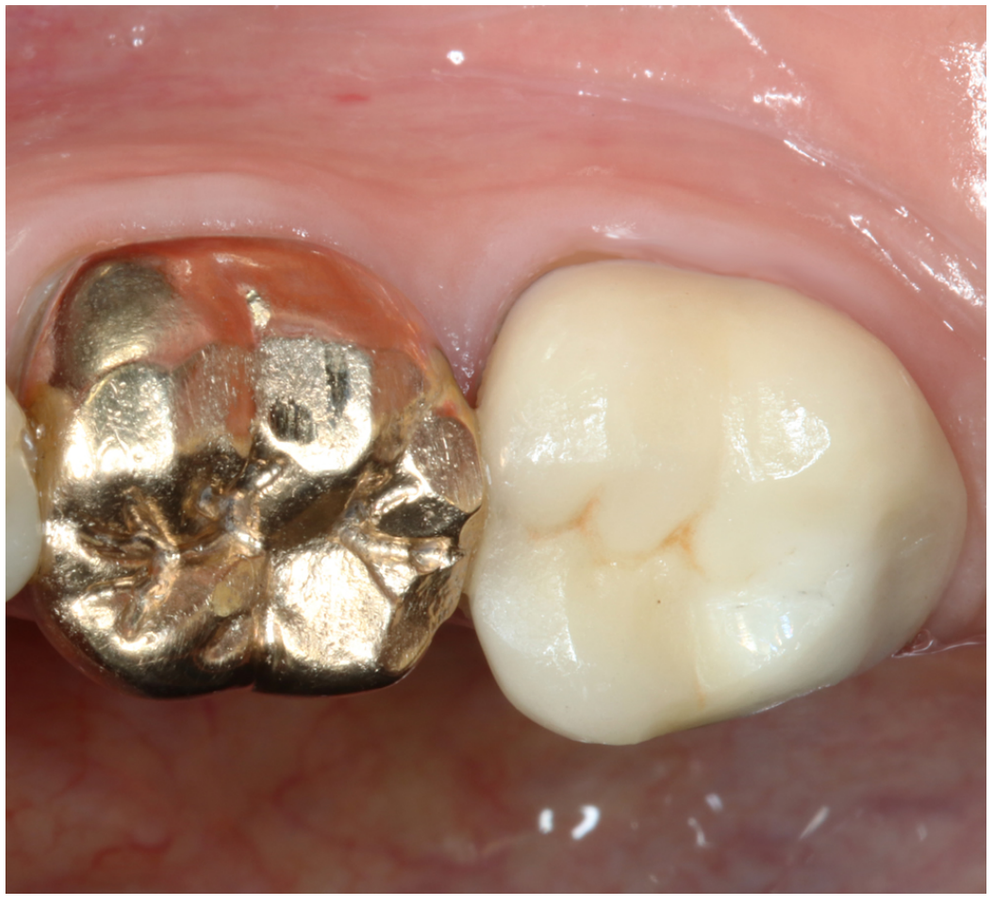
Clinical dentistry and photography by: Dr. Gunnar Reich, Munich, Germany
Lab work by: MDT Nicole Freund, Tutzing, Germany

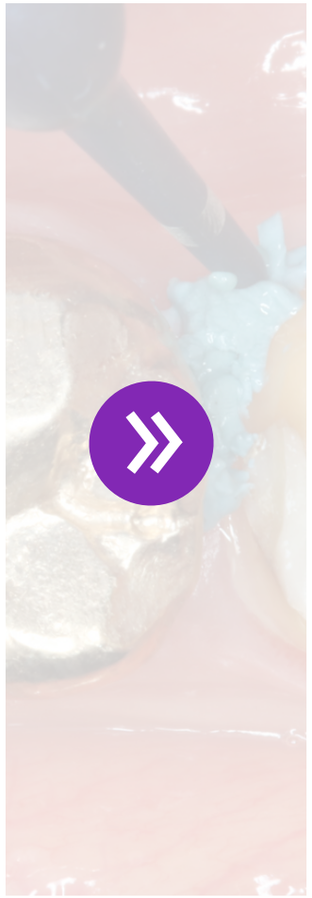
About the case:
Patient with a chipped all-ceramic crown on second molar: Impression made with 3M™ Impregum™ Super Quick Polyether Impression Material (Medium and Light Body) using the dual-arch bite impression technique.

Click on images to enlarge

Gallery



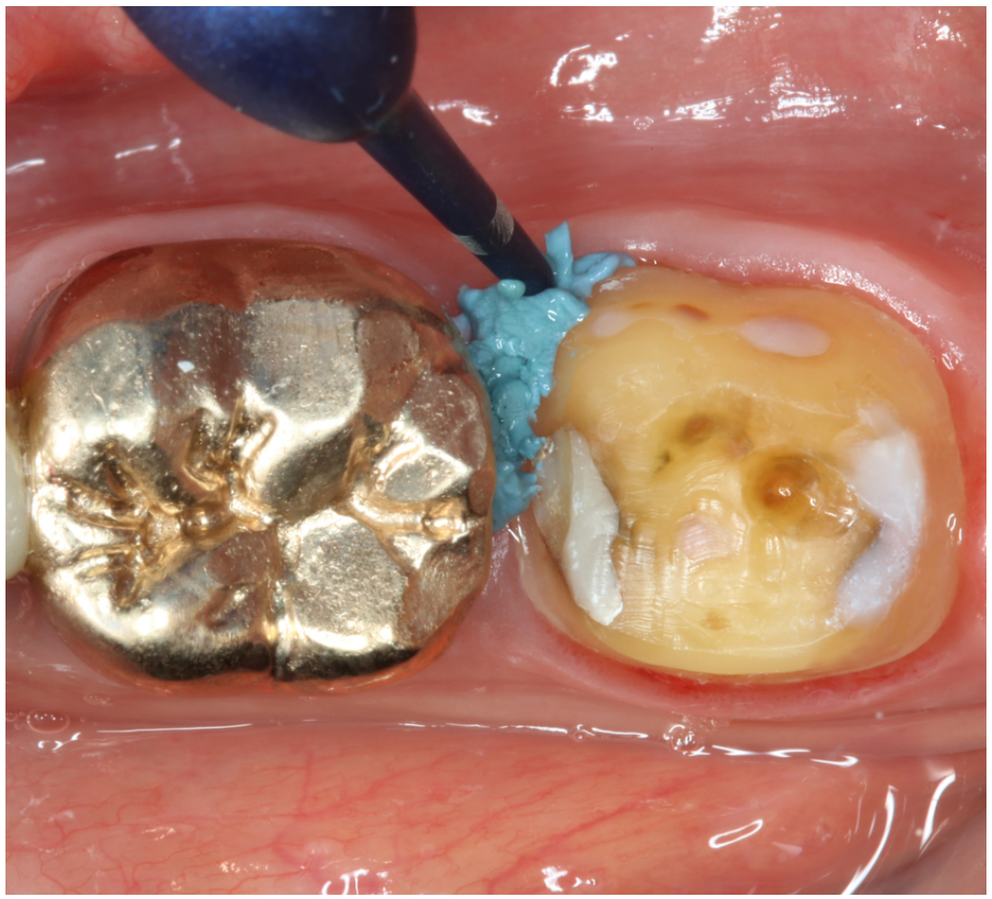
Initial situation: Patient arrived with a largely chipped veneered zirconia crown on second lower molar.

CLOSE

Dual-arch bite impression technique

Replacement of an all-ceramic crown

Case reports



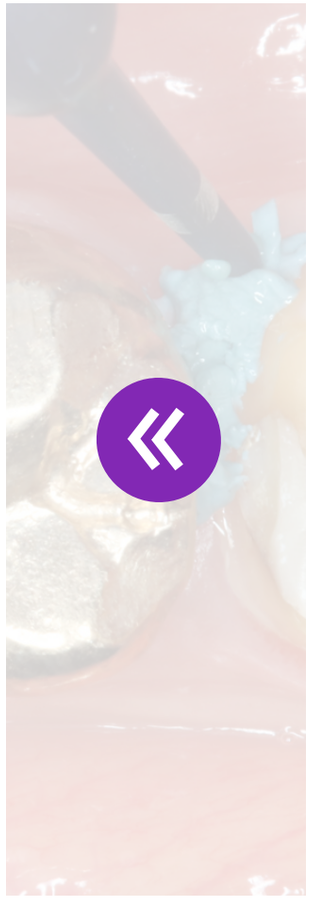
3M™ Astringent Retraction Paste was used for moisture management and slight displacement of gingiva.

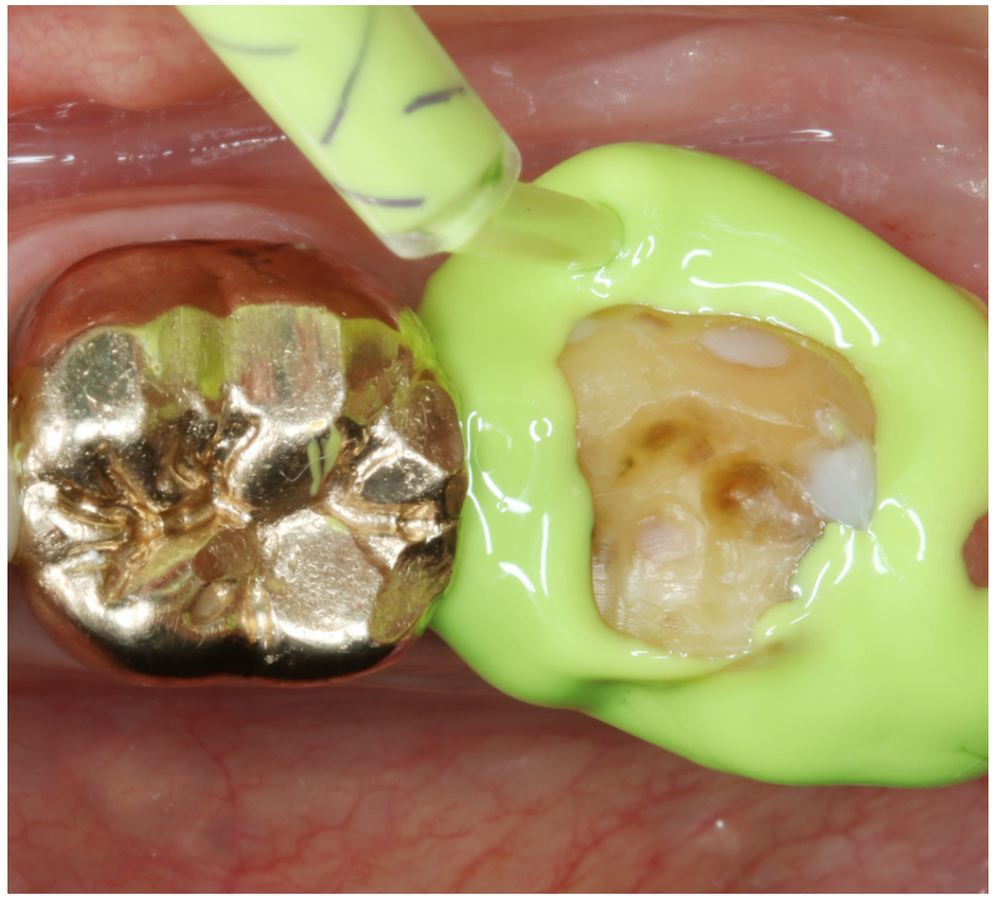
CLOSE

Dual-arch bite impression technique

Replacement of an all-ceramic crown

Case reports





For single-unit indications, the dual-arch bite impression technique is a viable alternative to full arch impressions. 3M™ Impregum™ Super Quick Light Body Polyether Impression Material was applied using 3M™ Intra-oral Syringe Purple.

CLOSE

Closed implant impression
Production of a crown on implant

Dual-arch bite impression technique

Replacement of an all-ceramic crown

Case reports

In parallel, the tray was loaded with 3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material. The impression was done in the dual-arch bite (closed mouth) impression technique.

CLOSE

Dual-arch bite impression technique

Replacement of an all-ceramic crown

Case reports

Final situation: Precisely fitting monolithic 3M™ Lava™ Esthetic Fluorescent Full-Contour Zirconia restoration in situ. The crown was cemented with 3M™ RelyX™ Unicem 2 Self-Adhesive Resin Cement.

CLOSE

Indications & Clinical Applications

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Impression tray preparation
Monophase technique
1-step full arch technique
1-step dual-arch technique
Lab handling guidelines for polyether impressions

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1-step heavy/light body impression
Replacement of a partial crown
1-step medium/light body impression
Replacement of a partial crown
Dual-arch bite impression
Replacement of a all-ceramic crown
Monophase impression
Replacement of a single-unit crown
Closed implant impression
Production of a crown on implant

Replacement of a single-unit molar crown

Monophase impression using 3M™ Impregum™ Penta™ Super Quick Polyether Impression Material

Clinical dentistry and photography by: Dr. Gunnar Reich, Munich, Germany
Lab work by: MDT Nicole Freund, Tutzing, Germany

About the case:
Patient with a fractured crown on second upper molar that needed replacement. Impression was made with 3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material in the monophase technique.

Click on images to enlarge

Gallery

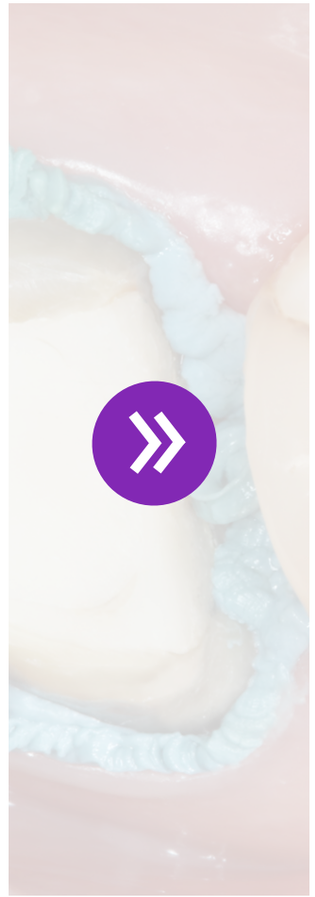




Monophase impression

Replacement of a single-unit molar crown

Case reports



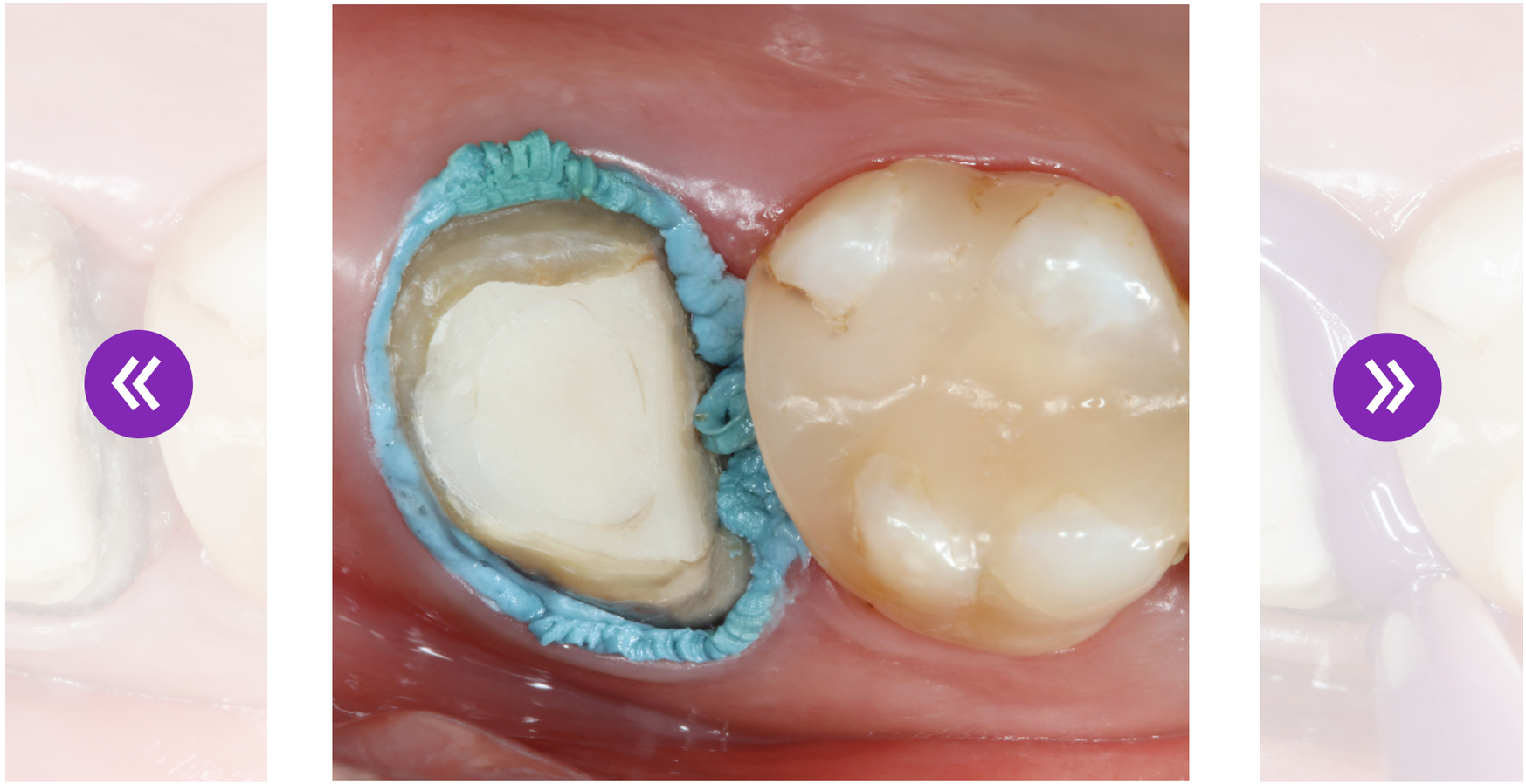
Initial situation: Second upper molar needs a crown after endodontic treatment. Insufficient filling on adjacent tooth needs to be renewed.

CLOSE

Monophase impression

Replacement of a single-unit molar crown

Case reports



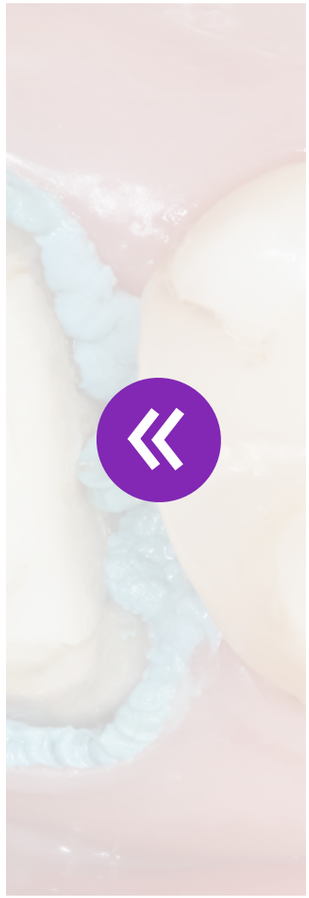
In order to prepare the situation for impression taking, 3M™ Astringent Retraction Paste was used for moisture management.

CLOSE

Monophase impression

Replacement of a single-unit molar crown

Case reports



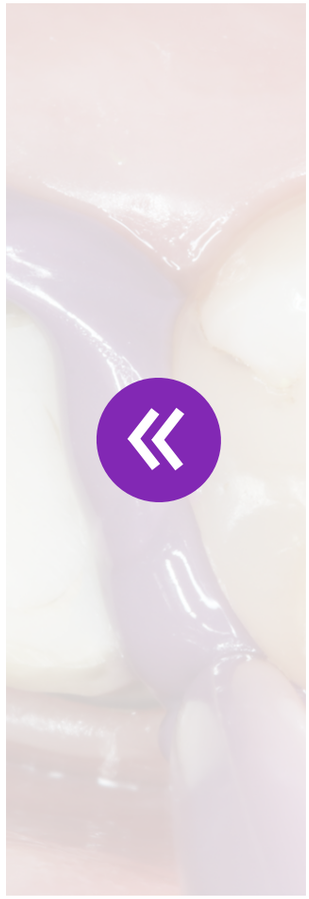
Impression was taken in the monophase technique using 3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material. Syringing of the impression material around preparation with the 3M™ Penta™ Elastomer Syringe while the tray was filled simultaneously.

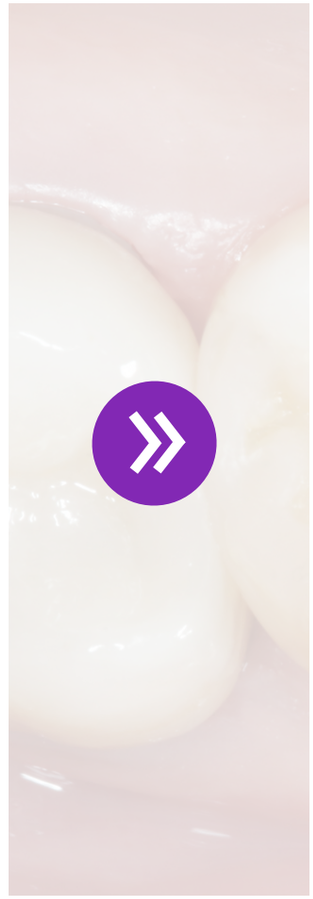
CLOSE

Monophase impression

Replacement of a single-unit molar crown

Case reports





Final impression made with a single-use 3M™ Impression Tray. Due to its self-retentive fleece strip a separate tray adhesive is not required. The impression shows crisp details and a clear circumferential mapping of the preparation line.

CLOSE

Monophase impression

Replacement of a single-unit molar crown

Case reports

Final situation: Monolithic 3M™ Lava™ Esthetic Fluorescent Full-Contour Zirconia crown on the second molar and a renewed filling on the first molar.

CLOSE

Indications & Clinical Applications

Production of a crown on implant

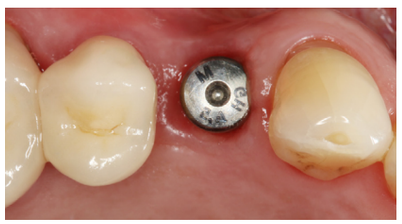
Closed implant impression technique using 3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material

Clinical dentistry and photography by: Dr. Gunnar Reich, Munich, Germany
Lab work by: MDT Nicole Freund, Tutzing, Germany

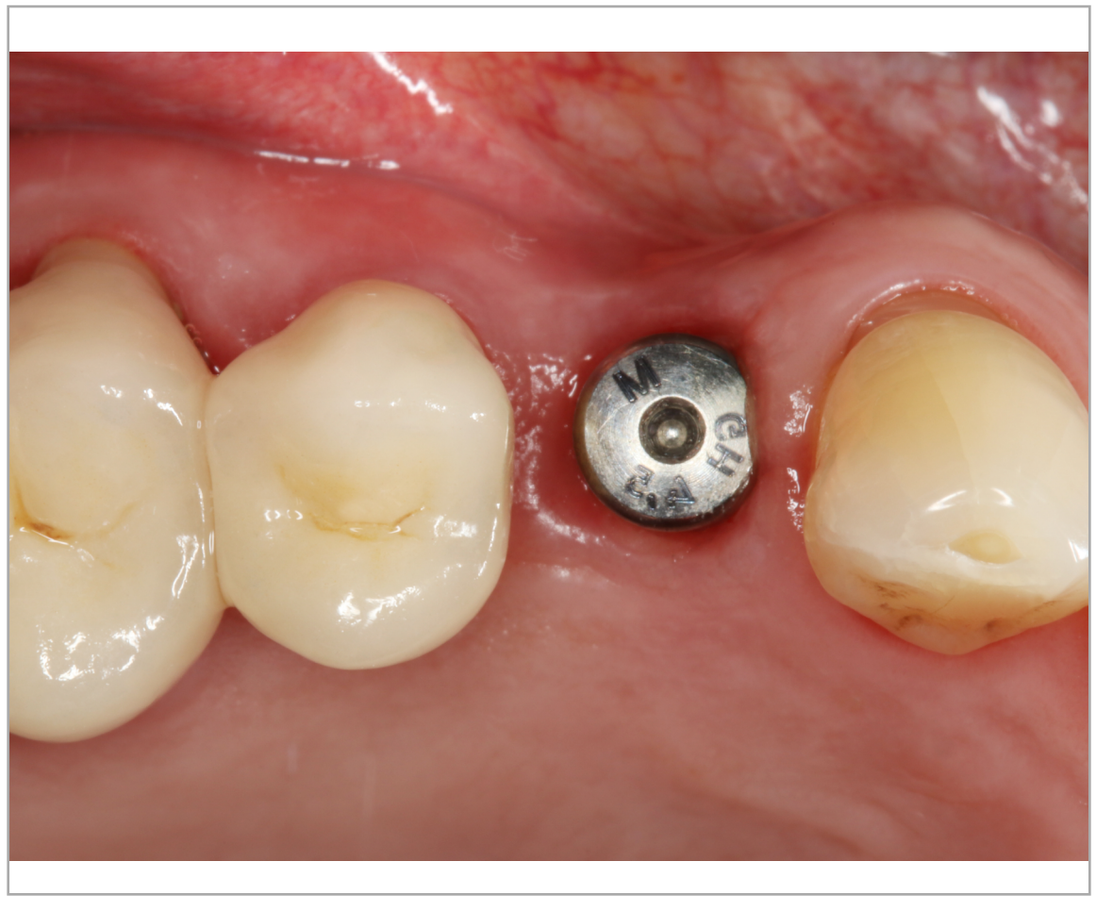
About the case:
After healing time, patient needed final prosthetics work on implant in first pre-molar regio. Impression made with 3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material in the closed snap-on implant (monophase) impression technique.

Click on images to enlarge

Gallery




Closed implant impression
Production of a crown on implant

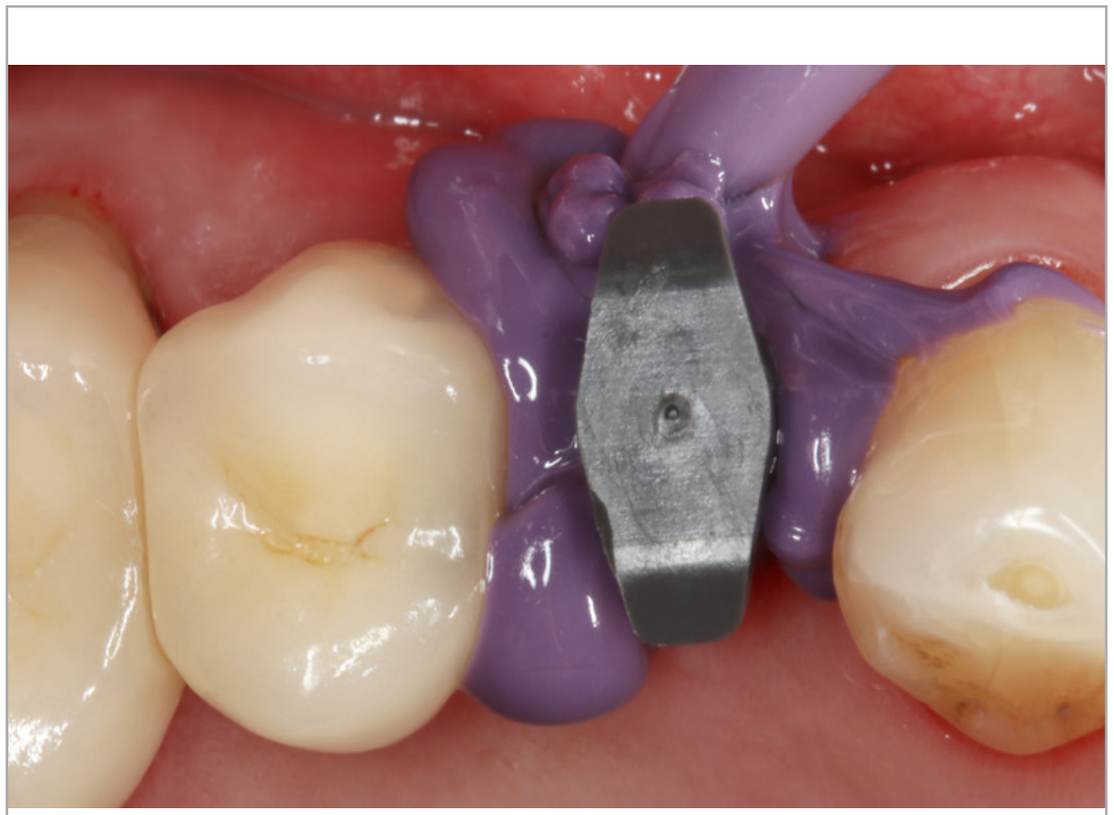


Initial situation: Implant (regio first premolar) six months after implantation. Healing cap in situ.

CLOSE

Closed implant impression
Production of a crown on implant

Indications & Clinical Applications



Syringing of 3M™ Impregum™ Penta™ Super Quick Medium Body Material around the impression coping with the 3M™ Penta™ Elastomer Syringe.

CLOSE

Closed implant impression
Production of a crown on implant

Impression coping securely fixed in 3M™ Impregum™ Penta™ Super Quick Medium Body Material. The impression was taken using the monophase technique.

CLOSE

Closed implant impression
Production of a crown on implant

Final veneered all-ceramic crown cemented on implant abutment.

CLOSE

Scientific Data

- 3M™ Impregum™ Super Quick - Testimonial by Dr. C. E. Sabrosa
- Constant flow behavior
- Moisture tolerance
- Super fast setting
- Precision
- Improved taste
- Mechanical properties

Scie

3M™

Const

Moist

Super

Precis

Impro

Mech

3M™ Impregum™ Super Quick
Testimonial by Dr. C. E. Sabrosa*

00:02:02

CLOSE

*Associate Professor of the Department of Restorative Dentistry and the Director of the Center for Technology Development at the University of the State of Rio de Janeiro Dental School, Brazil.

Scientific Data

Constant flow behavior

Consistency Of Light Body Impression Materials During Working Time
B. Kuppermann et al.

Flowability Throughout Working Time
Dr. C. E. Sabrosa

Constant flow behavior

An impression material should remain flowable throughout the entire working time. If the impression material begins to set during this critical time, an inaccurate impression may result.

Constant flow behavior is even more important in fast setting materials, where every second of the working time counts.

Scientific Data

Constant flow behavior

Consistency Of Light Body Impression Materials During Working Time
B. Kuppermann et al.

Flowability Throughout Working Time
Dr. C. E. Sabrosa

Constant flow behavior

Consistency Of Light Body Impression Materials During Working Time

B. Kuppermann, J. Zech, B. Cerny

Published in: J Dent Res 96 (Spec Iss B):0310 (CED), 2017

In cases where the maximum working time is needed, dentists have to count on the flowability of the impression material even at the end of the working time. Flowability of precision impression materials can be determined by the value of consistency as described in ISO 4823. Objective of the study was a comparison of the consistency at 25 seconds and at the end of the working time according to the manufacturers' instructions.

Only 3M™ Impregum™ Super Quick Polyether Impression Material (named XPE in the study) shows constant consistency over the given working time. All other VPS impression materials tested changed their consistency significantly. The authors stated that the constant flow properties of the polyether material throughout the whole working time may result in an easier and more reliable handling for the clinicians and a better quality of dental impressions.

Materials tested

Method description

Detailed results

Materials tested

Impression Wash Material (Manufacturer)	Abbreviation
Experimental Polyether Material (3M)	XPE
Aquasil® Ultra XLV Fast Set (Dentsply Sirona)	AQXL
Aquasil® Ultra LV Fast Set (Dentsply Sirona)	AQLV
Take1® Advanced Light Body Fast Set (Kerr)	T1LB
EXAFAST™ NDS Injection Type (GC)	EXA
Honigum Pro Light Fast (DMG)	HON
Flexitime® Light Flow (Heraeus)	FLEX

CLOSE

Method description

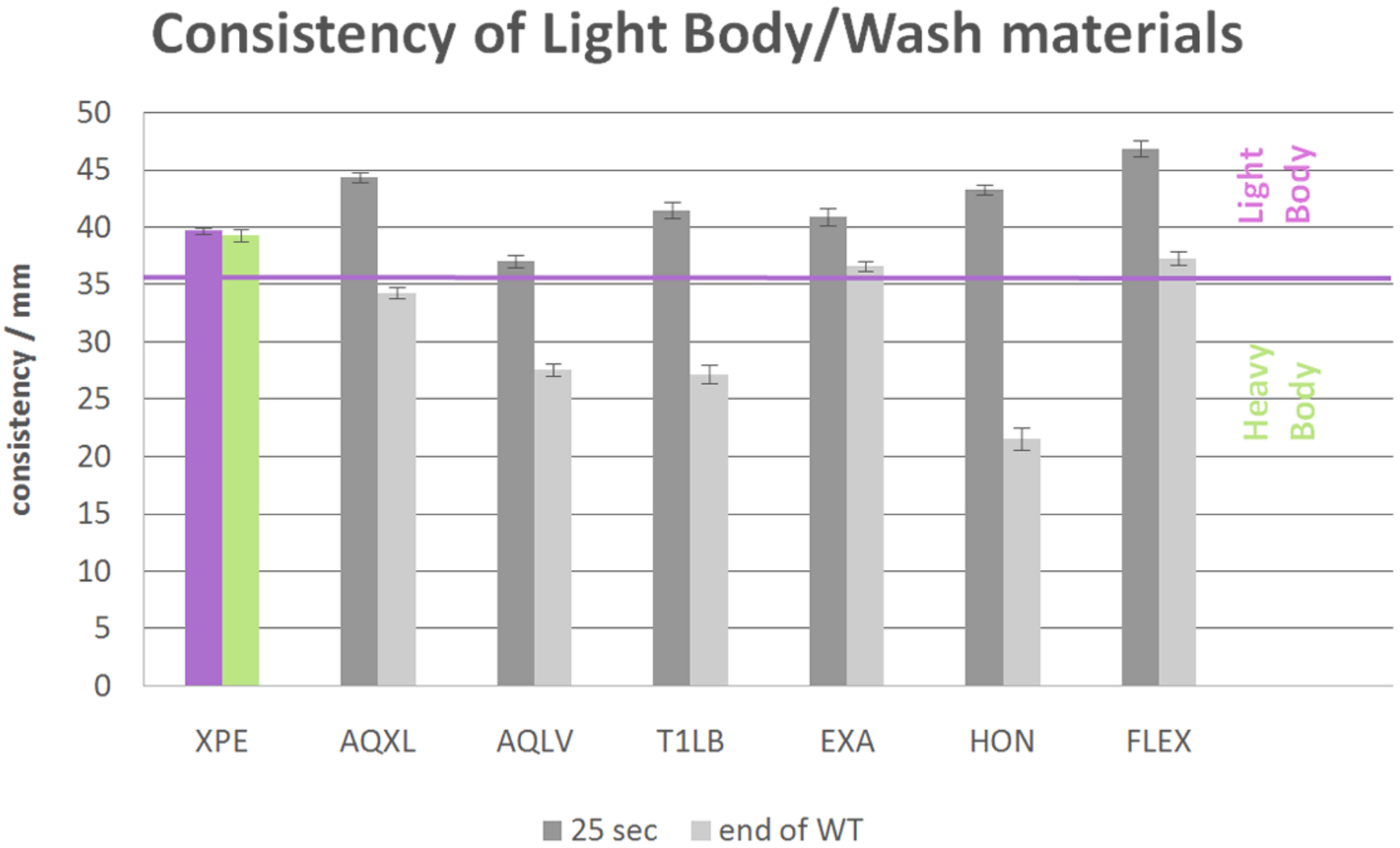
Constant flow behavior

Viscosity test showing the constant flowability of polyether throughout its working time.
00:01:08

CLOSE

Detailed results

Constant flow behavior



line indicates the lower ISO standard consistency limit for light body materials

CLOSE

Scientific Data

Constant flow behavior

Consistency Of Light Body Impression Materials During Working Time
B. Kuppermann et al.

Flowability Throughout Working Time
Dr. C. E. Sabrosa

Constant flow behavior

3M™ Impregum™ Super Quick Light Body: Flowability Throughout Working Time

The Shark Fin Test revealed that 3M™ Impregum™ Super Quick Polyether Impression Material shows constant viscosity throughout the whole working time. The indicated working time can actually be used to full capacity and avoids problems associated with premature setting (e.g. inaccuracies at the margins, less accurate reproduction of details).

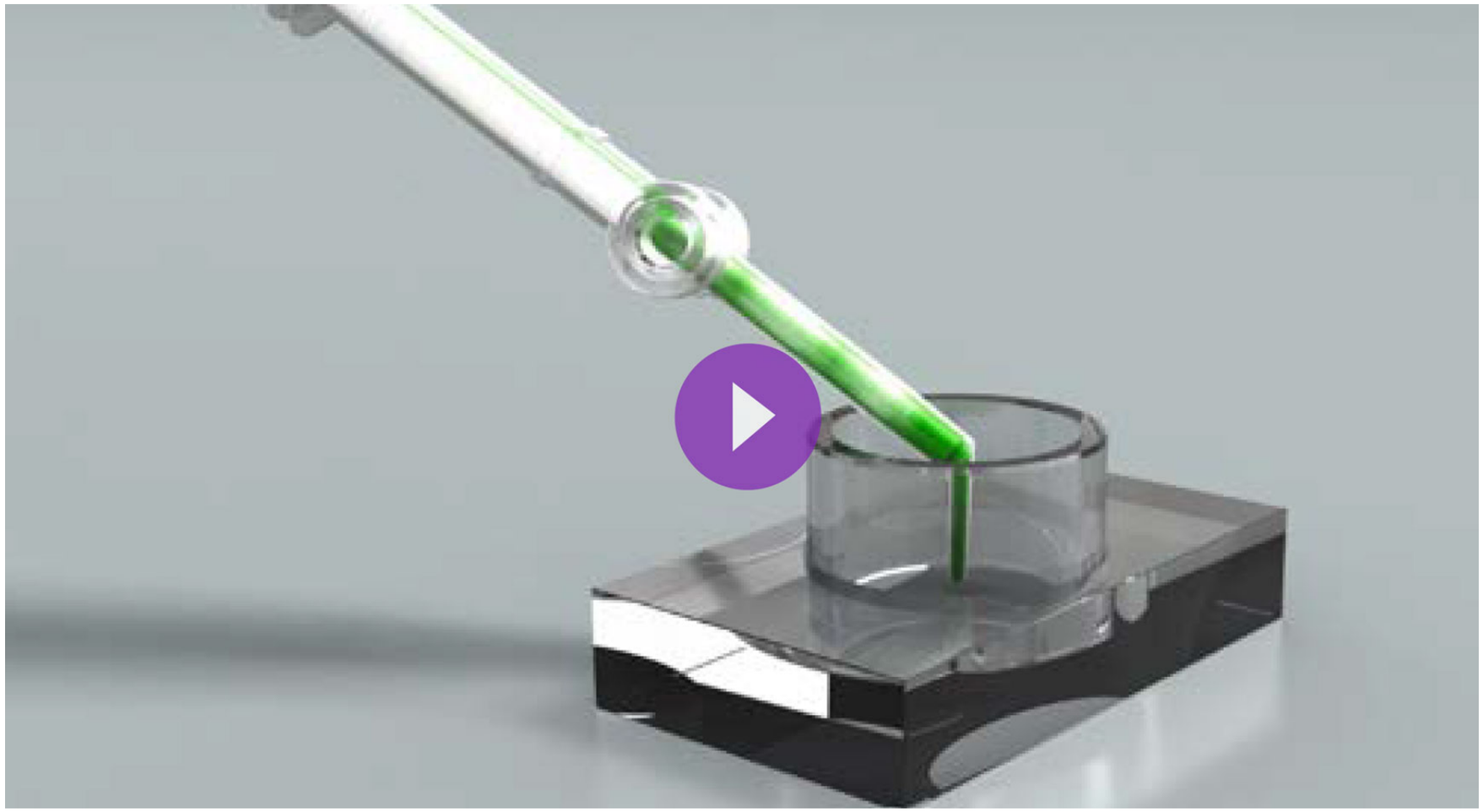
Method description

Background

Shark Fin Test results

Method description

Constant flow behavior



Shark Fin Test
00:01:04

CLOSE

Background

Literature search shows the test in use since 2001.

- Kim M.S., Doherty E.H., Kugel G. “Flow under pressure of four impression materials using shark fin device“. Published in: J Dent Res. 80 AADR Abstracts #624 (2001)
- Richter B., Kuppermann B., Führer C., Klettke T. “Flow Properties of Light Bodied Impression Materials During Working Time”. CED/NOF/IADR 2004 #142.
- Benchimol, Perry R., Kugel G., Hallas M. “Flow of Eight Impression Materials with 2mm slit after 25sec”. IADR 2005 #3083

CLOSE

Shark Fin Test results

Constant flow behavior

The Shark Fins are almost the same height, no matter the stage of the working time.

Shark Fin Test results
00:01:33

Courtesy of Dr. Carlos Sabrosa
Associate Professor of the Department of Restorative Dentistry and the Director of the Center for Technology Development at the University of the State of Rio de Janeiro Dental School, Brazil.

CLOSE

Moisture tolerance

In the unset stage, where the impression material is in touch with the moist oral environment, polyether materials ensure a precise and detailed reproduction of surfaces where it really matters.

Scientific Data

Moisture tolerance

Material science:
Intrinsic Hydrophilicity

Pairwise Comparison of the Initial Hydrophilicity of Impression Materials
S. Gaudet et al.

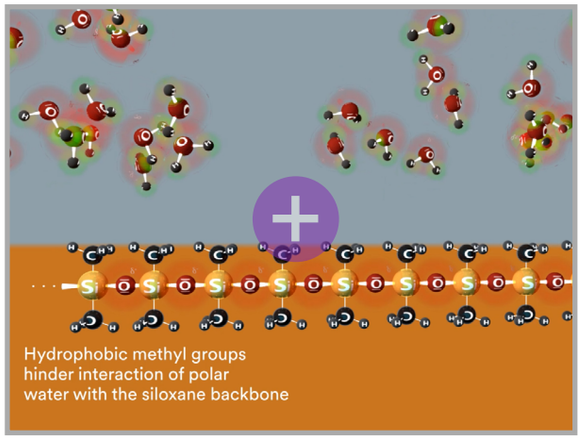
Initial Hydrophilicity of Light Body Impression Materials
J. Zech et al.

Moisture tolerance

Material science:
Intrinsic Hydrophilicity

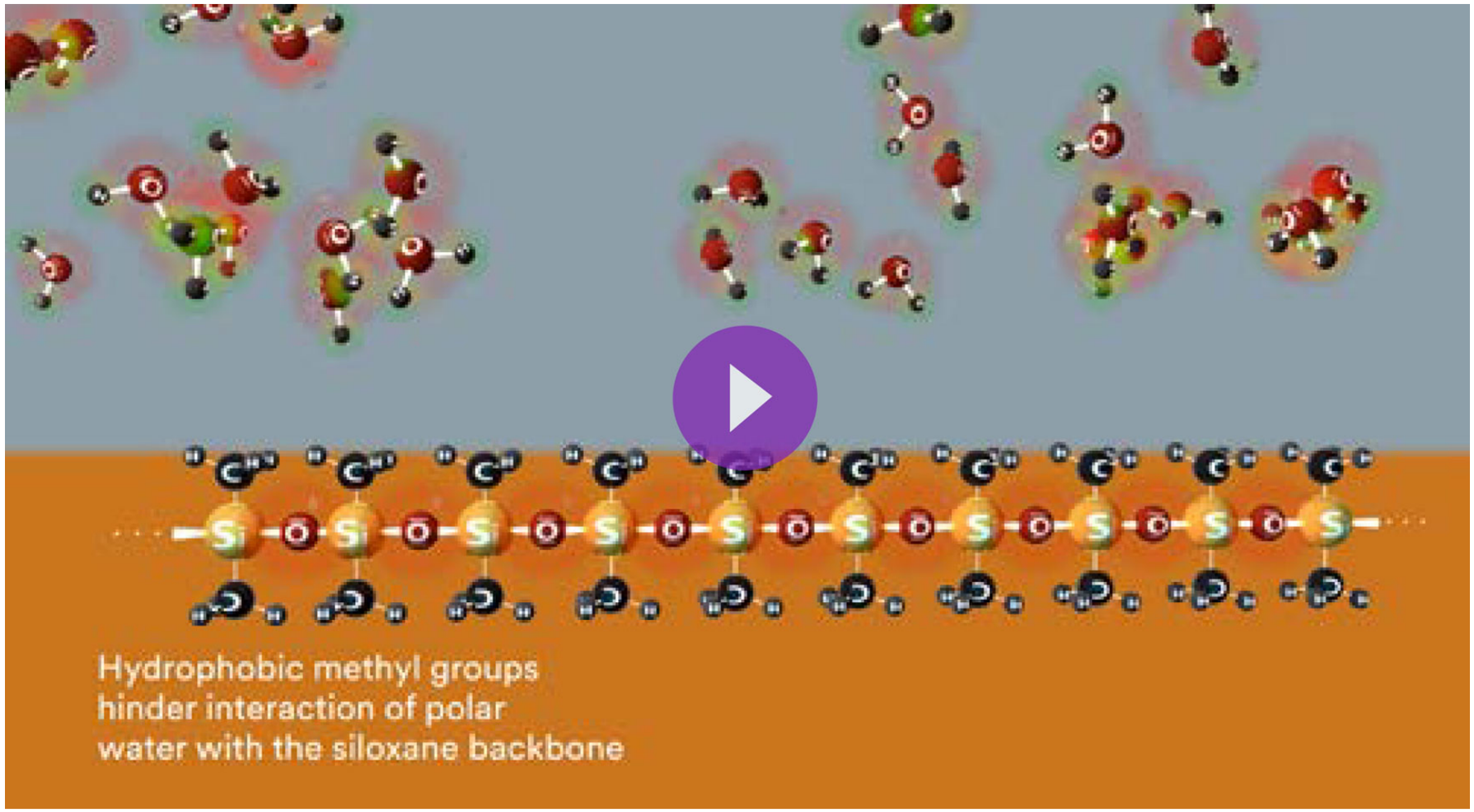
Polyether is hydrophilic by nature, which is due to its molecular structure. Like water molecules, polyether molecules contain different polar groups which chemically attract and interact with each other (hydrogen bonding). This phenomenon occurs with all bipolar molecules, while VPS materials are intrinsically hydrophobic. Hydrophobic methyl groups hinder interaction of polar water with the siloxane backbone.

What does intrinsic hydrophilicity mean?



Start animation

What does intrinsic hydrophilicity mean?



What does intrinsic hydrophilicity mean?

00:01:08

CLOSE

Scientific Data

Moisture tolerance

Material science: Intrinsic Hydrophilicity

Pairwise Comparison of the Initial Hydrophilicity of Impression Materials
S. Gaudet et al.

Initial Hydrophilicity of Light Body Impression Materials
J. Zech et al.

Moisture tolerance

Pairwise Comparison of the Initial Hydrophilicity of Impression Materials

S. Gaudet, S. Murali, S. Pagni, G. Kugel

Published in: J Dent Res 96 (Spec Iss A): 1618 (AADR), 2018

When an impression material gets in touch with the moist oral environment, the material needs to ensure a precise and void-free reproduction of the surfaces. In this study, the hydrophilicity of impression materials were directly compared in a side-by-side setup to find out if the new 3M™ Impregum™ Super Quick Polyether Impression Materials are more hydrophilic than VPS materials.

The study confirmed that the new Impregum Super Quick Materials show a superior hydrophilicity compared to all VPS materials tested.

Materials tested

Method description

Results

Materials tested

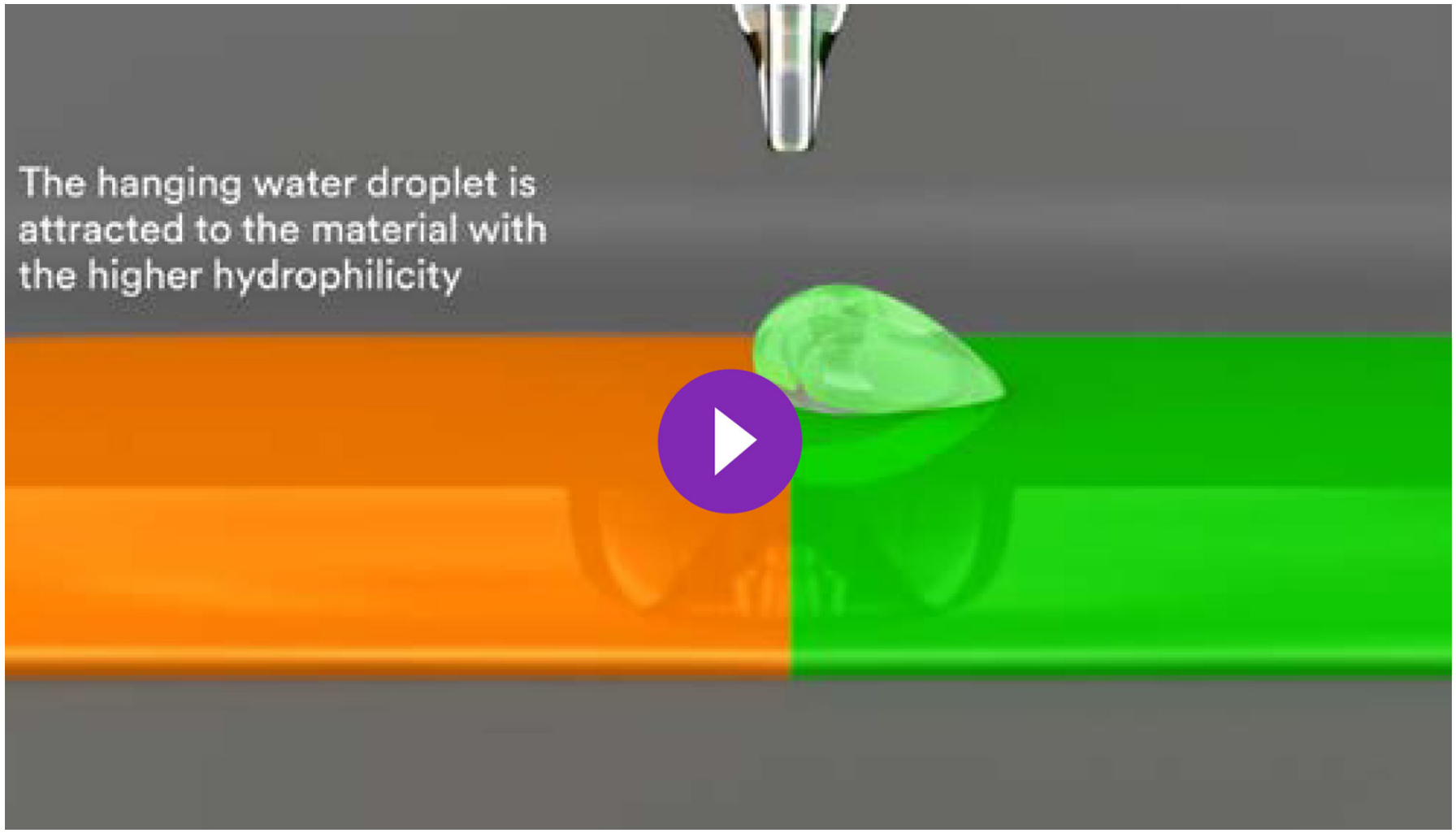
Moisture tolerance

Material (Manufacturer)	Type
3M™ Impregum™ Penta™ Super Quick Medium Body (3M) mentioned as experimental material	Medium bodied polyether
Aquasil® Ultra+ Medium Fast Set (Dentsply Sirona)	Medium bodied VPS
Aquasil® Ultra+ Medium Fast Set DECA (Dentsply Sirona)	Medium bodied VPS
Aquasil® Ultra Monophase DECA (Dentsply Sirona)	Medium bodied VPS
EXAFAST™ NDS Monophase (GC)	Medium bodied VPS
Flexitime® Monophase Dynamix (Kulzer)	Medium bodied VPS
Honigum Mixstar Mono (DMG)	Medium bodied VPS
Take 1™ Advanced™ Medium Fast Set (Kerr)	Medium bodied VPS
3M™ Impregum™ Super Quick Light Body (3M) mentioned as experimental material	Light bodied polyether
Aquasil® Ultra LV Fast Set (Dentsply Sirona)	Light bodied VPS
Aquasil® Ultra+ LV Fast Set (Dentsply Sirona)	Light bodied VPS
Aquasil® Ultra XLV Fast Set (Dentsply Sirona)	Light bodied VPS
Aquasil® Ultra+ XLV Fast Set (Dentsply Sirona)	Light bodied VPS
EXAFAST™ NDS Injection Type (GC)	Light bodied VPS
Flexitime® Light Flow (Heraeus Kulzer)	Light bodied VPS
Panasil® Initial Contact Light (Kettenbach)	Light bodied VPS
Take 1™ Advanced™ Light Body Wash Fast Set (Kerr)	Light bodied VPS

CLOSE

Method description

Moisture tolerance



Wettability comparison

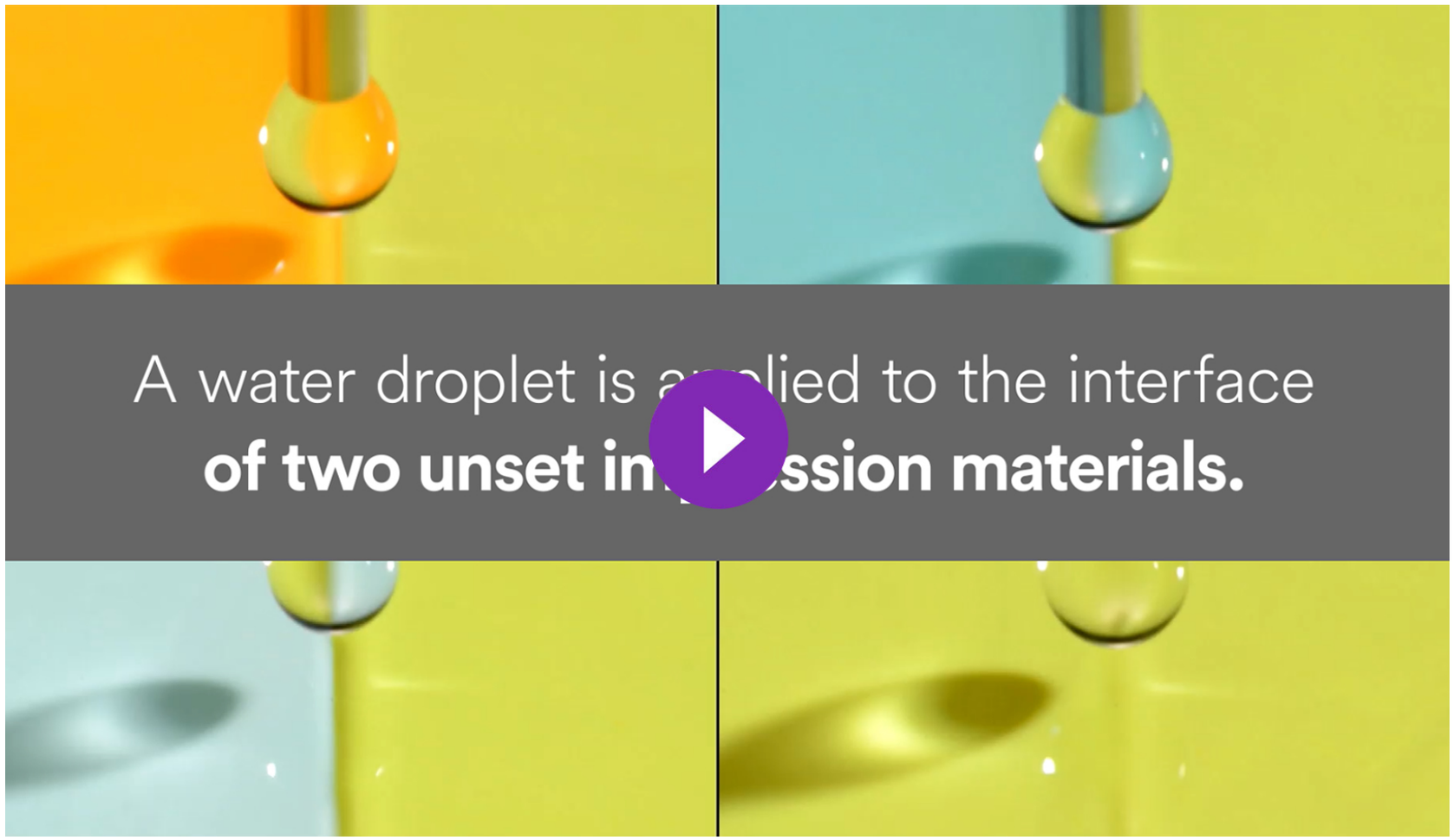
00:01:04

CLOSE

Results

Moisture tolerance

The tested polyether materials showed a larger horizontal spread and thus a higher hydrophilicity than the respective VPS material. In a control measurement with polyether material placed on both glass slides a comparable horizontal water spread was observed. More details with exact values can be found in the publication or the abstract thereof.



The sample video does not show the exact test but shows the behavior which was analyzed.
00:00:32

CLOSE

Scientific Data

Moisture tolerance

Material science: Intrinsic Hydrophilicity

Pairwise Comparison of the Initial Hydrophilicity of Impression Materials
S. Gaudet et al.

Initial Hydrophilicity of Light Body Impression Materials
J. Zech et al.

Moisture tolerance

Initial Hydrophilicity of Light Body Impression Materials

J. Zech, H. Hoffmann, H. Grupp, B. Cerny

Published in: J Dent Res 96 (Spec Iss A): 1007 (ADDR), 2018

The term hydrophilic is generally used to describe materials with a strong affinity for water or aqueous solutions. This property is crucial for impression materials as they are used in a moist oral environment and have to flow in close proximity to the teeth and gingival tissues in order to capture every important detail. In the study, hydrophilicity was determined by measuring initial water contact angles on surfaces of unset impression materials.

Both polyether materials, the existing 3M™ Impregum™ as well as the new 3M™ Impregum™ Super Quick Polyether Impression Materials showed a significantly higher initial hydrophilicity and thus the lowest contact angles compared to VPS materials.

Materials tested

Method description

Detailed results

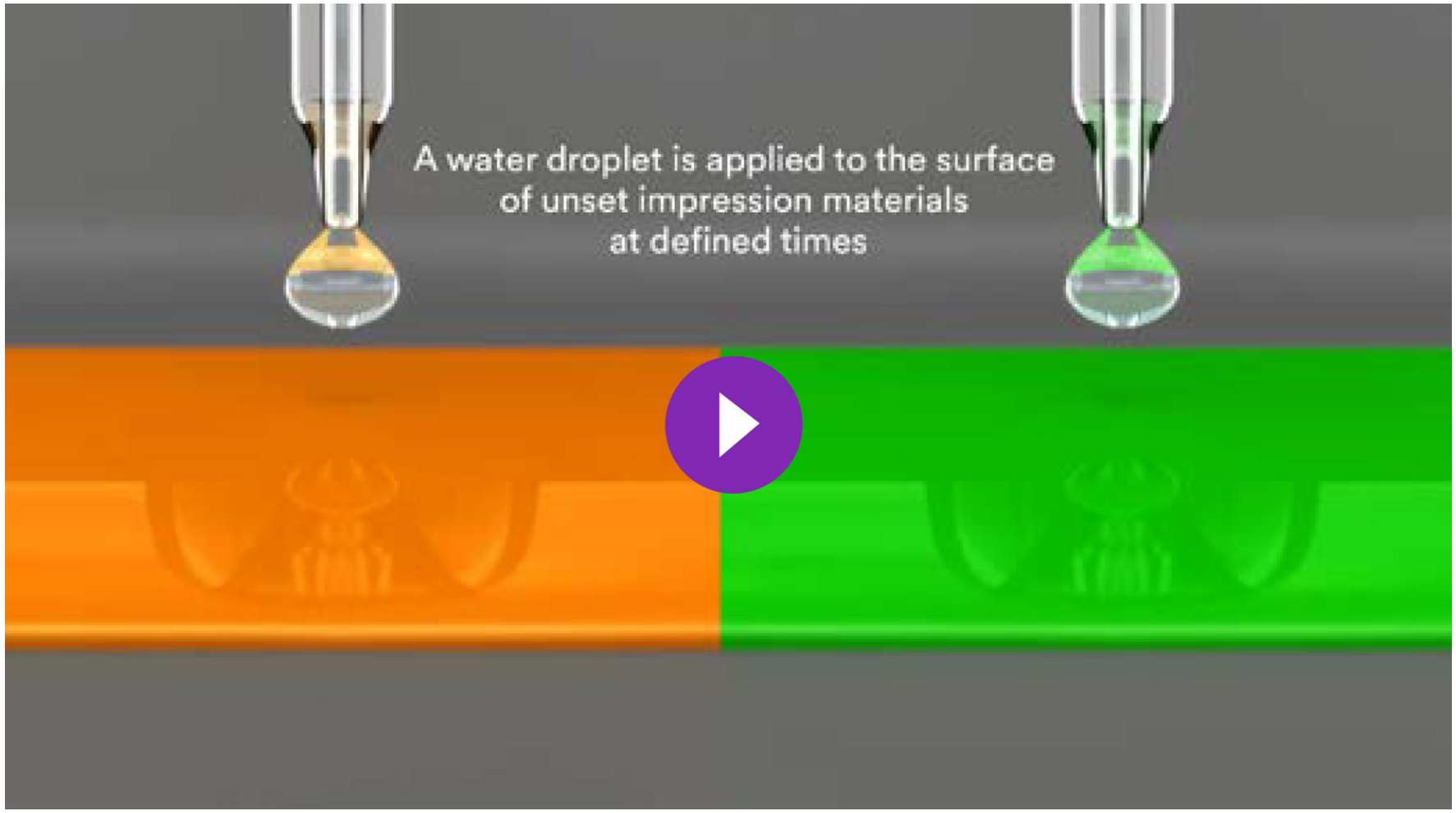
Materials tested

Moisture tolerance

Impression Material (Manufacturer)	Abbreviation
Honigum Pro Light Fast (DMG)	HPL
Panasil® Initial Contact Light (Kettenbach)	PIC
EXAFAST™ NDS Injection Type (GC)	ENI
Aquasil® Ultra LV Fast Set (Dentsply Sirona)	AUL
Aquasil® Ultra+ LV Fast Set (Dentsply Sirona)	AUP
3M™ Impregum™ Garant™ L DuoSoft™ (3M)	IMP
3M™ Impregum™ Super Quick Light Body (3M)	EXP

CLOSE

Method description



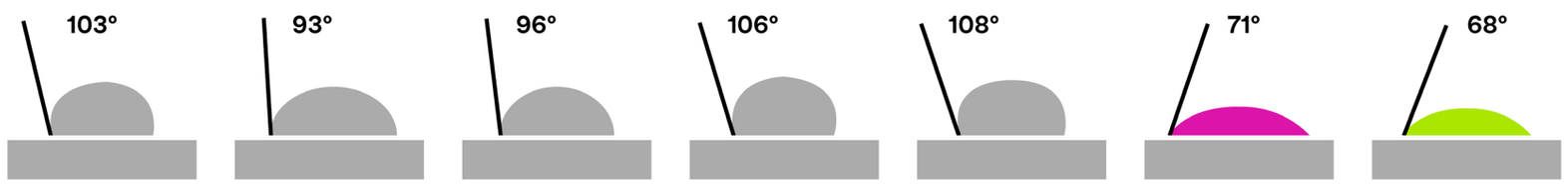
Contact angle measurement
00:00:37

CLOSE

Detailed results

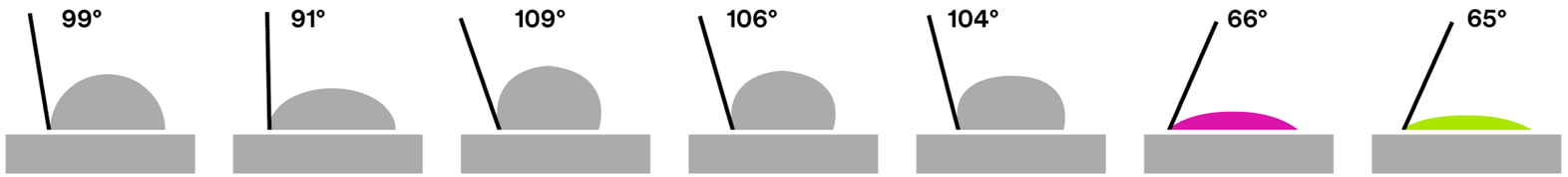
Moisture tolerance

Droplet placed on unset material after 20 sec. from start of mixing



HPL	PIC	ENI	AUL	AUP	IMP	EXP
Honigum Pro Light Fast (DMG)	Panasil® Initial Contact Light (Kettenbach)	EXAFAST™ NDS Injection Type (GC)	Aquasil® Ultra LV Fast Set (Dentsply Sirona)	Aquasil® Ultra+ LV Fast Set (Dentsply Sirona)	3M™ Impregum™ Garant™ L Duosoft™ (3M)	3M™ Impregum™ Super Quick Light Body (3M)

Droplet placed on unset material after 45 sec. from start of mixing



HPL	PIC	ENI	AUL	AUP	IMP	EXP
Honigum Pro Light Fast (DMG)	Panasil® Initial Contact Light (Kettenbach)	EXAFAST™ NDS Injection Type (GC)	Aquasil® Ultra LV Fast Set (Dentsply Sirona)	Aquasil® Ultra+ LV Fast Set (Dentsply Sirona)	3M™ Impregum™ Garant™ L Duosoft™ (3M)	3M™ Impregum™ Super Quick Light Body (3M)

CLOSE

Scientific data

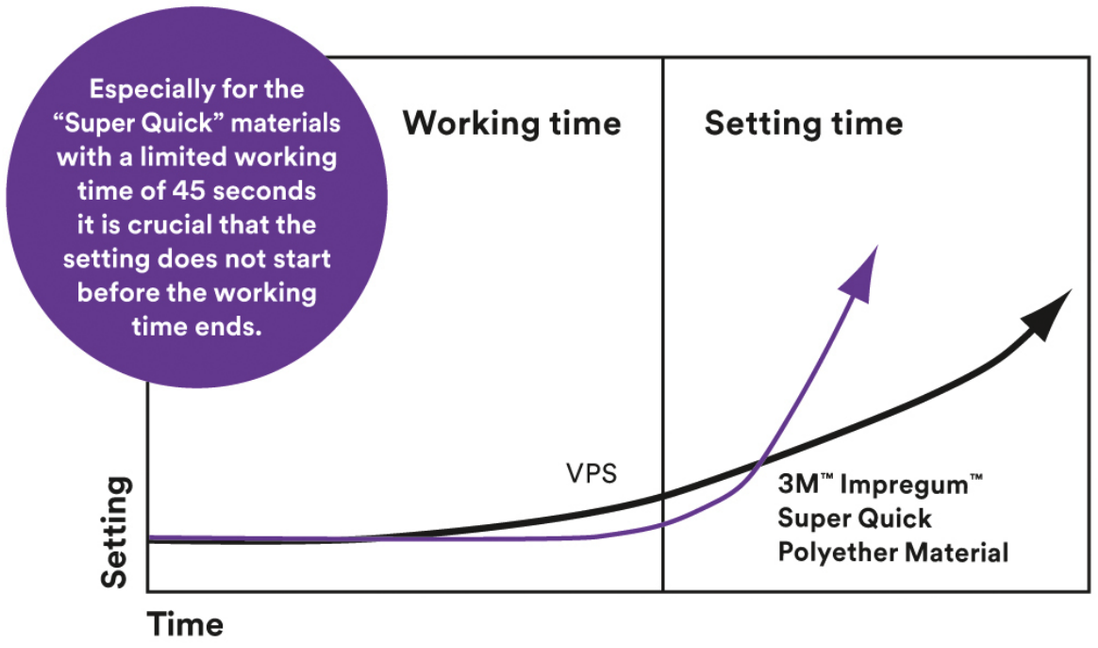
Super fast setting

Material science: Polyether setting mechanism

Setting speed

Super fast setting

Immediate setting once the working time is over is a hallmark of polyether impression material. The rapid transition from the unset to the set state is exhibited by the new 3M™ Impregum™ Super Quick Polyether Impression Materials.



Scientific data

Super fast setting

Material science:
Polyether setting mechanism

Setting speed

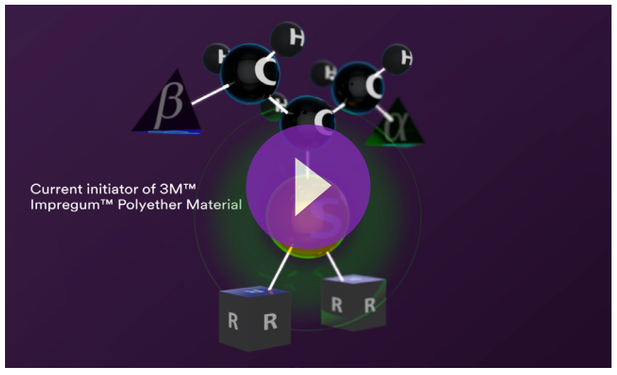
Super fast setting

Material science:
Polyether setting mechanism

The goal in developing the new 3M™ Impregum™ Super Quick Polyether Impression Material was to offer an advanced formula Impregum Material with all the benefits of a polyether - combined with the speed of VPS.

The goal has been reached by developing a new initiator compound. The molecule is similar to the one used in the existing Impregum™ materials: It has the same reactive group and relies on an identical reaction mechanism called cationic ring-opening polymerization. The small but crucial difference lies in the substituents of the molecule. The increased reactivity of the molecule is the basis for a faster setting reaction. Compared to Impregum Penta (Soft) Materials, the intra-oral setting time is thus reduced by approximately 50%.

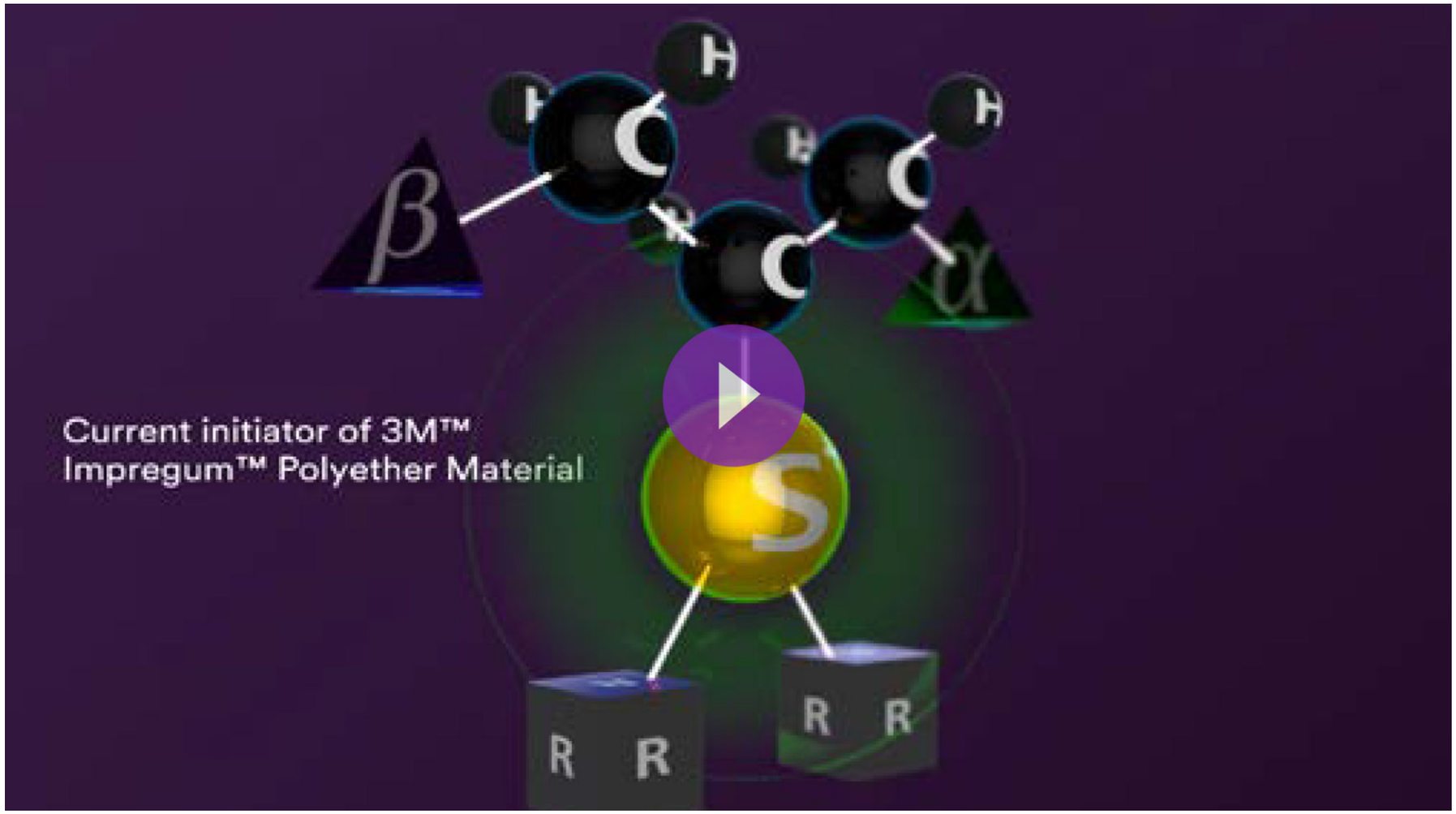
New initiator - video



Setting mechanism - video

New initiator - video

Super fast setting



Initiator
00:00:32

CLOSE

Setting mechanism - video

Super fast setting

Polymerization
00:01:28

CLOSE

Scientific data

Super fast setting

Material science: Polyether setting mechanism

Setting speed

Super fast setting

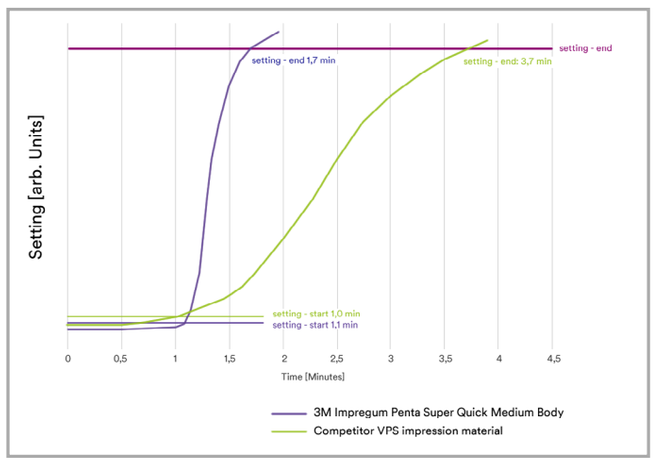
Setting speed

Compared to a well known VPS brand, 3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Material shows no setting and a continuous flowable viscosity during working time. A quick setting reaction starts at the end of the working time, resulting in a steep increase in viscosity to a cured stage. At this point, the material can be removed without distortions.

Method description

A controlled oscillating paddle is placed in the material sample at intra-oral temperature. As the material sets, the change in the paddle's amplitude coincides with the material's increase in viscosity during setting.

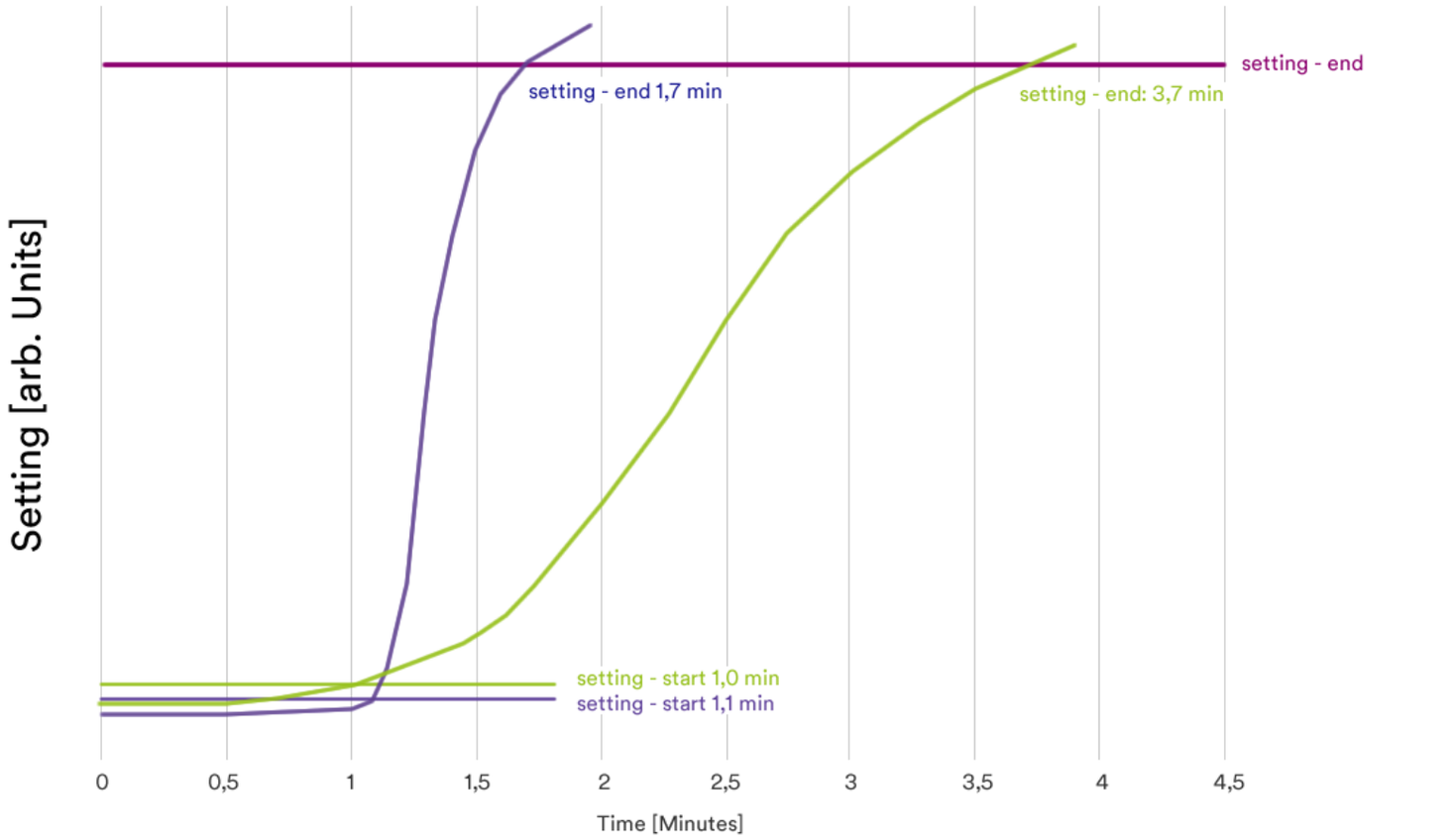
Click on image to enlarge



Detailed results

Super fast setting

Setting speed



Lab measurements at 32 °C, values do not necessarily represent recommended clinical working and setting times.

CLOSE

Scientific Data

Precision

3M™ Impregum™ Polyether Impression Material is known for its precision and reliability. Even in difficult clinical situations, it is able to deliver highly accurate detail reproduction, resulting in precise fitting final restorations.

Scientific Data

Precision

Clinical Evaluation Of A Novel Super Quick Setting Polyether Impression Material
R. Hampe et al.

Digitization of Impression Materials
R. Hampe et al.

Torque Strength of Implant Copings in Various Impression Materials
B. Cerny et al.

Precision

Clinical Evaluation Of A Novel Super Quick Setting Polyether Impression Material

R. Hampe, A. Dire, B. Cerny, R. Guggenberger

Published in: J Dent Res 97 (Spec Iss B): 2522 (IADR), 2018

In an in-office evaluation, more than 6,900 impressions were taken with 3M™ Impregum™ Super Quick Polyether Impression Materials by 482 dentists. The dentists' feedback confirms the very high clinical acceptance with the tested materials. The short intra-oral setting time and high impression accuracy were specifically mentioned as very desirable.

Materials tested

3M™ Impregum™ Penta™ Super Quick Medium Body
3M™ Impregum™ Penta™ Super Quick Heavy Body
3M™ Impregum™ Super Quick Light Body

Method description

Customer feedback

Scientific Data

Precision

Method description

The research was conducted via a web-based survey which was administered after a trial period of 5 weeks. Participants were asked to use the new 3M™ Impregum™ Super Quick Polyether Impression Materials in their clinical routine and to rate different performance criteria.

Sample size: 630 dentists from Europe and the U.S. had been pre-selected to take part in this evaluation. Field dates: first testing period has been from January to March, second testing period has been from October to December 2017, 482 respondents.

Survey scope: To assess dentists' satisfaction with Impregum Super Quick Polyether Impression Materials.

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Method description

Customer feedback

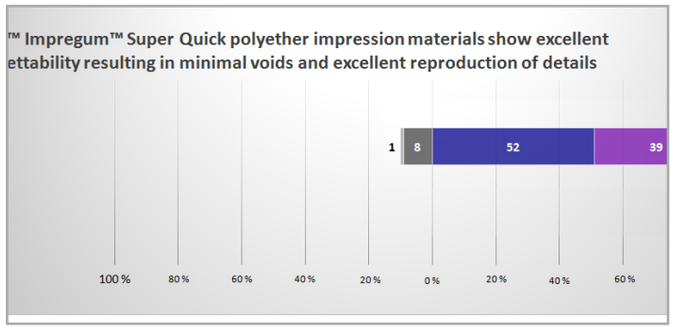
Customer feedback

Precision

Overall, 482 participants completed the questionnaire. Quantified responses for various features and characteristics of 3M™ Impregum™ Super Quick Polyether Impression Materials, especially regarding accuracy, were analyzed using descriptive statistics.

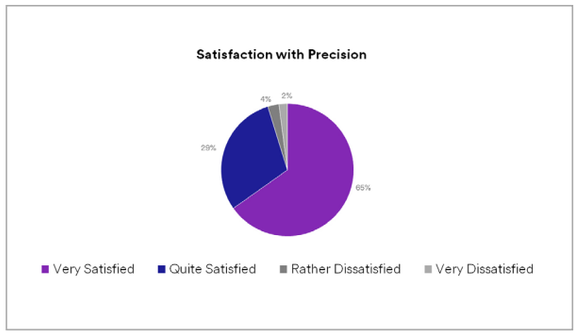
Detail reproduction of 3M™ Impregum™ Super Quick Polyether Impression Materials

Click on image to enlarge



Satisfaction with fit of final restorations using 3M™ Impregum™ Super Quick Polyether Impression Materials

Click on image to enlarge



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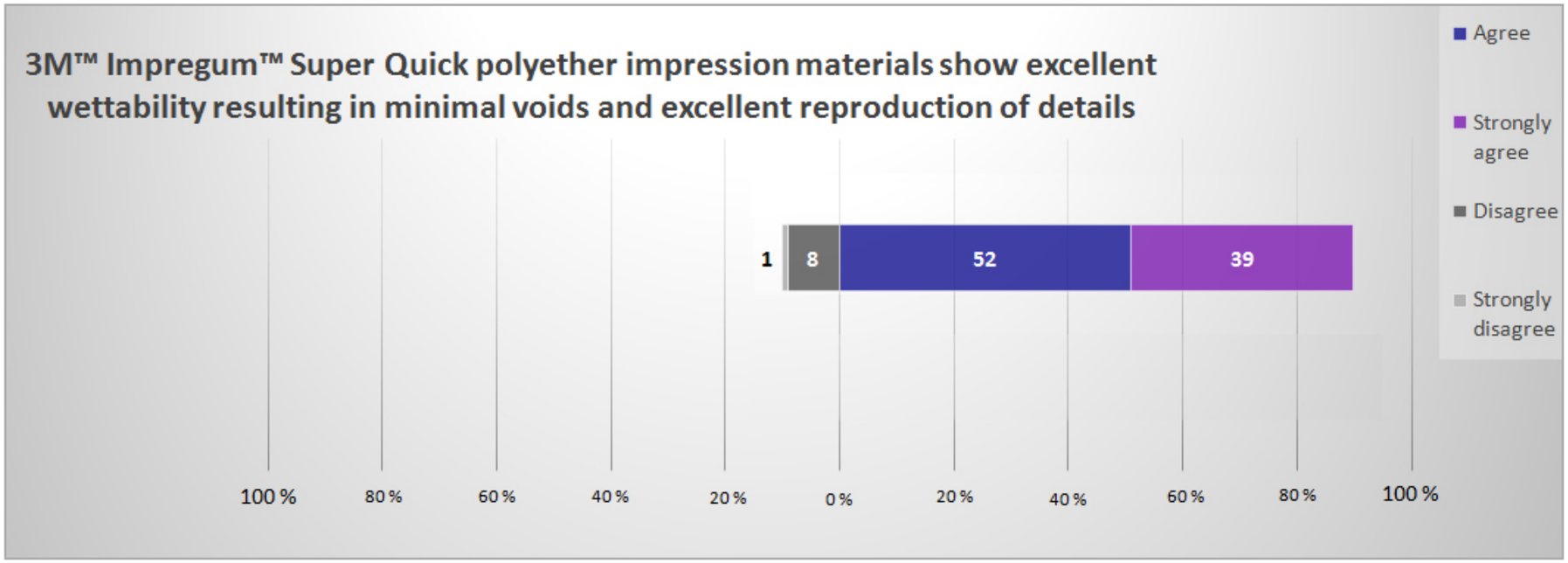
Customer feedback

Precision

Detail reproduction of
3M™ Impregum™ Super Quick Polyether Impression Materials

Precision



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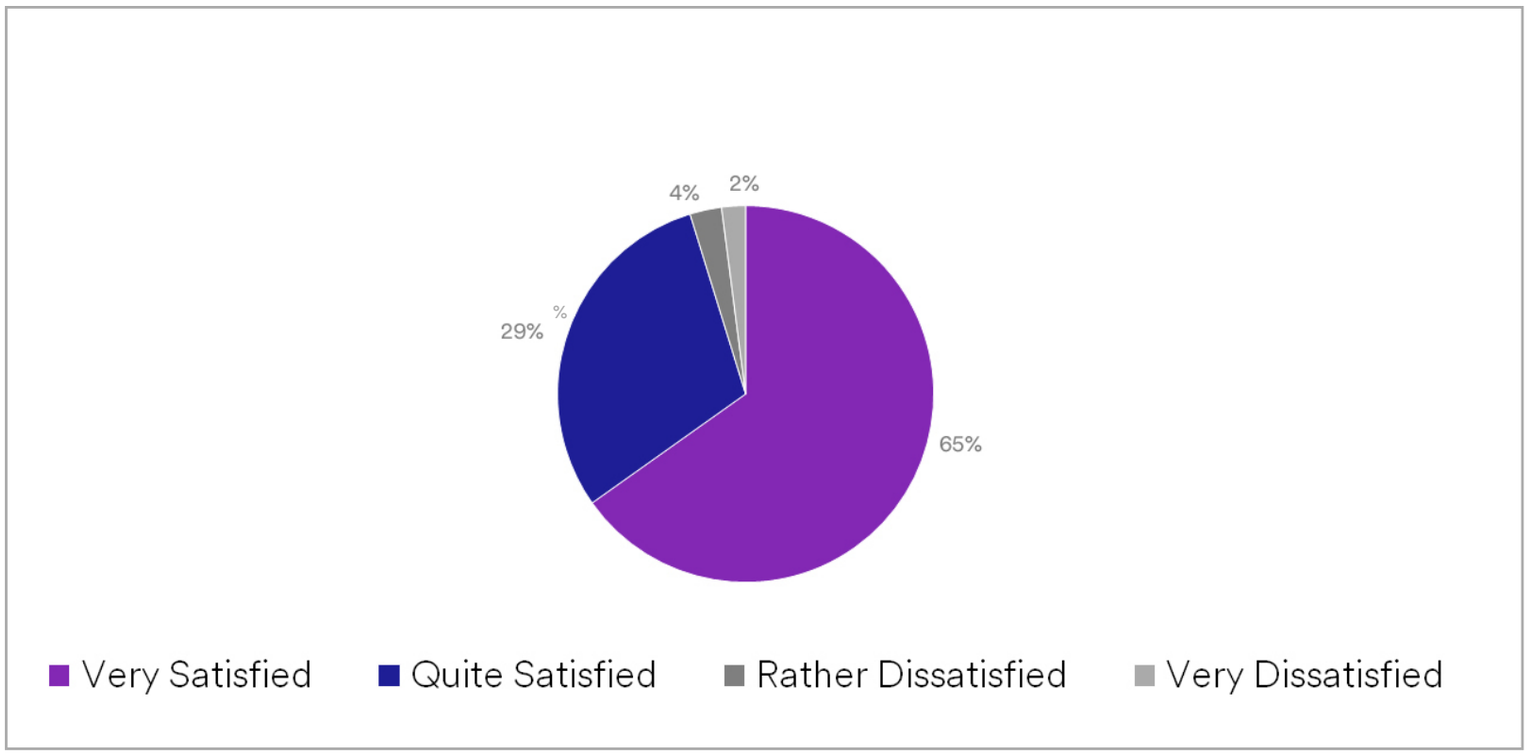
Customer feedback

Customer feedback

Precision

Satisfaction with fit of final restorations using 3M™ Impregum™ Super Quick Polyether Impression Materials



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Customer feedback

Scientific Data

Precision

Clinical Evaluation Of A Novel Super Quick Setting Polyether Impression Material
R. Hampe et al.

Digitization of Impression Materials
R. Hampe et al.

Torque Strength of Implant Copings in Various Impression Materials
B. Cerny et al.

Precision

Digitization of Impression Materials

R. Hampe, P. Osswald, M. Krämer, A. Dire, P. Athanasiou, G.P. Morris

Published in: J Dent Res 97 (Spec Iss A): 0264 (AADR), 2018

For an easy access to the digital CAD/CAM workflow, impressions may be scanned directly. In this study the variance of the scanning accuracy was addressed. Each impression and a master model were scanned using a commercially available LED multiline scanner. The absolute mean differences between both scans for scanning accuracy was extracted.

All direct impression scans provided a high and clinically suitable accuracy with the LED multiline scanner used. If desired, impressions made with 3M™ Impregum™ Polyether Impression Material can enter the digital workflow in-office or in the lab with direct scanning of the impression with modern desktop scanners (blue light technology).

Materials tested

Method description

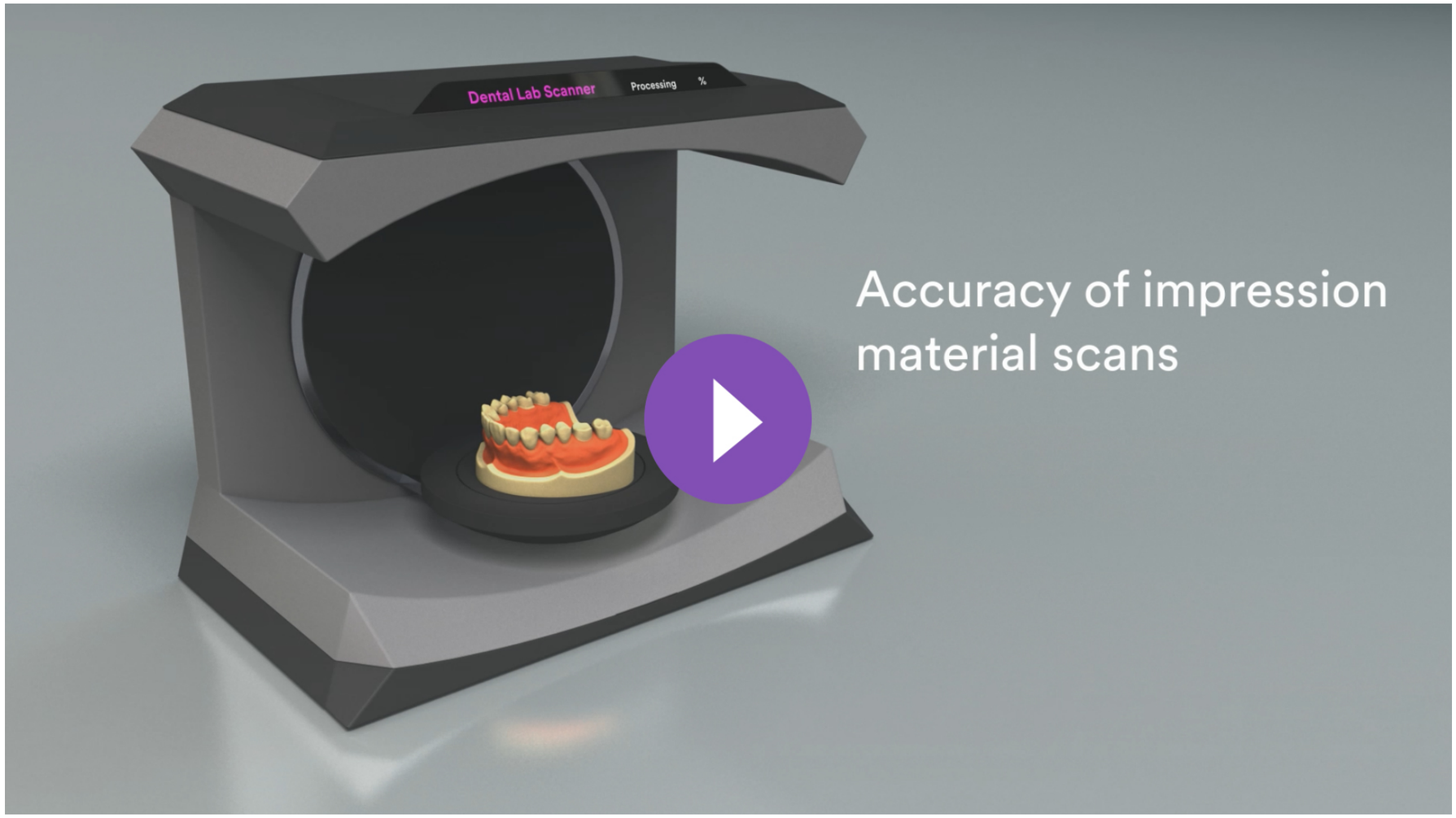
Detailed results

Materials tested

Impression Material (Manufacturer)	Abbreviation
Flexitime® Fast&Scan (Kulzer)	FFS-1step
3M™ Impregum™ DuoSoft™ Quick	IPDuoQ-1step
3M™ Impregum™ Penta™ Super Quick Heavy Body / 3M™ Impregum™ Super Quick Light Body (3M)	EXPHL-1step
3M™Impregum™ Penta™ Super Quick Medium Body / 3M™ Impregum™ Super Quick Light Body (3M)	EXPML-1step
Flexitime® Monophase Pro Scan Dynamix (Kulzer)	FM-mono
3M™ Impregum™ Penta™ Soft Quick (3M)	IPSQ-mono
3M™ Impregum™ Penta™ Super Quick Medium Body (3M)	EXP-mono

CLOSE

Method description



Accuracy of impression material scans
00:00:52

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Scientific Data

Precision

Detailed results

As proven in a 2-sample equivalence test, all tested impressions were statistically equivalent in their accuracy. The differences to the master model were below 50 microns in all cases.

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Materials tested

Method description

Detailes results

Scientific Data

Precision

Clinical Evaluation Of A Novel Super Quick Setting Polyether Impression Material
R. Hampe et al.

Digitization of Impression Materials
R. Hampe et al.

Torque Strength of Implant Copings in Various Impression Materials
B. Cerny et al.

Precision

Torque Strength of Implant Copings in Various Impression Materials

B. Cerny, J. Zech, B. Kuppermann

Published in: J Dent Res 97 (Spec Iss A): 1009 (AADR), 2018

In order to achieve accurate fabrication of an implant-retained prosthesis, the impression must record an exact registration of the position and orientation of the implant. Aim of the study was to test the suitability of different impression materials for a secure transfer of implant copings.

Even if there were significant differences in the torque strength of the VPS impression materials, all 3M polyether materials clearly showed the highest torque strength and thus the lowest chance of accidental implant displacements in comparison to all tested VPS materials.

Materials tested

Method description

Detailed results

Materials tested

Material (Manufacturer)	Type
3M™ Impregum™ Penta™ Super Quick Medium Body (3M)	Polyether
3M™ Impregum™ Penta™ (3M)	Polyether
3M™ Impregum™ Penta™ Soft (3M)	Polyether
3M™ Impregum™ Penta™ Soft Quick (3M)	Polyether
Aquasil® Ultra+ Medium FS DECA (Dentsply Sirona)	VPS
Aquasil® Ultra+ Medium FastSet (Dentsply Sirona)	VPS
Flexitime® Monophase Cartr. (Kulzer)	VPS
Monopren® transfer (Kettenbach)	VPS
Honigum Pro-Mono (DMG)	VPS
Take 1™ Advanced™ Medium Fast Set (Kerr)	VPS
EXAFAST™ NDS Garant Mono (GC)	VPS

CLOSE

Method description

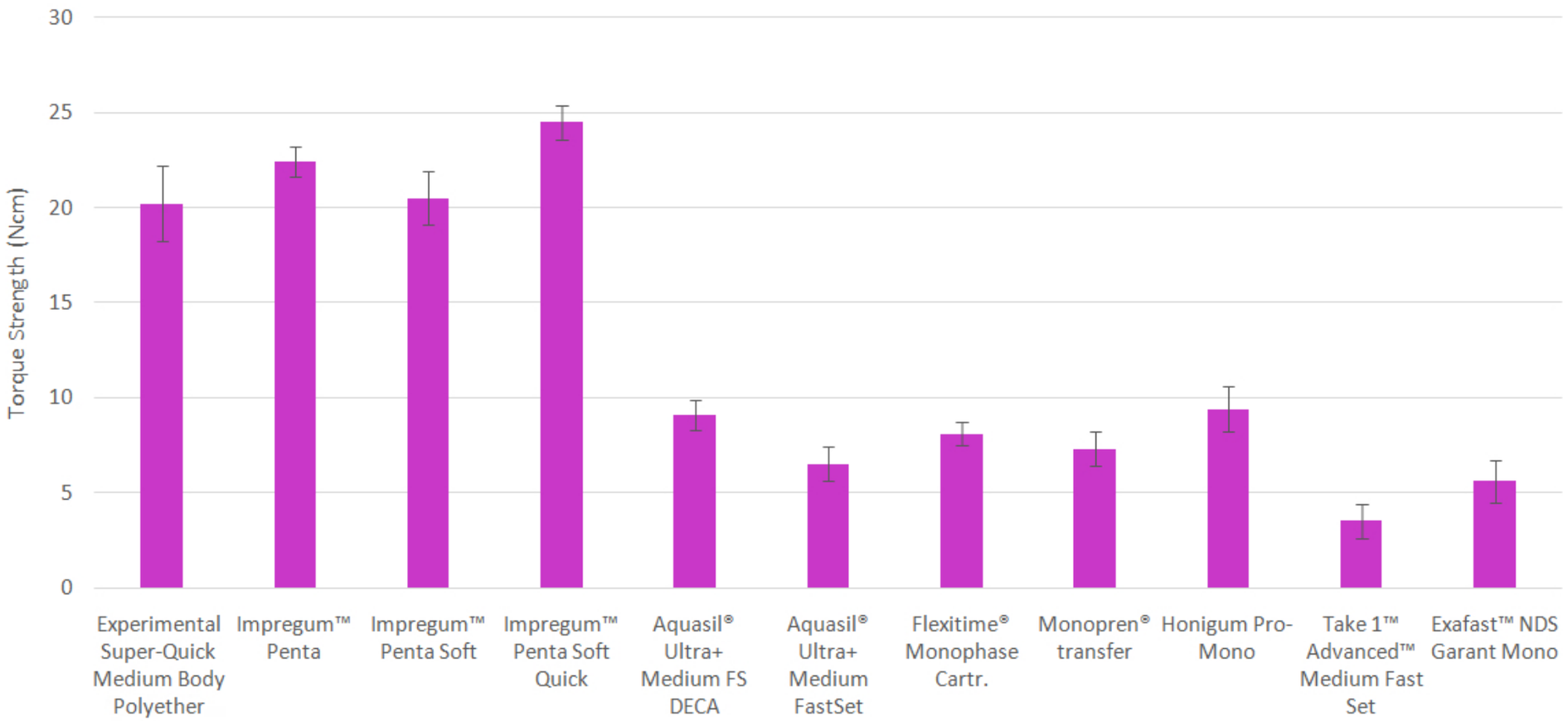
Precision

Torque test
00:00:42

CLOSE

Detailed results

Precision



Torque strength of implant copings in various impression materials

CLOSE

Scientific Data

Improved taste

Material science:
Why the taste was improved

In-vivo study: Taste and Comfort

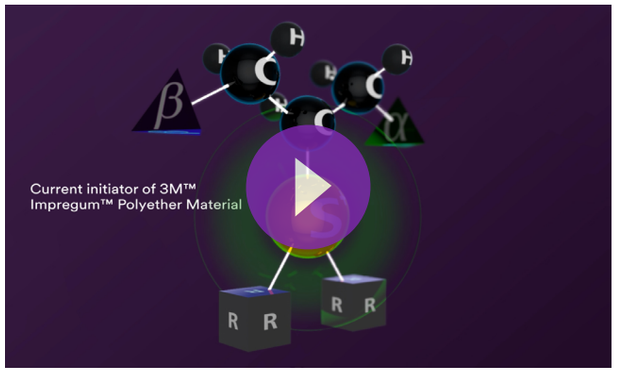
Evaluation of Polyether Impression Materials
A. Syrek et al.

Improved taste

In order to further improve patient comfort, a better taste and smell was on the wish list for a new 3M™ Impregum™ Polyether Impression Material.

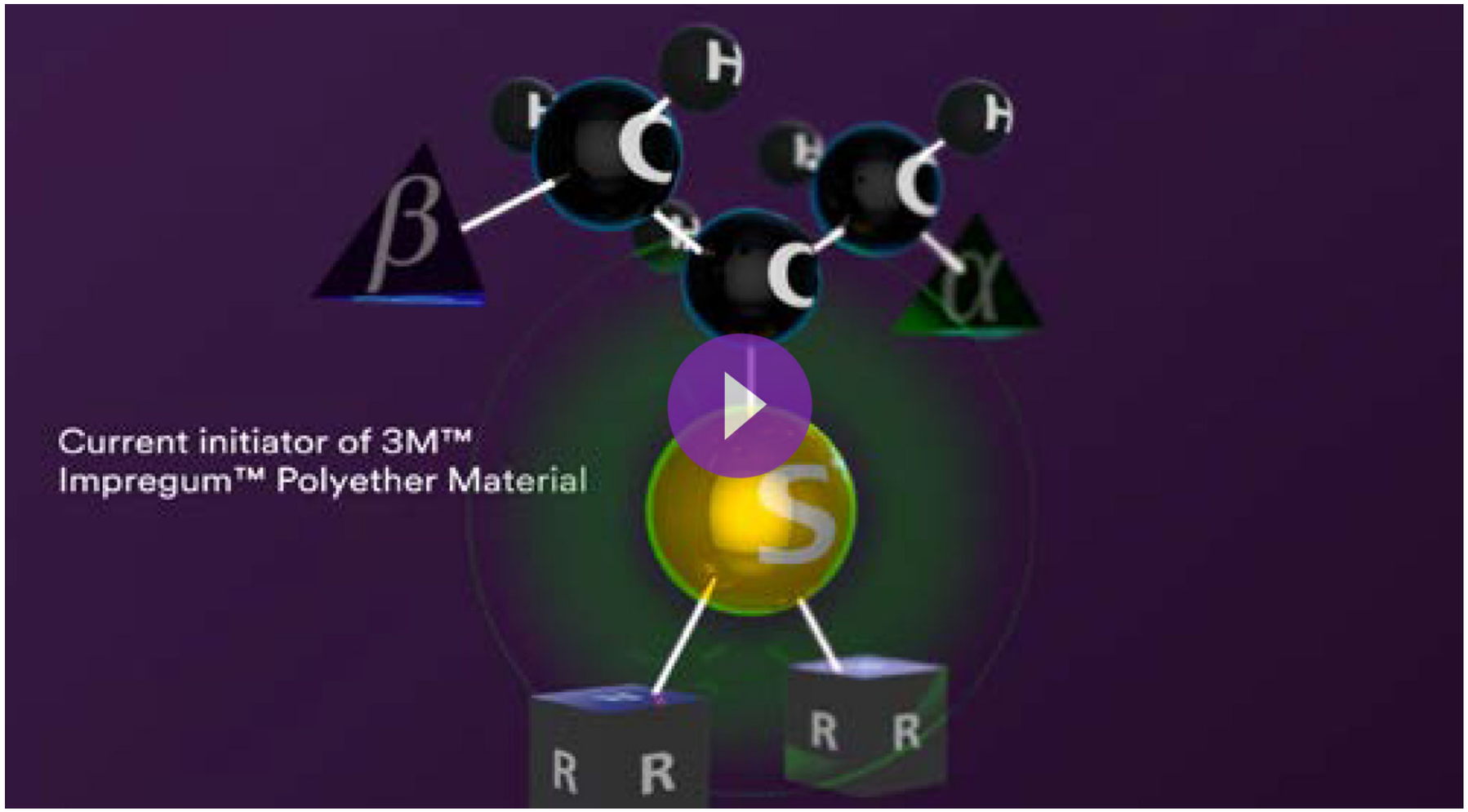
Improved taste and smell were achieved through the development of a new initiator compound. The compound has the same reactive group as existing Impregum materials, while the improvement comes from new substituents.

New initiator - video



New initiator - video

Improved taste



Initiator

00:00:32

CLOSE

Scientific Data

Improved taste

Material science: Why the taste was improved

In-vivo study: Taste and Comfort Evaluation of Polyether Impression Materials
A. Syrek et al.

Improved taste

In-vivo study: Evaluation of Taste and Comfort of Polyether Impression Materials

A. Syrek, O. Brinkmann, B. Cerny, B. Rauch

Published in: J Dent Res 97 (Spec Iss B): 3309 (IADR), 2018

Randomized, cross-over, single blinded, internal 3M study assessing the taste and comfort of two polyether impression materials. A total of 70 subjects received one impression with each material in a randomized order in dual-arch trays. After setting of the materials and removal of the impressions from the mouth, subjects were asked to give their feedback on taste and comfort of each material on a visual analog scale (VAS).

Objectives:

1. Compare the taste of the new polyether impression material with standard polyether impression material
2. Compare the comfort of both impression materials

Material tested

Results

Scientific Data

Improved taste

Material tested

Improved taste

3M™ Impregum™ Penta™ Super Quick Medium Body

and

3M™ Impregum™ Penta™ Polyether Impression Materials

CLOSE

Material tested

Results

Scientific Data

Improved taste

Results

The new Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material revealed statistically significant higher taste and comfort ratings in this study. It had a more pleasant taste and more patient comfort compared to Impregum Penta Impression Material.

CLOSE

Material tested
Results

Mechanical properties
Scientific Data

Mechanical properties

	3M™ Impregum™ Super Quick Light Body Polyether Impression Material*	3M™ Impregum™ Penta™ Super Quick Medium Body Polyether Impression Material**	3M™ Impregum™ Penta™ Super Quick Heavy Body Polyether Impression Material***
Consistency A+B [mm] (ISO 4823:2015)	40.5	35.0	33.0
Recovery from deformation [%] (ISO 4823:2015)	99.0	97.6	97.9
Strain in compression (ISO 4823:2015)	2.9	2.8	2.0
Detail reproduction (ISO 4823:2015)	pass	pass	pass
Linear dimensional change [%] (ISO 4823:2015)	-0.38	-0.16	-0.12
Shore hardness after 15 min/24 h (ISO 7619-1)	54/55	50/54	57/60
Tensile strength after 24 h [MPa] (3M Internal SOP)	2.33	1.85	2.16
Toughness after 24 h [J] (3M Internal SOP)	0.70	0.79	1.00
Contact angle initial, on set material [°] (3M Internal SOP)	62	66	45
Working time at 23°C [min:sec] (according to IFU)	0:45	0:45	0:45
Intra-oral setting time [min:sec] (according to IFU)	2:00	2:00	2:00

* Batch No. #VT-PENG-Abf_G-0009

** Batch No. Base #VT-PENG-B-0008, Cat #VT-PENG-K-0007

*** Batch No. Base #4202097, Cat #4230412

CLOSE

Downloads

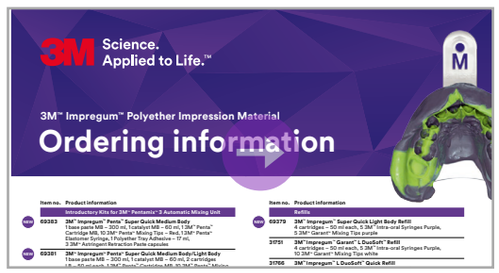
Product information:

- Product brochure
- Product portfolio
- Competitive comparisons
- Product video

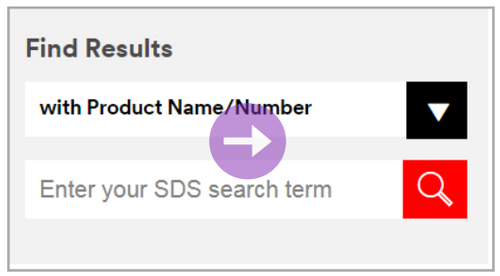
Operatory guides:

- Monophase impression
- 1-step impression
- 1-step dual-arch impression
- Lab handling guidelines for polyether impressions

Ordering information:



Safety Data Sheet:



Competitive comparisons
Downloads

How does your material measure up?
Discover the difference.

3M™ Impregum™ Super Quick Light Body	VS	Identium® Light Fast Impression Material
3M™ Impregum™ Super Quick Light Body	VS	Panasil® Initial Contact Light VPS Impression Material
3M™ Impregum™ Super Quick Light Body	VS	Flexitime® Light Flow VPS Impression Material
3M™ Impregum™ Super Quick Light Body	VS	Aquasil® Ultra XLV Fast Set VPS Impression Material
3M™ Impregum™ Super Quick Light Body	VS	Aquasil® Ultra LV Fast Set VPS Impression Material

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General

FAQs

Are you planning to substitute a current material with 3M™ Impregum™ Super Quick Polyether Impression Material?

No, with the launch of Impregum Super Quick Material 3M extends the polyether impression material portfolio. All current Impregum and Impregum Quick Materials will be kept in the portfolio.

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General

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Are there specifics to be considered regarding the allergy potential of 3M™ Impregum™ Super Quick Polyether Impression Material?

Based on the biocompatibility evaluation, which included an evaluation for the sensitization potential of the product, the sensitization potential of Impregum Super Quick Material was found to be low and not different from that of other 3M impression materials.

CLOSE

What safety data supports 3M™ Impregum™ Super Quick Polyether Impression Material?

Impregum Super Quick Material was evaluated using international standards for biocompatibility – specifically, the evaluation was structured according to ISO 10993 (Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process) and ISO 7405 (Dentistry – Evaluation of biocompatibility of medical devices used in dentistry). These standards provide a framework of toxicological endpoints that must be included in a product evaluation based on the nature and duration of body contact.
For impression materials, the toxicological endpoints include: cytotoxicity, irritation and sensitization (ability to cause an allergic reaction). The result of the biocompatibility evaluation, which was conducted by a board-certified toxicologist, indicates that the product is safe for its intended use.

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Is 3M™ Impregum™ Super Quick Material indicated for implant impressions?

Can I use Impregum Super Quick Material for larger cases?

What is our recommendation for Clear Tray Aligner impressions? Can Impregum Super Quick Material be used?

What kinds of impression trays are suitable for Impregum Super Quick Impression Material?

Does 3M™ Astringent Retraction Paste influence the setting of impression materials?

Are specific limitations to consider when using Impregum Super Quick Material (retraction, gloves)?

Is Impregum Super Quick Material compatible with other dental materials such as cements and fillings?

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Indications and compatibility with other impression procedure products

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Is 3M™ Impregum™ Super Quick Material indicated for implant impressions?

Yes, Impregum Super Quick Material is indicated for implant impressions.
There are no constraints but it is especially suited for single-unit implant cases.

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Indications and compatibility with other impression procedure products

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Can I use 3M™ Impregum™ Super Quick Material for larger cases?

Impregum Super Quick Material can be used for all cases where 45 seconds working time are sufficient. There is no contraindication. 3M recommends but not limits using Impregum Super Quick Material or 1 to 2 units.

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What is our recommendation for Clear Tray Aligner impressions? Can 3M™ Impregum™ Super Quick Material be used?

Impregum Super Quick Material is not recommended for Clear Tray Aligner impressions, but 3M™ Imprint™ 4 VPS Impression Material is excellently suited for Clear Tray Aligner impressions. The materials should be chosen depending on the technique the dentist wants to use.

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Indications and compatibility with other impression procedure products

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What kinds of impression trays are suitable for 3M™ Impregum™ Super Quick Material?

All impression trays, full arch, quadrant and dual-arch impression trays generally used for precision impressions are suitable (metal and plastic trays, non-perforated and perforated trays, stock and custom trays). Generally, 3M recommends the use of rigid trays. Usage of a polyether tray adhesive is recommended unless using the 3M™ Impression Tray where a retention fleece makes the usage of tray adhesives unnecessary.

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Does 3M™ Astringent Retraction Paste influence the setting of impression materials?

As with all astringents, Astringent Retraction Paste may inhibit the setting of 3M™ Impregum™ Super Quick Material. The paste must be completely rinsed off with air-water spray and suction prior to impression taking.

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Indications and compatibility with other impression procedure products

Are there specific limitations to consider when using 3M™ Impregum™ Super Quick Material (retraction, gloves)?

Since Impregum Super Quick Material is based on proven 3M polyether chemistry, there are no specific limitations. Retraction solutions have to be rinsed with water thoroughly before applying Impregum Super Quick Material.

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Indications and compatibility with other impression procedure products

Is 3M™ Impregum™ Super Quick Material compatible with other dental materials such as cements and fillings?

There are no specific effects expected for Impregum Super Quick Material, similar to other 3M polyether or VPS impression materials. Use caution with VPS gingival mask materials, they can be used only with a separator that forms a sealed solid waxy layer (Sherasepal-U®, Shera®). Separating materials can be applied with a brush, to insulate areas that are necessary.

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To see the answer click on the question.

- During summer, it becomes very warm in my practice, what shall I do?
- What should I do in winter times when 3M™ Impregum™ Super Quick Material has been stored below 18 °C/64 °F?
- Which mixing devices can be used with Impregum Penta Super Quick Impression Material?
- How to use the tray adhesive?
- The mixing tips cannot be attached to the Impregum Super Quick Material cartridge. I observed leakage between mixing tip and cartridge?
- Can I use the standard 3M™ Impregum™ Mixing Tips?
- How many applications are possible with the material in one 3M™ Intra-oral Syringe Purple?
- What materials can be syringed using the Intra-oral Syringe Purple?
- Is Impregum Super Quick Material performance influenced by using the Intra-oral Syringe Purple?
- Paste comes out between the 50 ml cartridge and the Intra-oral Syringe Purple while loading.
- When loading the Intra-oral Syringe Purple the catalyst and base pastes do not run evenly into the barrels of the syringe.
- When loading the Intra-oral Syringe Purple or when placing the plungers, paste flows into the mixing tip.
- How should I reclose the 50 ml cartridge?

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During summer, it becomes very warm in my practice, what shall I do?

In general, the working time of polyether impression materials is shortened at higher temperature. In this case the materials should be stored at a cooler place (but not below 18°C/64°F) or a regular-set version instead of a super quick setting material should be used. The setting reaction of polyether is less temperature sensitive compared to a VPS. According to the instructions for use, 3M™ Impregum™ Super Quick Material as well as all other 3M impression materials should be stored at 18°C/64°F – 25°C/77°F.

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What should I do in winter times when 3M™ Impregum™ Super Quick Material has been stored below 18 °C/64 °F?

- Do not use 3M™ Penta™ Impression Materials that have been stored at temperatures below 18°C/64°F, the viscosity of the pastes will increase to such an extent that there may be mixing problems in the unit. They can be used after storing for one day at a minimum temperature of 18°C/64°F. This will re-establish the usual handling characteristics without compromising quality.

- 50 ml cartridge materials: If the material is stored at temperatures below 18°C/64°F, it needs to be discarded. Precise dosing and mixing can no longer be guaranteed even if subsequently kept at room temperature for a longer period.

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Which mixing devices can be used with 3M™ Impregum™ Penta™ Super Quick Impression Material?

Manufacturer	Mixing device	3M™ Pentamix™ 2 cartridge	3M™ Pentamix™ 3 cartridge
Zhermack	Modulmix	✓	✓
DMG	Mix Star emotion	✓	✓
Heraeus Kulzer	Dynamix	✓	✗
Heraeus Kulzer	Dynamix Speed	✓	✓
Kettenbach	Sympress	✓	✓
Dentsply-Sirona	Duomix	✓	✗
Dentsply-Sirona	Duomix II	✓	✓

Heraeus Kulzer, Kettenbach and Dentsply-Sirona are using the Renfert device.

✗ Cartridge can be inserted; however the cover cannot be closed and therefore the mixing process cannot be started.
✓ Cartridge is fully compatible.

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How should I reclose the 50 ml cartridge?

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How to use the tray adhesive?

For sufficient adhesion, it is important to apply a thin layer of 3M™ Polyether Adhesive, at least 1 minute before you intend to fill the tray.

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The white mixing tips cannot be attached to the 3M™ Impregum™ Super Quick Material cartridge. I observed leakage between mixing tip and cartridge.

Please use the 3M™ Garant™ Mixing Tips Purple only. The white mixing tips do not fit on the Impregum Super Quick Material cartridge. Similarly, the purple tips do not fit on the 3M™ Impregum™ L DuoSoft™ cartridges.

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When loading the Intra-oral Syringe Purple or when placing the plungers, paste flows into the mixing tip.

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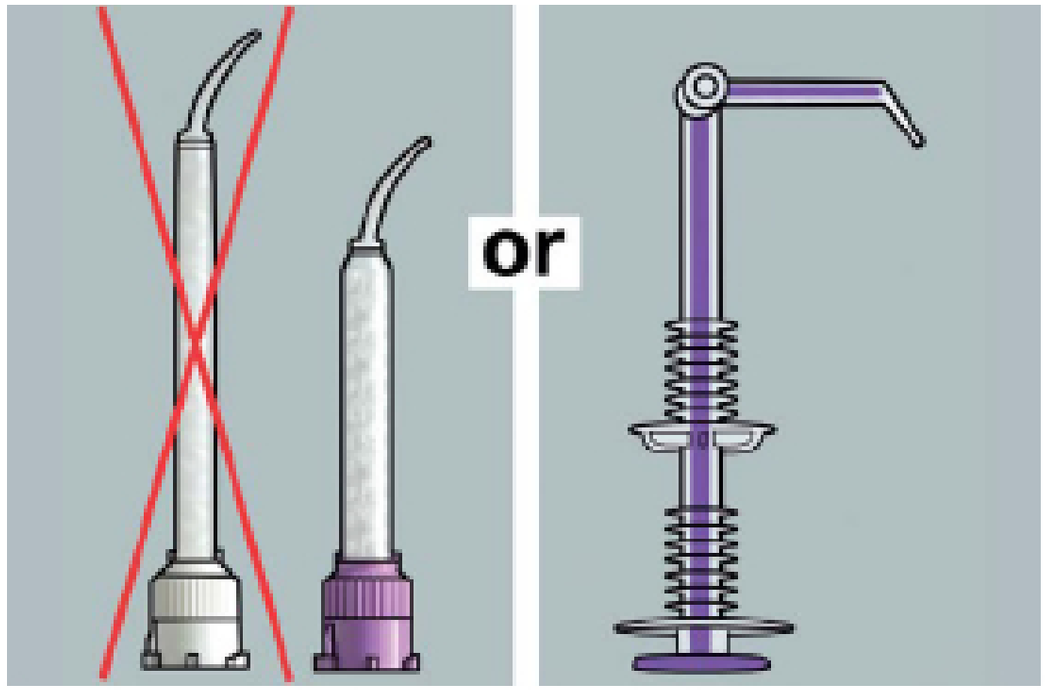
Can I use the standard 3M™ Impregum™ Mixing Tips?

Please use the 3M™ Garant™ Mixing Tips Purple only. The white mixing tips do not fit on the 3M™ Impregum™ Super Quick Material cartridge.



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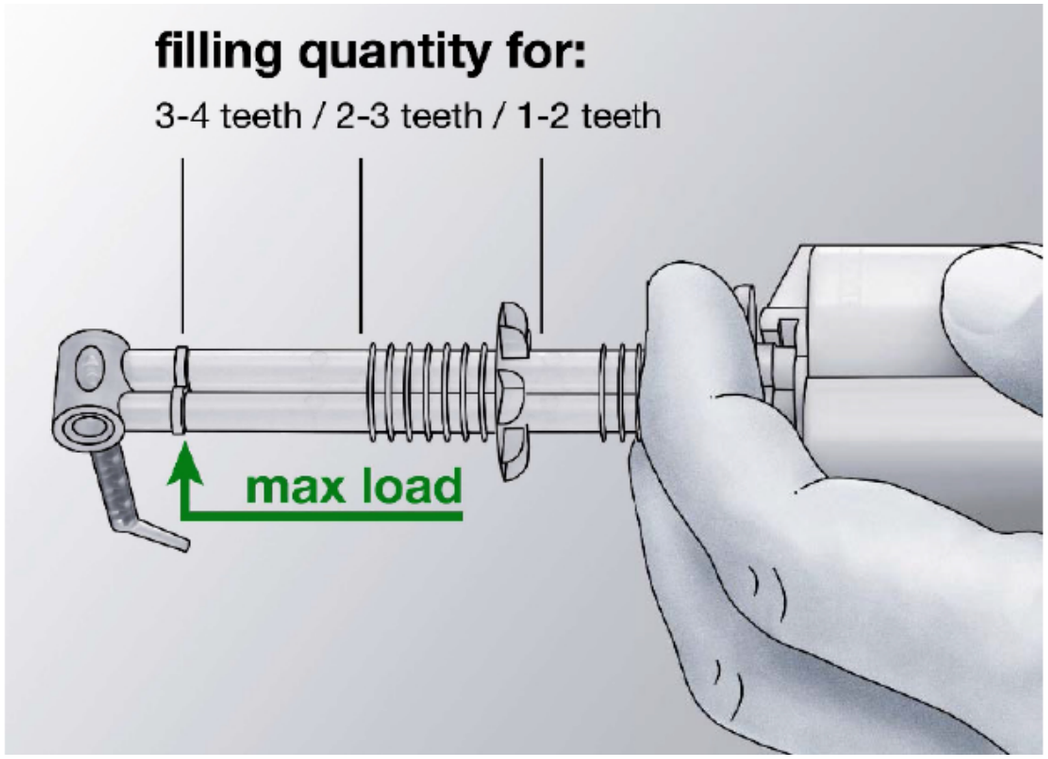
How many applications are possible with the material in one 3M™ Intra-oral Syringe Purple?

According to clinical evidence and depending on the quantity syringed around each unit, the amount of material in one syringe should be sufficient for about 2 – 4 units.



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When loading the Intra-oral Syringe Purple or when placing the plungers, paste flows into the mixing tip.

How should I reclose the 50 ml cartridge?

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What materials can be syringed using the 3M™ Intra-oral Syringe Purple?

The Intra-oral Syringe Purple is indicated for syringing preparations with all polyether precision impression materials from 3M in accordance with ISO 4823 Type 3 and Type 2, provided the impression materials are intended for syringing.

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Is 3M™ Impregum™ Super Quick Material performance influenced by using the 3M™ Intra-oral Syringe Purple?

All impression materials perform as usual when using the single-use Intra-oral Syringe Purple.

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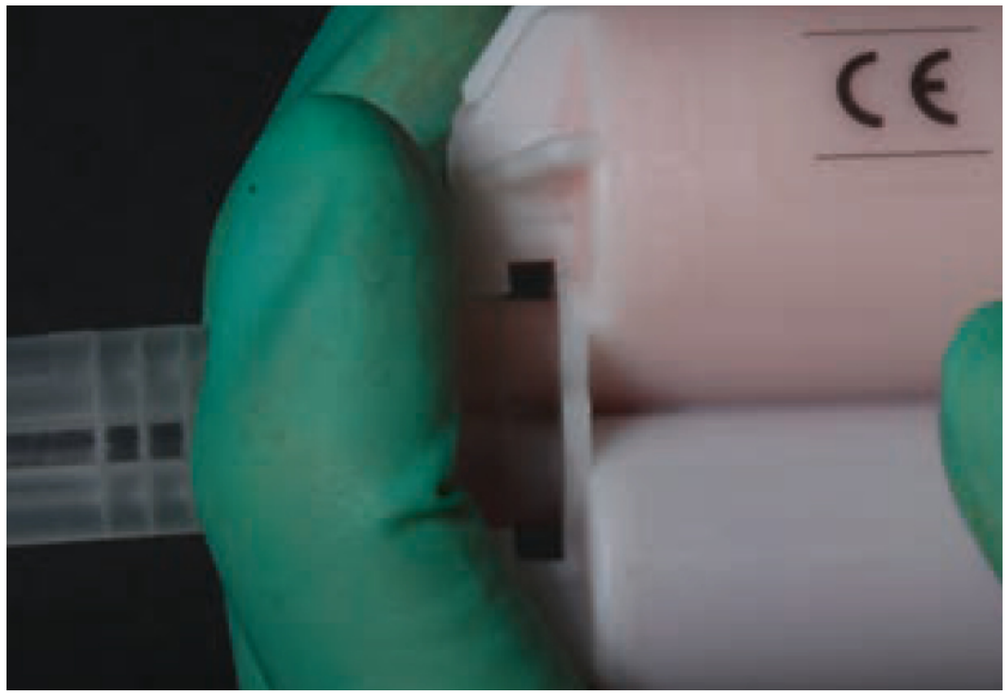
FAQs

Paste comes out between the 50 ml cartridge and the 3M™ Intra-oral Syringe Purple while loading.

Place the Intra-oral Syringe Purple directly onto the openings of the 50 ml cartridge and hold firmly in place while loading.



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When loading the 3M™ Intra-oral Syringe Purple the catalyst and base pastes do not run evenly into the barrels of the syringe.

To minimize this effect, dispense a pea-sized amount of material from the 50 ml cartridge before loading the Intra-oral Syringe Purple. Often, you cannot completely avoid uneven filling. The first small quantity of paste dispensed from the Intra-oral Syringe Purple should be discarded until the base and the catalyst pastes result in an even, homogeneous mixture.

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When loading the 3M™ Intra-oral Syringe Purple or when placing the plungers, paste flows into the mixing tip.

While loading the Intra-oral Syringe Purple, leave the mixing tip in the original angled position to prevent paste from entering the mixing tip. In an angled position overfilled paste will emerge at the side of the joint.

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Paste comes out between the 50 ml cartridge and the 3M™ Intra-oral Syringe Purple while loading.
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How should I reclose the 50 ml cartridge?

Close the 50 ml cartridge using an original cartridge cap. Alternatively close with a mixing tip containing hardened impression material. Make sure that the catalyst paste does not come into contact with the base paste to prevent paste cross-contamination.

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Can 3M™ Impregum™ Super Quick Material be combined with VPS materials?

No, VPS and polyether materials are chemically not compatible.

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How does the new Impregum Super Quick wash material viscosity correspond to the existing Impregum wash viscosities?

When using the 3M™ Intra-oral Syringe Purple: Why is the mixing quality inhomogeneous? Or why does the impression material not set properly?

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Can Impregum™ Super Quick Material be used with other 3M polyether materials?

Yes, but it is not recommended. If Impregum Super Quick Material is combined with other Impregum or 3M™ Permadyne™ Polyether Impression Materials the longer intra-oral setting time does apply.

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How does the new Impregum Super Quick wash material viscosity correspond to the existing Impregum wash viscosities?

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Does the working time of the materials depend on the temperature?

Like all chemically setting materials the working time for 3M™ Impregum™ Super Quick Impression Material depends on the temperature. At room temperatures above 25°C/77°F, the working times for all Impregum products are shorter compared to the values given in the instructions for use. According to the IFU, Impregum Super Quick Material as well as all other 3M impression materials should be stored at 18/64°F – 25°C/77°F.

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What is the difference between the working and setting times of 3M™ Impregum™ Soft Quick, Impregum Quick and regular-setting Impregum Polyether Impression Materials?

Working time: The regular-setting Impregum Materials offer 1:45 min., the "Quick" products max. 1:00 min., and the new Impregum Super Quick Material offers 45 seconds maximum working time. Since 3M polyether impression materials are less affected by temperature, the extra- and intra-oral working time are the same.

Intra-oral setting time: The intra-oral setting time of Impregum Super Quick Material has been reduced significantly – to only 2 minutes. Unused working time does not need to be added to the intra-oral setting time for the Impregum Quick and Super Quick materials. In contrast to regular-setting Impregum products, 3M does not indicate a "total setting time" for Impregum Quick and Super Quick Materials.

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When using the 3M™ Intra-oral Syringe Purple: Why is the mixing quality inhomogeneous? Or why does the impression material not set properly?

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What is the intra-oral and what is the extra-oral working time for 3M™ Impregum™ Super Quick Material?

In contrast to most VPS materials, only one working time is given in the instructions for use. The setting reaction of 3M polyether materials are less temperature sensitive compared to VPS. Therefore, only one valid extra- and intra-orally working time is given.

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How does the new Impregum Super Quick wash material viscosity correspond to the existing Impregum wash viscosities?
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Do I have to use the full working time?

No, you can use any time up to the maximum working time of 45 seconds. The intra-oral setting time of 2 minutes remains constant, regardless of the working time used.

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The working time of 3M™ Impregum™ Super Quick Material is too short.

Impregum Super Quick Material offers 45 seconds intra-oral syringing time and 45 seconds working time at room temperature – this time allows for syringing 1 or 2 units and inserting the tray within the 45 seconds working time. The tray should be inserted slowly – so plan in a couple of seconds for tray insertion. This is the reason why we recommend the “Super Quick” versions only for 1 or 2 unit cases. If the dentist wants to take a little more time or the 3M™ Pentamix™ Automatic Mixing Unit is not in the same operatory, 3M recommends to use a regular-setting material.

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When should the tray be inserted?

The tray should be inserted ideally immediately after the syringing is finished, so the tray should be ready by then. The tray must be inserted within the intra-oral working time.

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When should I set the timer? At start of mixing?

Just set the timer as soon as the tray is inserted in the mouth. The tray can be removed from the mouth after the indicated intra-oral setting time which is 2:00 minutes for 3M™ Impregum™ Super Quick Material. To assure staying within the given working times you might find it helpful to use a second timer.

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How does the new Impregum Super Quick wash material viscosity correspond to the existing Impregum wash viscosities?

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How does the new 3M™ Impregum™ Super Quick wash material viscosity correspond to the existing Impregum wash viscosities?

The new Impregum Super Quick Wash Material shows the same consistency according to the ISO standard measurement. Dentists might recognize a difference to the other Impregum wash materials. Impregum Super Quick Material shows a high thixotropy/structural viscosity, i.e. it flows well when syringing but stays more stable than the existing Impregum wash materials at the preparation afterwards.

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When using the 3M™ Intra-oral Syringe Purple:
Why is the mixing quality inhomogeneous? Or why does the impression material not set properly?

Make sure you are using the correct syringe. Use the purple syringe for 3M™ Impregum™ Super Quick Material (2:1) and the green one for VPS (1:1) wash materials. A completely even filling is often not possible. Therefore, discard the first amount of syringed material per the instructions for use.

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When using the 3M™ Intra-oral Syringe Purple: Why is the extrusion force so high?

When using the Intra-oral Syringe Purple: Is it possible to use it with an angled mixing tip?

When using the Intra-oral Syringe Purple: During application I observed leakage at the joint.

Why is the mixing quality inhomogeneous?
Or why does the impression material not set properly?

Is it useful to air-blow the wash material onto the teeth and margins to get better detail of the impression?

I observe void formation at the preparation margin. What can I do to avoid that?

How to remove the impression from the patient´s mouth?

What are the reasons for poor bonding of the wash material to the tray material?

What can be the cause of smeary or greasy impression surfaces in the preparation area?

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Is Impregum Super Quick Material scannable?

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When using the 3M™ Intra-oral Syringe Purple: Why is the extrusion force so high?

3M™ Impregum™ Super Quick Materials are tested for an acceptable extrusion force. Please make sure that:

- The Intra-oral Syringe Purple is completely activated and the mixing tip is in the 180° straight position.
- The material does not set in the mixing tip before or during use.

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When using the 3M™ Intra-oral Syringe Purple: Is it possible to use it with an angled mixing tip?

No, the mixing tip has to be in a 180° straight position. Otherwise, the extrusion force would be higher and a part of the paste would be emerged at the joint venting valve.

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When using the 3M™ Intra-oral Syringe Purple: During application I observed leakage at the joint.

Please be sure that the Intra-oral Syringe Purple is completely activated and the mixing tip is in the 180° straight position. Otherwise a part of the paste may emerge at the joint venting valve.

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Why is the mixing quality inhomogeneous? Or why does the impression material not set properly?

Dispense a pea-sized amount of material from the 50 ml cartridge before attaching the mixing tip. The first small quantity of paste dispensed from the mixing tip should be discarded until the base and the catalyst pastes result in an even, homogeneous mixture.

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Is it useful to air-blow the wash material onto the teeth and margins to get better detail of the impression?

3M recommends to carefully syringe wash materials around the prepared teeth as described above. When using the air-blow technique there is a risk of introducing bubbles into the wash material which can cause voids at the impression.

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I observe void formation at the margin of preparation. What can I do to avoid that?

Start spiral syringing around the tooth stump in the sulcus without stopping, and while ensuring that the mixing tip is not removed from the material. If the preparation has been cleaned with hydrogen peroxide, rinse carefully with water.

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How to remove the impression from the patient´s mouth?

Make sure to use trays in an appropriate size (not too small). For an easier removal, block out undercuts before impression taking if information is not needed. Slightly lift the edge of the impression with one finger in order to let air creep under the impression thus overcoming the vacuum. Carefully blow air or water with the air syringe between the impression and the teeth underneath.

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How to disinfect 3M™ Impregum™ Super Quick Material?
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What are the reasons for poor bonding of the wash material to the tray material?

The main reason is that the working time has been exceeded and the wash material is already setting when the tray is seated. Be sure to use compatible materials and ideally materials from one product line with same setting speed. Do not combine VPS and polyether materials.

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What can be the cause of smeary or greasy impression surfaces in the preparation area?

Such smear layers are an indication that the impression material has not set properly. One reason can be improper mixing of the material. Please be sure to discard the first amount of material. Another reason is contact with chemicals, e.g. traces of hemostatic solutions or pastes. These residues can inhibit polymerization. Also, thoroughly rinse off any retraction solution with water around the preparation. Such effects are often not seen until casting, where adhesion of plaster to the impression or the adhesion of impression material to the plaster cast can occur.

If topical anesthetics containing epinephrine are used, let the patient rinse out his mouth well before the impression is taken. If the preparation has been cleaned with hydrogen peroxide, rinse carefully with water.

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How to disinfect 3M™ Impregum™ Super Quick Material?

All commercial water-based disinfectants indicated for dental impression materials can be used. Glutaraldehyde solutions are recommended for disinfection. Follow the manufacturer's instructions for use, time, and level of disinfection required. After disinfection, rinse impression well with water and blow dry. The impression should be kept dry when sent to the laboratory. Temperatures exceeding 60°C/140°F will damage polyether impressions.

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Is 3M™ Impregum™ Super Quick Material scannable?

Impregum Super Quick Material can be scanned with impression scanners dedicated for impression scanning. Depending on scanner technology used applying scanning sprays or powders might be indicated.
With current LED line scanners (e.g. D2000, E3 from 3Shape), impression materials can be digitized without any surface treatment for easy access to CAD/CAM workflow.

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To see the answer click on the question.

How to pour 3M™ Impregum™ Super Quick Material?

What needs to be considered when pouring the impression with resin based materials?

The gingival mask shows a smeary surface. What gingival mask material can be used?

Is plating of Impregum Super Quick Material possible?

The removal of the Impregum Super Quick Material impression from the model is very difficult. What shall I do?

What are the ideal storage conditions for Impregum Super Quick Material?

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How to pour 3M™ Impregum™ Super Quick Material?

The cast should be prepared from the impression with commercial gypsum stone no earlier than 30 minutes and no later than 14 days after making the impression.
Do not use surfactants (de-bubblizers).

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What needs to be considered when pouring the impression with resin based materials?

When pouring polyether impressions with epoxy, or any urethane resin based materials, a separator must be used.

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The gingival mask shows a smeary surface. What gingival mask material can be used?

Choosing the right gingival mask material in combination with the right separating material is important: Polyether materials from 3M (3M™ Impregum™, 3M™ Permadyne™) can be used with common separators based on silicone, wax, or petrolatum (vaseline). C-silicones (GI-MASK®, Coltène®) can be used without a separator. Use caution with A-silicones (VPS), they can be used only with a separator that forms a sealed solid waxy layer (Sherasepal-U®, Shera®). Separating materials can be applied with a brush, to insulate areas as necessary.

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Is plating of 3M™ Impregum™ Super Quick Material possible?

All polyether impressions can be silver-plated, but cannot be copper-plated.

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The removal of the 3M™ Impregum™ Super Quick Material impression from the model is very difficult. What shall I do?

Heating the impression to about 40°C/104°F after the cast has set will help in the removal of the cast. Block out, or minimize undercuts if information is not needed. Isolating or blocking out the palatal area will help in removal of the model on a maxillary impression with a deep vault. When making a custom tray, make sure that you have 2 – 3 mm material thickness per 1 mm undercut. You may section or cut the custom tray if it is “locked-on” the model.

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What are the ideal storage conditions for 3M™ Impregum™ Super Quick Material?

Carefully dry off impression after disinfection. Store impressions dry and below 30 °C/86 °F in the dark. Do not expose to direct sunlight and do not store when moist (e.g. storing an impression not quite dry yet in a plastic bag or together with alginate) since this may damage the impression.

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Material properties

To see the answer click on the question.

3M states that the taste of 3M™ Impregum™ Super Quick Material is improved. Nevertheless, some of my patients complain about unpleasant taste.

Do Impregum Polyether Impression Materials contain additional surfactants?

What is the Shore hardness of Impregum Super Quick Material?

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3M states that the taste of 3M™ Impregum™ Super Quick Material is improved. Nevertheless, some of my patients complain about unpleasant taste.

3M conducted a clinical study. In this study, Impregum Super Quick Material showed a more pleasant taste and increased patient comfort compared to existing Impregum Penta Impression Material. The aftertaste was also rated much better. Nevertheless, the taste sensitivity is very subjective and differs widely among individuals. Some patients will still be complaining, particularly patients who do not like the minty taste.

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Do 3M™ Impregum™ Polyether Impression Materials contain additional surfactants?

The intrinsic hydrophilicity is caused by polyether polymers. Impregum Materials do not contain typical surfactants used in VPS materials.

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What is the Shore hardness of 3M™ Impregum™ Super Quick Material?

Impregum Super Quick Material has a Shore A hardness in the range of 50 to 55.

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