

A close-up photograph of a syringe-like applicator dispensing a thick stream of white, porous, spherical particles. The particles are falling onto a dark, textured surface, creating a pile. The background is a blurred blue with bokeh light effects.

easy-graft
synthetic bone graft substitutes

**Predictable regeneration.
Simple handling.**



[PRODUCT OVERVIEW](#)

[INDICATIONS & USE](#)

[TECHNOLOGY](#)

[SOLUTIONS AT A GLANCE](#)

Synthetic bone grafting designed to make it easy

GUIDOR® *easy-graft* is a patented* bone grafting solution offering a fully resorbable, synthetic bone graft substitute to clinicians who seek stability, osteoconductivity and control of placement. With over 250,000 applications worldwide¹, GUIDOR *easy-graft* has established itself as a leading synthetic bone grafting material for your ridge preservation and other bone regenerative needs.

GUIDOR® *easy-graft* is a complete system that helps clinicians provide more predictable clinical results. Each system is comprised of β -tricalcium phosphate (β -TCP) granules coated with a polylactide-co-glycolide (PLGA) that are mixed with N-methyl-2-pyrrolidone (NMP) liquid activator called BioLinker to form a permeable, moldable material which hardens to form a stable, porous scaffold.



Fully Resorbable bone grafting

- *easy-graft* CLASSIC consists of a phase-pure β -TCP
- the profile is fully resorbed within 5 to 15 months
- In clinical practice, resorption of phase-pure β -TCP is observed after shorter healing periods
- No synthetic bone graft product remains in the body



GUIDOR *easy-graft* supports bone regeneration and bone formation. The application of the material does not guarantee a treatment success. The success of the therapy depends on many factors such as surgical technique and habits, age and the regeneration potential of the patient.

* US Patent: 7,731,756; 8,153,148; 8,163,030.

Predictable graft placement with clear indications and a simple, step-by-step workflow

GUIDOR *easy-graft* CLASSIC is intended for the filling of mostly unloaded and preferably multi-walled dental or maxillofacial bone defects. The implantation site should be free of infections and soft or granulation tissue. Indications may include:

- Defects after removal of bone cysts
- Periodontal defects
- Peri-implant defects
- Augmentation of the alveolar crest (e.g. Guided Bone Regeneration – GBR)
- Defects after root-end resection
- Extraction sockets
- Defects after surgical removal of retained teeth
- Sinus floor elevation procedures
- Defects after removal of autologous bone

Step-by-step application



1

Add the supplied BioLinker to the syringe containing the granules.



2

Gently pull back the plug to wet the granules, then move the plunger back and forth 1-3 times for uniform activation.



3

Discard any excess BioLinker



4

Apply the material directly into the defect.

Please note

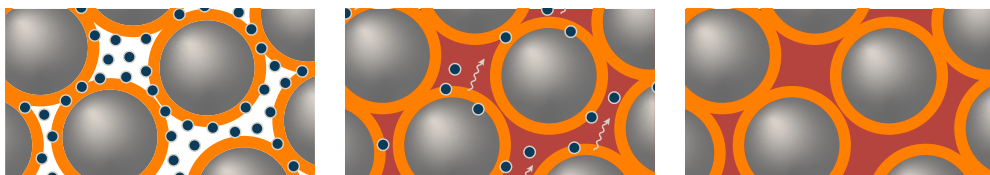
The product should be packed / gently condensed into the defect site. Excess granules may occasionally migrate into the soft tissue. These granules can be easily removed at re-entry, if desired.



easy-graft
designed for easy
handling and placement

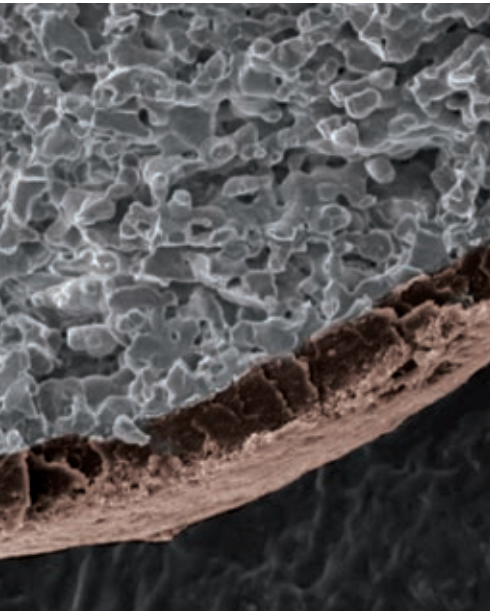
Controlled in-situ hardening through a simple material interaction

Upon mixing, the BioLinker temporarily softens the polymer coating, creating a cohesive and moldable graft material. Once in contact with body fluids, the BioLinker is flushed out, allowing the material to harden in situ. Within approximately one minute, a stable, porous scaffold of interconnected granules is formed.



Three integrated components working together for stable graft regeneration

Three complementary components are precisely coordinated to ensure secure graft placement and predictable handling. While the graft hardens in situ, the system gradually transitions to support natural bone regeneration. This controlled interaction is designed to maintain stability during the early healing phase.



1

Calcium Phosphate Granules

Osteoconductive scaffold supporting bone regeneration.

2

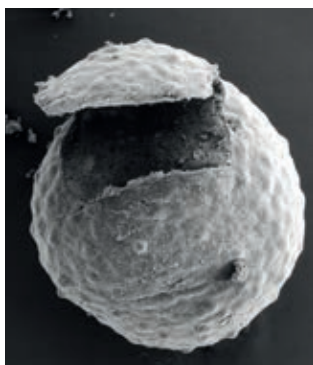
PLGA Polymer Coating

Each granule is coated with a 10 µm layer of polylactic-co-glycolic acid (PLGA). PLGA polymers are widely used in devices such as membranes, screws and plates for maxillofacial surgery, suture anchors, and cages for spinal surgery and are considered Biocompatible.

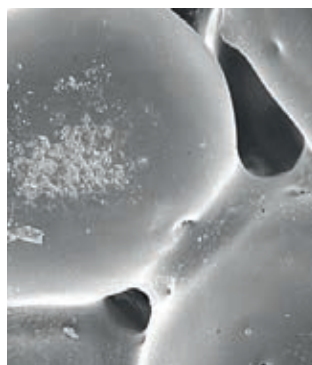
3

BioLinker-N-Methyl-2-pyrrolidone (NMP)

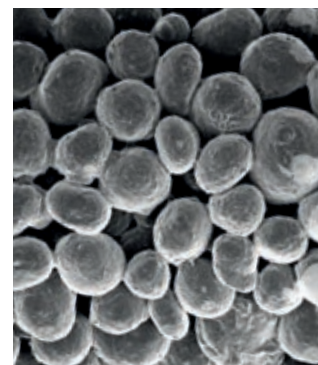
A solvent widely used in pharmaceutical and medical devices such as dental membranes, subcutaneous drug-release systems etc.



Each granule is pre-coated with PLGA.

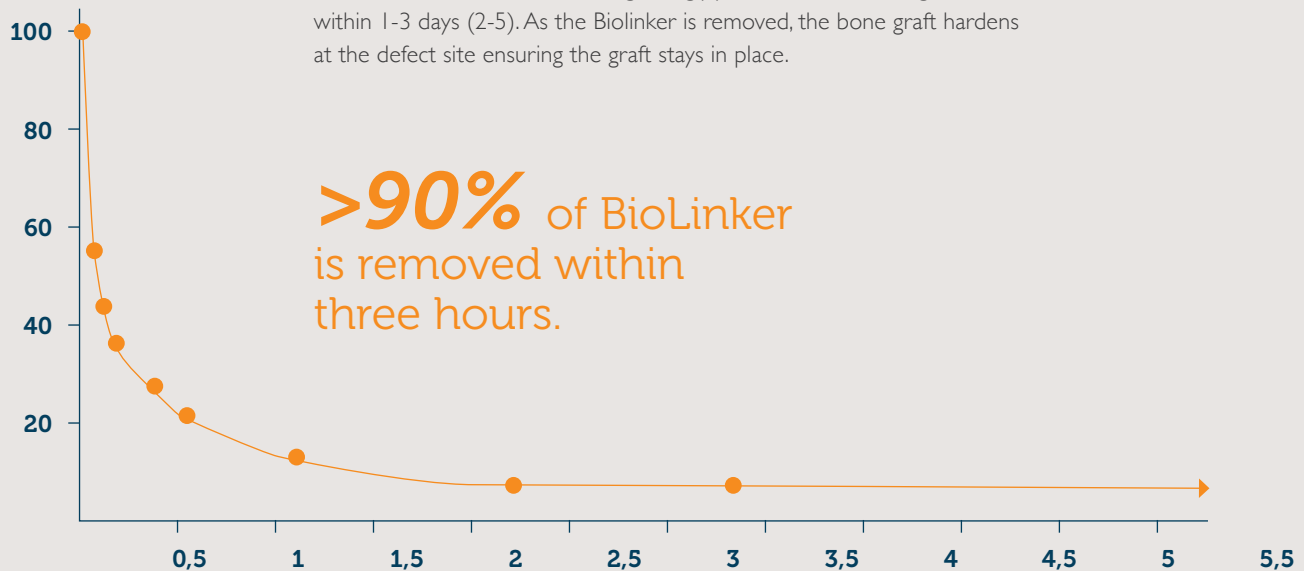


When the supplied BioLinker is added to the syringe contents it softens the polymer coating of the granules creating a sticky yet mouldable mass.



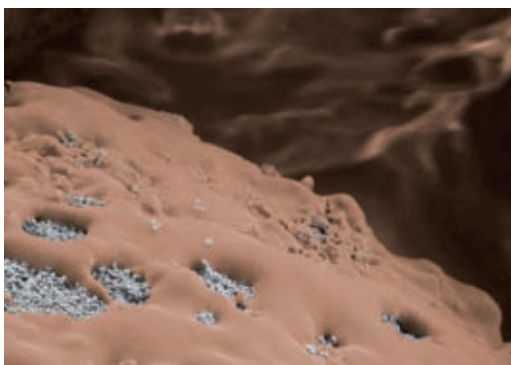
Removal of BioLinker

More than 90% of the BioLinker is eliminated from the bone graft substitute within three hours of grafting(1) and excreted through urine within 1-3 days (2-5). As the BioLinker is removed, the bone graft hardens at the defect site ensuring the graft stays in place.



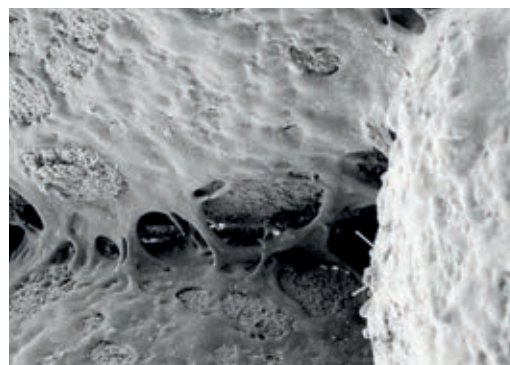
Breakdown and removal of PLGA

In parallel to the healing and regeneration process, the PLGA coating and adhesive connection between the granules gradually weakens (three to six weeks in vitro), exposing the microporous, osteoconductive scaffold. Resorption of PLGA releases small amounts of lactic and glycolic acid. Lactic acid is degraded by metabolic processes. Glycolic acid can be degraded in the body or be excreted with the urine.



During resorption

Colored electron microscope image of GUIDOR easy-graft showing resorption of the PLGA coating (orange) and exposure of biphasic calcium phosphate (white).



PLGA resorption

Electron microscope image from an in vitro degradation study.

GUIDOR *easy-graft* Solutions at a glance

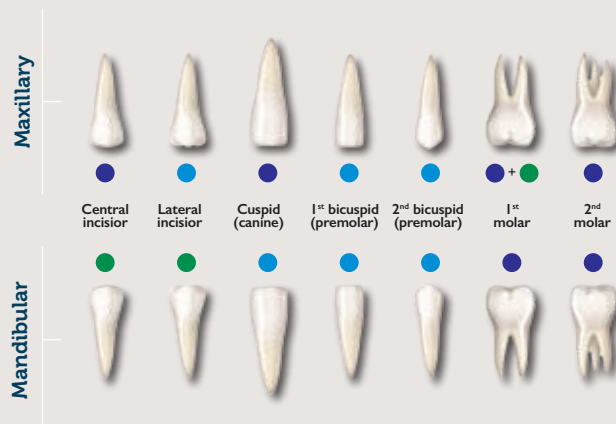
GUIDOR® *easy-graft* is a fully resorbable bone grafting system that contains a syringe filled with coated granules and an ampule of the liquid activator, Biolinker®. Once mixed, GUIDOR *easy-graft* can be dispensed and shaped directly into the defect where it will harden into a stable, porous scaffold in approximately one minute.



	➤ LARGE	➤ MEDIUM	➤ SMALL
Product Codes	C11-008	C11-078	C11-018
Granule Size	500 – 1000 µm	500 – 1000 µm	500 – 630 µm
Content	3 packs x 0,4 ml	3 packs x 0,25 ml	3 packs x 0,15 ml
Color Code	●	●	●

Size Selector: The Amount of GUIDOR *easy-graft* needed to fill a socket

The following estimates are based on GUIDOR *easy-graft* placement in dentiform sockets. Material needs in clinical use may vary.





easy-graft

Soft from the Syringe.
Hard in the Defect.

Key information and frequently asked questions

APPLICATION

Mixing with BioLinker: How long should GUIDOR *easy-graft* granules be in contact with the BioLinker in the syringe?

The granules must be completely wetted with BioLinker. A complete wetting can be achieved by moving back and forth the plunger and the plug 1 - 3 times. Typically this takes around 20 - 40 seconds.

Should defects be overfilled?

No, overfilling is not recommended.

How should GUIDOR *easy-graft* material be condensed?

Experienced GUIDOR *easy-graft* users use various aids such as flattened stoppers or the plunger of the GUIDOR *easy-graft* applicator syringe. Over larger areas the material can be evenly condensed by pressing down a piece of gauze (moistened with physiological saline solution) with the finger for 10 - 30 seconds.

Can GUIDOR *easy-graft* products be used in combination with dental membranes?

Yes, it is at the discretion of the practitioner.

When would the use of a membrane be recommended?

GUIDOR *easy-graft* products are stable and do not require a membrane for containment in 3 or 4 walled defects. Flat (non-concave defects with limited walls) and defects of a critical size may require the additional support of a barrier membrane. Sites where a full thickness periosteal relieving flap is created may also benefit from a barrier membrane for exclusion of soft tissue ingress. The decision to use a membrane is part of therapy planning and is the responsibility of the practitioner.

Can GUIDOR *easy-graft* products be mixed with autogenous bone or bone graft substitutes or with preparations such as BMP-2 and Enamel matrix proteins in the application syringe?

No, mixing GUIDOR *easy-graft* products with autogenous bone chips or foreign materials will cause the material to harden prematurely in the syringe, or will prevent the material from hardening in the defect. This means that GUIDOR *easy-graft* products will lose their unique handling advantage.

Does GUIDOR *easy-graft* adhere to the bone surface?

No. GUIDOR *easy-graft* products do not adhere to tissue and do not contain adhesives. The granules adhere to one another and form a mouldable mass because of the coating of the granules with PLGA ("sticky granules").

Can GUIDOR *easy-graft* products be ground down after hardening?

Grinding down is not recommended. The effect of the rotary forces may cause the graft to loosen in the defect, which may endanger the bone regeneration. Excess material should be removed before hardening (e.g. with a curette).

INDICATIONS

Is it necessary to cover the material with soft tissue after socket grafting?

No, the material will also heal in place without a soft-tissue cover. The material surface should be well condensed during socket preservation. The application of retention may be useful depending on the shape of the extraction socket. A temporary restoration serves to protect the graft surface from the tongue and foodstuffs. For examples of applications see the Sunstar GUIDOR guidebook for ridge preservation.

When can an implant be placed after using GUIDOR *easy-graft* products to fill the extraction sockets?

GUIDOR *easy-graft* products are osteoconductive bone graft substitutes. The time of implant placement can be selected in accordance with experience with comparable materials (e.g. β -TCP granules, bone replacement materials of bovine origin). A definite answer to this common question cannot be given, because the regeneration of bone depends on the anatomical and physiological conditions at the extraction site, and the time of implant placement depends on the treatment philosophy.

Can an implant be placed immediately with subsequent filling of the defect with GUIDOR *easy-graft*?

Yes, peri-implant gaps and bone deficiencies around implants with primary stability can be filled with GUIDOR *easy-graft* products.

Can GUIDOR *easy-graft* products be used for fixing implants without primary stability?

No. Implants must be anchored in local bone with primary stability. GUIDOR *easy-graft* products are suitable for filling bone deficits around implants anchored in pristine bone.

Is GUIDOR *easy-graft* radio opaque?

Yes, GUIDOR *easy-graft* CLASSIC is opaque to x-rays.

How long do GUIDOR *easy-graft* products remain stable in the body?

The adherence of the granules is determined by the PLGA coating. It is resorbed over a period of 3 - 6 weeks. During this period, the strength of the material gradually decreases.

Does the volume of GUIDOR *easy-graft* change during the healing process?

During the initial phase of degradation, *easy-graft* CLASSIC may swell by taking up body fluids, thus supporting a close contact to the surrounding bone tissue. When applied in larger defects, this might result in slight sensation of pressure by the patient.

References:

1. Data on file: Degradable Solutions, Wagistrasse 23 8952 Schlieren, Switzerland.
2. World Health Organization (2001). Concise International Chemical Assessment Document 35 N-Methyl-2-Pyrrolidone. Organization, W. H. Stuttgart, Wissenschaftliche Verlagsgesellschaft mbH: 32.
3. Bader M., Keener S. A. and Wrbitzky R.: Dermal absorption and urinary elimination of N-methyl-2-pyrrolidone. Int Arch Occup Environ Health (2005)78(8): 673-6.
4. Bader M., Wrbitzky R., Blaszkewicz M. and van Thriel C.: Human experimental exposure study on the uptake and urinary elimination of N-methyl-2-pyrrolidone (NMP) during simulated workplace conditions. Arch Toxicol (2007) 81 (5):335-46.
5. Bader M., Wrbitzky R., Blaszkewicz M., Schaper M. and van Thriel, C.: Human volunteer study on the inhalational and dermal absorption of N-methyl-2-pyrrolidone (NMP) from the vapor phase. Arch Toxicol (2008) 82(1): 13-20



More information at
www.guidor.com

Please refer to the Instructions for Use for description, indications, contraindications, warnings, precautions and other important information. A surgeon must always rely on his or her own professional clinical judgement when deciding whether to use a particular product when treating a particular patient. Availability of these products might vary from one given country or region to another as a result of specific local regulatory approval or clearance requirements for sale in such country or region. MS935 Rev 3, 03/2026

