

Variotime®

Product Information



**Variotime®**  
Freedom to impress.

Giving a hand to oral health.



**KULZER**  
MITSUI CHEMICALS GROUP

# Variotime®

Gain more leeway with starting the setting time.

## Benefit from straightforward, adaptable handling:

- Mixed automatically, using the Dynamix *speed 2*.
- **One material with variable applications** – for single crowns as well as for multi-unit prosthetic restorations.
- Fast Set and Regular Set **combined in only one material:**
  - **Variable** working time, ranging from 1:00–2:30 minutes.
  - **Short** intraoral setting time of only 2:30 minutes.
- **Result:** Convenient, time-saving working.

Innovative time concept		
	Variable working time	Short intraoral setting time
Single-unit impression	1:00	2:30
Multiple-unit impression	2:30	2:30

Variotime's special formula controls the polymerisation kinetics by mouth temperature and sets rapidly only after insertion into the mouth.



## Splendid performance in the wet sulcus.

### Precision of fit:

- Low dimensional changes (–0.001 %) ensure most exact dimensional accuracy.\*
- Detailed reproduction of surface roughness (details <20 µm).\*\*
- Convincing hydrophilic properties – high reproduction of details thanks to excellent flowability.

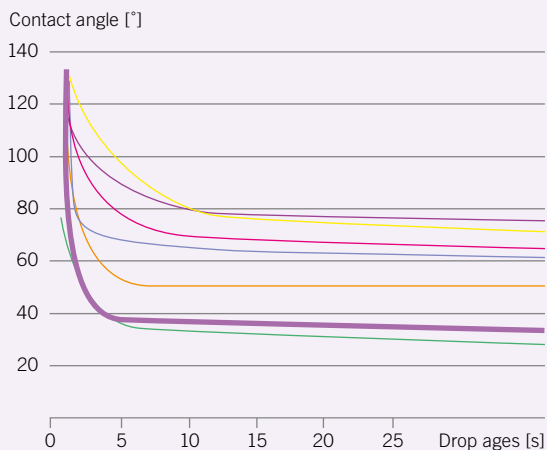
\* Source: Piwowarczyk, A. *et al.*, In Vitro Study on the Dimensional Accuracy of Selected Materials for Monophase Elastic Impression-Making, Int J Prosthodont 2002; 15: 168–174. The material tested in this study is equal to the product Variotime Monophase.

\*\* Source: Kanehira, M. *et al.*, Surface detail reproduction with new elastomeric dental impression materials. Quintessence Int 2007; 38: 479–488.

The contact angles of a water drop on Variotime Extra Light Flow – a measurement for hydrophilicity – are on the polyether level.

A high toughness enables the prevention of tearing of flashes as well as distortion upon removal.

In-vitro study: contact angles of unset impression materials



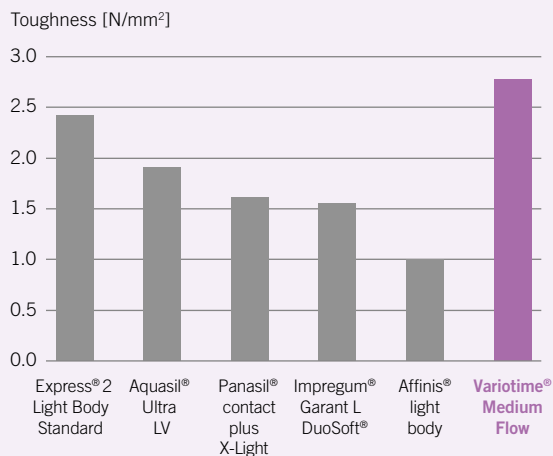
Variotime® Extra Light Flow

Panasil® contact plus x-light Express® 2 Light Body Standard Affinis® light body

Aquasil® Ultra LV Impregum® Garant L DuoSoft® Honigum® Light

Source: Geis-Gerstorfer, J., High-resolution contact-angle measurements. University of Tübingen, Germany, May 2009, data on file.

In-vitro study: toughness of 6 different impression materials













Source: Thermoplastic Testing Centre, Bayer Material Science AG, Krefeld-Uerdingen, Germany, March 2009, data on file.

# Variotime®

## The allrounder among A-silicones.

Its possible combinations make it extremely flexible:

We matched all parts of the Variotime system to fit your working routines optimally. That is why you can individually combine the different materials for all impression techniques. Consequently, Variotime adapts in an ideal way to your personal preferences of treatment.

	Two-step, two-phase impression	Single-step, two-phase impression		Single-step, one-phase impression
Impression technique	Correction technique	Double-mixing technique	Sandwich technique	Monophase impression
Viscosity of tray material	Highly viscous/ Kneadable, highly viscous	Highly viscous	Kneadable, highly viscous	Medium viscous
Product recommendation	Step 1  <b>Heavy tray/Putty</b>  Step 2  <b>ExtraLight flow</b>	 <b>Heavy tray</b> +  <b>Medium flow/</b> <b>Light flow</b> 	 <b>Putty</b> +  <b>Medium flow/</b> <b>Light flow</b> 	 <b>Monophase</b>
Intended use	<ul style="list-style-type: none"> <li>▪ Crowns &amp; Bridges</li> </ul>	<ul style="list-style-type: none"> <li>▪ Crowns</li> <li>▪ Bridges</li> <li>▪ Inlays</li> <li>▪ Onlays</li> <li>▪ Transfer &amp; Implant impression</li> </ul>	<ul style="list-style-type: none"> <li>▪ Crowns</li> <li>▪ Bridges</li> <li>▪ Inlays</li> <li>▪ Onlays</li> </ul>	<ul style="list-style-type: none"> <li>▪ Crowns</li> <li>▪ Bridges</li> <li>▪ Inlays</li> <li>▪ Onlays</li> <li>▪ Transfer &amp; Implant impression</li> <li>▪ Functional impression</li> </ul>

## The Dynamix® speed 2 system

Precision at the push of a button.

### Reliable in quality and precision

- Homogeneously and void-free mixed impression materials leading to precisely fitting prosthetic restorations.
- Reproducible material properties.
- Consistent quality of mix, independent of operator, for a constant precision of fit.

### High-speed efficiency

- High-speed mixing and precise dispensing, including for Putty viscosities.
- Easy and reliable handling.
- Savings in time and material.
- 3 selectable velocities.



### What's new with Dynamix® speed 2:

- **For your convenience:** Additional markings on the level indicator allow you to assess whether the remaining quantity is sufficient for another impression (upper/lower jaw). This helps to improve the impression-taking process in the practice.
- **For the environment:** Avoids waste as you can make the best possible use of the contents of the cartridge.

# Variotime® Bite

Modern bite registration.

## Your benefits following from the outstanding material properties

- Variotime Bite is extra-hard and precise. Its very high final hardness of Shore D 40 prevents undesirable shifts when adjusting the position of the casts in the articulator.
- Distinct thixotropy avoids flowing off from the occlusal surface into the interdental spaces, and enables easy removal from the mouth.
- It shows a superb scannability for the powder-free 3D data recording of antagonists for CAD/CAM technology.

## Your benefits following from excellent handling properties

- Variotime Bite is extremely fast and features a convenient working time of 30 seconds plus a fast intraoral setting time of only 30 seconds for increased patient comfort.
- The set material is easy to trim and grind with minimum risk of fracture.
- Its whipped cream-like consistency assures a resistance-free bite.

## Variotime Bite is widely applicable

- Standard bite registration in the occlusal position.
- Coating of bite forks.
- Key material for needle-point registration.
- Production of small model segments.
- Powder-free optical data recording of antagonists for CAD/CAM technology.



# Variotime®

## Product range.

### Dynamix Cartridge Refills

#### Variotime Dynamix Putty Refill

2x380ml Dynamix Putty  
2 Dynamix Mixing Tips  
1 Dynamix Fixation Ring  
Art. code: 66044995

#### Variotime Dynamix Heavy Tray Refill

2x380ml Dynamix Heavy Tray  
2 Dynamix Mixing Tips  
1 Dynamix Fixation Ring  
Art. code: 66045000

#### Variotime Dynamix Monophase Refill

2x380ml Dynamix Monophase  
2 Dynamix Mixing Tips  
1 Dynamix Fixation Ring  
Art. code: 66045034

### Automix Cartridge Refills

#### Variotime Heavy Tray Refill

2x50ml Heavy Tray  
5 Mixing Tips green  
Art. code: 66044998

#### Variotime Monophase Refill

2x50ml Monophase  
5 Mixing Tips green  
Art. code: 66045032

#### Variotime Medium Flow Refill

2x50ml Medium Flow  
10 Mixing Tips yellow  
Art. code: 66045036

#### Variotime Light Flow Refill

2x50ml Light Flow  
10 Mixing Tips yellow  
Art. code: 66045038

#### Variotime Extra Light Flow Refill

2x50ml Extra Light Flow  
10 Mixing Tips yellow  
Art. code: 66045040

#### Variotime Bite Cartridge Refill

2x50ml Variotime Bite  
10 Mixing Tips green  
Art. code: 66045042

### Handmix Trial Kit

#### Variotime Easy Putty + Flow Trial Kit

1 x600ml Easy Putty  
(300ml each Base & Cat.)  
1 x50ml Light Flow  
5 Mixing Tips yellow  
5 Intraoral Tips  
1 x Universal Adhesive (10ml)  
Art. code: 66045044

### Handmix Refill

#### Variotime Easy Putty Refill

1 x600ml Easy Putty  
(300ml each Base & Cat.)  
Art. code: 66044993



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