

Implant Solutions

Impregum™

Polyether Impression Material



Extremely precise
for implant impressions

3M ESPE

Precise fitting

Impregum™ Penta™ Polyether Impression Material – accurate impressions for precise-fitting implants.

For the growing number of dentists who are incorporating implants into their practice, 3M™ ESPE™ – the worldwide leader in impression solutions – has developed products and simplified procedures to achieve outstanding functional and aesthetic results. Implant impressions may well be the ultimate test for impression materials. In these demanding circumstances, important characteristics such as accuracy, dimensional stability and rigidity all help to produce a long-lasting and perfectly fitting restoration.

The successful Impregum Penta polyether impression materials from 3M ESPE – tried and tested for many years and now practically a synonym for topnotch impressioning precision – offer all clinically relevant properties for optimum implant-supported prosthetic restorations.

Take the strain and uncertainty out of mixing impression materials – with the Pentamix™ 3 Mixing Unit.

Experience the speed, convenience and accuracy of mixing Impregum Penta impression material with the Pentamix™ 3 Automatic Mixing Unit. At the touch of a button, it delivers a completely homogeneous and void-free mix for highly accurate impressions and perfectly fitting restorations. The Pentamix 3 mixing unit gives you ultimate efficiency and high-quality mixtures. And because it's fully automatic, it reduces strain on you and your assistants, too.



Perfect implant impressions

Impregum™ Penta™ Polyether Impression Material

The implant treatment plan can only be as accurate as the impression. The performance and detail reproduction of Impregum Penta polyether impression material help you:

- **Achieve a detailed impression on the first take.** Whether using an open or closed tray technique, or making implant or abutment-level impressions, a detailed impression reduces the chance of costly retakes.
- **Capture impressions of transfer copings with confidence.** Ensure the precise orientation and position of the implant in the mouth.



Quality



Features & benefits:

- **Precise and void-free impressions** due to outstanding initial hydrophilicity in moist environments.
- **First-rate detail reproduction and intimate contact with transfer coping** thanks to excellent flow properties.
- **Consistent flow behaviour throughout working period and fewer distortions** due to unique “snap-set” behaviour.
- **Secured implant coping position** because of rigidity of polyether material.
- **Fast-setting “Quick” version cuts working and setting times** significantly.
- **Fresh minty flavor and easier removability** of “Soft” materials.

Precise fitting

Impregum™ Penta™ Polyether Impression Material – the leader in implant impressions.



Among dental professionals, Impregum polyether material stands for the ultimate in impression precision and is also a preferred choice for challenging implant impressions.

Results from a survey* carried out in Europe (Germany, Italy) and the U.S. show that Impregum Penta polyether impression material from 3M ESPE is the impression material most often used for implant-supported prosthetic restorations.

Of the dentists who participated in the survey, 75% of those in Germany, close to 50% in Italy, and 36% in the U.S. prefer 3M ESPE polyether materials to restore implants—making Impregum material the leading brand for implant impressions.

* GfK Globus 2005

Recommended by dental laboratories.



High-detail reproduction is extremely important for dental labs' work. Many dental laboratories therefore recommend specific impression materials to their dentists. According to two recent surveys** in Europe and the U.S., the majority of participating labs that make recommendations concerning impression materials would recommend Impregum polyether impression material from 3M ESPE.

** GfK Globus Labor 2005

Highly recommended

Excellent impression results using any implant system you choose.

A number of implant companies offer excellent implant options to choose from. One choice is the 3M™ ESPE™ MDI implant line. No matter which system you prefer, using Impregum Penta impression material can help you achieve your desired outcome, using the technique you decide is best for the indication. There are numerous impression techniques for making implant impressions. 3M ESPE has focused on the three most common ones to assist clinicians in making this critical decision:

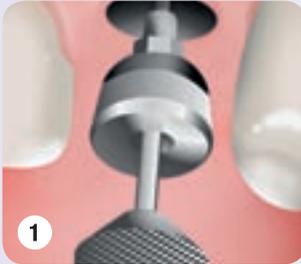
- Open tray (direct) pick-up technique
- Closed tray (indirect) transfer impression technique
- Closed tray (direct) snap-on technique

Open tray (direct)

pick-up technique

In this technique, the direct transfer coping gets “picked up” and remains in the set impression upon removal from the mouth. Once the impression has set, the screw holding the coping on the implant is accessed through the hole above/below the implant in the open tray and unscrewed to allow removal of the impression from the mouth. Once outside of the mouth, the implant analogue is connected to the transfer coping prior to pouring the stone model.

Removal of healing abutment



- 1
- Remove healing abutment
 - Confirm prosthetic platform is free of bone debris or soft tissue
 - Seat the coping and secure it—using the method recommended by the implant manufacturer

Placement of transfer coping



- 2
- Verify correct seating of the coping with a radiograph

Tray selection—open tray try-in



- 3
- Try-in the tray and create access window
 - Ensure there is appropriate clearance for entire arch with no contact between tray and tissue
 - Evaluate tray-coping fit, ensuring there is enough clearance for coping to fit easily through window in tray

Load tray



- 4
- Load the tray material after using proper bleeding technique
 - Keep the mixing tip submerged in the tray material to prevent voids
 - Do not under-fill the tray

Syringe around coping



- 5
- While loading the tray, syringe the wash material around the coping, and ensure continuous flow around the entire coping
 - Keep the mixing tip submerged in the wash material at all times to avoid trapping air bubbles

Tray seating and immobilization



- 6
- Insert the loaded tray straight and evenly into mouth—avoid rotation
 - Don't let patient bite down on tray
 - Immobilize the tray using passive pressure
 - Follow the recommended setting time in the mouth—using a timer

Tray and coping removal



- 7
- Once impression material has set, remove screw holding coping in place, following implant manufacturer's instructions
 - Remove tray from mouth carefully, with coping embedded in the set impression
 - Replace healing abutment immediately to prevent soft tissue collapse

Evaluate final impression with coping inserted (indexed)



- 8
- Rinse impression before inspection
 - Evaluate the impression for correct transfer and common impression errors (see side bar on this page)
 - Attach the implant analogue to coping embedded in the impression
 - Dry and disinfect impression before shipping

Bite registration



- 9
- Apply a layer of 3M ESPE Imprint™ Bite Material with a thickness of approximately 5 mm occlusal-incisally to the entire lower arch
 - Have patient bite into proper occlusion
 - Disinfect prior to shipping
 - Make an impression of the opposing arch and submit it with case



Tips

Common causes for retakes:

Distorted impression:

To prevent, stabilize tray as material is setting

Voids and bubbles:

Use enough material and keep tip submerged in extruded material

Pick-up technique:

Tray-abutment contact: Widen implant windows in tray

RECOMMENDED MATERIAL
Impregum™ Penta™
Penta™ Soft

Closed tray (indirect) transfer impression technique

In this technique, the indirect transfer coping remains on the implant during removal of the set impression from the mouth. Once the impression has been removed, the coping is removed from the implant and connected with the implant analogue. The coping/analogue assembly is then indexed (transferred) back into its corresponding position in the impression.

Removal of healing abutment



- 1
- Remove healing abutment
 - Confirm prosthetic platform is free of bone debris or soft tissue
 - Seat the coping and secure it—using the method recommended by the implant manufacturer

Placement of transfer coping



- 2
- Verify correct seating of the coping with a radiograph
 - Block out hex-hole with material or components recommended by the manufacturer

Tray selection—open tray try-in



- 3
- Try-in the tray
 - Ensure there is appropriate clearance for entire arch
 - Evaluate tray-coping fit, ensuring there is no impingement/interference

Load tray



- 4
- Load the tray material after using proper bleeding technique
 - Keep the mixing tip submerged in the tray material to prevent voids
 - Do not under-fill the tray

Syringe around coping



- 5
- While loading the tray, syringe the wash material around the coping, and ensure continuous flow around the entire coping
 - Keep the mixing tip submerged in the wash material at all times to avoid trapping air bubbles

Tray seating and immobilization



- 6
- Insert the loaded tray straight and evenly into mouth—avoid rotation
 - Don't let patient bite down on tray
 - Immobilize the tray using passive pressure
 - Follow the recommended setting time in the mouth—using a timer

Tray and coping removal



- 7
- Remove tray from mouth carefully after end of setting time
 - Remove coping post or assembly from implant after tray has been removed, following implant manufacturer's instructions
 - Replace healing abutment immediately to prevent soft tissue collapse
 - Assemble coping with implant analogue

Evaluate final impression with coping inserted (indexed)



- 8
- Rinse impression before inspection
 - Evaluate the impression for correct transfer and common impression errors (see side bar on this page)
 - Insert coping assembly into impression
 - Ensure the coping is properly aligned (indexed) within the impression
 - Dry and disinfect impression before shipping

Bite registration



- 9
- Apply a layer of 3M ESPE Imprint™ Bite Material with a thickness of approximately 5 mm occlusal-incisally to the entire lower arch
 - Have patient bite into proper occlusion
 - Disinfect prior to shipping
 - Make an impression of the opposing arch and submit it with case



Tips

Common causes for retakes:

Distorted impression:

To prevent distortion, stabilize the tray while material is setting

Voids and bubbles:

Use enough material and keep tip submerged in extruded material

Insufficient capture of detail around coping:

Syringe material without creating air bubbles around copings by keeping mixing tip submerged



Closed tray (direct)

snap-on technique

The snap-on procedure is best described as a hybrid between the two techniques shown previously. In this closed tray procedure, the direct transfer coping “snaps-on” to the top of the implant abutment in the mouth. Once the impression has set, the coping becomes embedded in the impression and is pulled off of the implant abutment when the set impression is removed from the mouth. Once outside of the mouth, the implant analogue is connected to the transfer coping prior to pouring the stone model.

Removal of healing abutment



- Remove healing abutment
- Confirm prosthetic platform is free of bone debris or soft tissue

Placement of transfer coping



- Seat the abutment and secure it—using the method recommended by the implant manufacturer
- Attach the snap-on transfer coping assembly (see completed assembly in step 5)

Tray selection—open tray try-in



- Try-in the tray
- Ensure there is appropriate clearance for entire arch
- Evaluate tray-coping fit, ensuring there is no impingement/interference

Load tray



- Load the tray material after using proper bleeding technique
- Keep the mixing tip submerged in the tray material to prevent voids
- Do not under-fill the tray

Syringe around coping



- While loading the tray, syringe the wash material around the coping, and ensure continuous flow around the entire coping
- Keep the mixing tip submerged in the wash material at all times to avoid trapping air bubbles

Tray seating and immobilization



- Insert the loaded tray straight and evenly into mouth—avoid rotation
- Don't let patient bite down on tray
- Immobilize the tray using passive pressure
- Follow the recommended setting time in the mouth—using a timer

Tray and coping removal



- Once impression material has set, remove tray from mouth carefully, with snap-on coping embedded in the set impression
- Depending on the implant system used, either
 - A) Replace healing abutment immediately to prevent soft tissue collapse, OR
 - B) Create the appropriate temporary restoration to protect the abutment
- Assemble coping with implant analogue

Evaluate final impression with coping inserted (indexed)



- Rinse impression before inspection
- Evaluate the impression for correct transfer and common impression errors (see side bar on this page)
- Dry and disinfect impression before shipping

Bite registration



- Apply a layer of 3M ESPE Imprint™ Bite Material with a thickness of approximately 5 mm occlusal-incisally to the entire lower arch
- Have patient bite into proper occlusion
- Disinfect prior to shipping
- Make an impression of the opposing arch and submit it with case



Tips

Common causes for retakes:

Distorted impression:

To prevent, stabilize the tray while material is setting

Voids and bubbles:

Use enough material and keep tip submerged in extruded material

Snap-on technique:

Coping-tray contact: Try-in the tray prior to making impressions and ensure proper size

RECOMMENDED MATERIAL
Impregum™ Penta™
Penta™ Soft

Ordering Information



Impregum™ Penta™ Intro Kit (P31684)



Impregum™ Penta™ Soft Intro Kit (P31734)



Impregum™ Penta™ Soft Quick Intro Kit (P31770)

Item No. Product Information

Impregum™ Polyether Impression Material

P31684 For Pentamix™ 3: Impregum™ Penta™ Intro Kit

1 base paste–300 ml, 1 catalyst–60 ml, 1 Impregum™ Penta™ cartridge, 10 Penta™ Mixing Tips red, 1 Penta™ elastomer syringe, 1 bottle polyether adhesive–17 ml

31684 For Pentamix™ 2: Impregum™ Penta™ Intro Kit

Kit contents see Item No. P31684

P31734 For Pentamix™ 3: Impregum™ Penta™ Soft Intro Kit

1 base paste–300 ml, 1 catalyst–60 ml, 1 Impregum™ Penta™ Soft cartridge, 10 Penta™ Mixing Tips red, 1 Penta™ elastomer syringe, 1 bottle polyether adhesive–17 ml

31734 For Pentamix™ 2: Impregum™ Penta™ Soft Intro Kit

Kit content see Item No. P31734

P31770 For Pentamix™ 3: Impregum™ Penta™ Soft Quick Intro Kit

1 base paste–300 ml, 1 catalyst–60 ml, 1 Impregum™ Penta™ Soft Quick cartridge, 10 Penta™ Mixing Tips red, 1 Penta™ elastomer syringe, 1 bottle polyether adhesive–17 ml

31770 For Pentamix™ 2: Impregum™ Penta™ Soft Quick Intro Kit

Kit content see Item No. P31770

Pentamix™ 3 Automatic Mixing Unit & Accessories

77871 1 Pentamix™ 3–230 V Western Europe

77872 1 Pentamix™ 3–230 V CH

77873 1 Pentamix™ 3–230 V GB

77601 Wall-Mount Kit Pentamix™ 3

71512 50 Penta™ Mixing Tips red

71210 Elastomer Syringe Kit

1 syringe, 4 tips, 4 barrels, 1 brush

Our Expertise™ guidebooks – your resource for optimum results

Impression Compendium

A formula for success: All about impressing – with expert theoretical and practical knowledge that provides valuable guidelines on achieving a perfect professional outcome.

Impression Trouble Shooting Guide

Based on our experience, know-how and clinical input, this guide helps to identify common problems when making an impression and provides you with solutions.



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