

Dimensional stability

V-Posil Mono Fast – suitable in particular for implant impressions

Precision

Working time



Toughness

Hydrophilicity

Intraoral setting time

V-Posil

PRECISION IMPRESSION MATERIAL, A-SILICONE-BASED

V-Posil

ADDITION SILICONE IMPRESSION MATERIAL – IMPRESSIVELY PRECISE

Models are usually required for the fabrication of dental prostheses, and that means taking precision impressions. As a source of information for detailed reproduction of the intraoral structures, precision impressions are a means of communication between dentist and dental technician. Any imprecisions in an impression will transfer to the models, and often go unnoticed until the final prosthesis is being fitted.

Precise dental restorations require a material with properties that support optimal impression taking, from the very outset and right through to the pouring stage.

V-Posil was developed with the aim of creating a material that consistently lives up to this service philosophy, in order to combine

- Clinically relevant parameters
- Treatment convenience and
- Patient comfort

in one product family.

Overview of benefits – the service philosophy

A high level of hydrophilicity allows for good wetting of the intraoral structures, ensuring maximum precision. With its variable extraoral working time and short intraoral setting time, V-Posil makes the impression-taking process very efficient, while its high toughness ensures that the impression can be safely removed from the patient's mouth. The material's excellent elastic recovery, on the other hand, is important for retaining precision after removal, while the high level of hydrophilicity when set means that precision is maintained until pouring. It's thanks to these properties that V-Posil is able to meet all the day-to-day requirements of the dental practice.

The V-Posil family is available in different viscosities

- Putty,
- Heavy-bodied,
- Medium-bodied,
- Light-bodied,
- X-light-bodied

and comes in the standard mixing systems

- 450 ml putty jars, 1:1 for manual kneading

- 50 ml automix cartridges, 1:1
- 380 ml cartridges, 5:1

for use in standard automatic dispensing and mixing devices (e.g. VOCO Dynamic Dispenser System, Sympress I/II).

V-Posil boasts the following properties to support you in the impression-taking process:

Hydrophilicity

Vinyl polysiloxanes, i.e. addition-cured silicones, are naturally hydrophobic. The purpose of an impression material is to accurately reproduce the patient's intraoral structures. With V-Posil, the wetting capacity has been optimised so that it flows reliably in a moist environment thanks to its hydrophilic properties.

Contact angle

The smallest possible contact angle reflects the good wetting capacity of a material on a surface. Here the contact angle of two addition silicone-based precision impression materials and a contact angle of a polyether material are depicted.

Contact angle measurements for correction materials



V-Posil Light Fast / V-Posil X-Light Fast / V-Posil Mono Fast – small contact angle of $< 10^\circ$

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IMPRESSION MATERIAL WITH SERVICE PHILOSOPHY

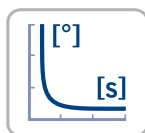


Aquasil Ultra XLV – contact angle of ~ 71°



Impregum Garant L Duo Soft – contact angle of ~ 24°

Source: VOCO in-house measurement



V-Posil Light Fast and V-Posil X-Light Fast have a small contact angle of $< 10^\circ$. The rapid reduction in the contact angle occurs in just a few seconds following intraoral application, as shown in the diagram.

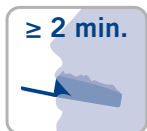
Working time and intraoral setting time*

The working time and intraoral setting time of V-Posil make for maximum convenience and comfort for both dentist **and** patient.



V-Posil combines

- Optimal working time
- Short intraoral setting times



The times required for the preliminary impression material and the correction impression material are optimally coordinated.

The extraoral working time and the intraoral setting time are both around 2 minutes, with the extraoral working time of ≤ 2 minutes representing an optional maximum. If you require less working time, simply start the setting process before the 2 minutes have elapsed by inserting the tray into the patient's mouth.

Product	Maximum working time at 23 °C \leq min.	Intraoral working time at 35 °C \leq min	Intraoral setting time at 35 °C \geq min.
V-Posil Putty Fast 5:1	01:30		02:30
V-Posil Putty Fast	02:00		02:00
V-Posil Heavy Soft Fast	02:00		02:00
V-Posil Mono Fast	02:00	01:00	02:00
V-Posil Light	02:00	01:00	02:00
V-Posil X-Light Fast	02:00	01:00	02:00

Regular Set or Fast Set?

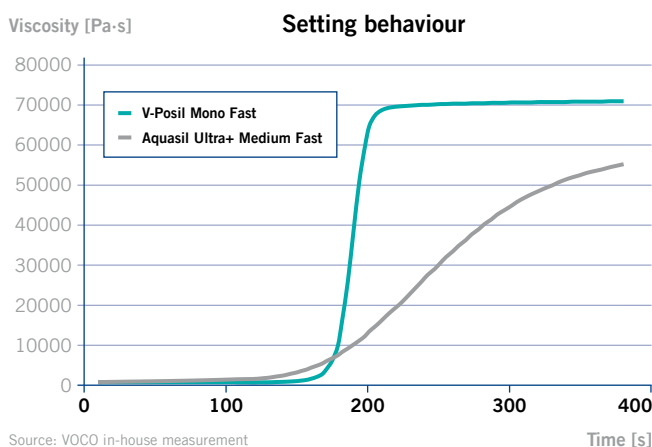
V-Posil is a precision impression material that works like a regular-set material in terms of its maximum working time, and like a fast-set material as regards its intraoral setting time of ≥ 2 minutes. This allows for maximum flexibility and simplicity within the V-Posil range.

Setting behaviour

The viscosity of V-Posil barely changes during the extraoral working time. When using materials with an early transition from the plastic to the elastic phase, the impression precision is reduced and distortion can occur. The long, user-friendly working time, combined with the rapid viscosity increase after the impression tray is inserted into the patient's mouth reduces the risk of inaccuracies when taking the impression.

The setting behaviour of the correction material is modified so that it does not lose its excellent flowability even intraorally at 35 °C, and remains workable in the patient's mouth for ≤ 1 minute, **which is enough time for it to flow into the areas** where the impression is being taken.

The special setting technology used in V-Posil therefore supports precise impression results.



Source: VOCO in-house measurement

*Only exception is V-Posil Putty Fast, 380 ml see table

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SAFE REMOVAL

Toughness

The areas of fine details in the correction material are put under particular strain when removing the impression. Both V-Posil correction materials flow thinly right into the subgingival areas. High toughness means that the impression with its details can be safely removed from the patient's mouth. As shown in the diagram below, V-Posil X-Light Fast, for example, can stretch by 2.6 times the original length of the standardised test specimen, which is a prerequisite for safe removal of the precision impression.



Stretching of V-Posil X-Light Fast

With a stretch factor of 2.6 times, V-Posil X-Light Fast supports safe removal

Dimensional accuracy

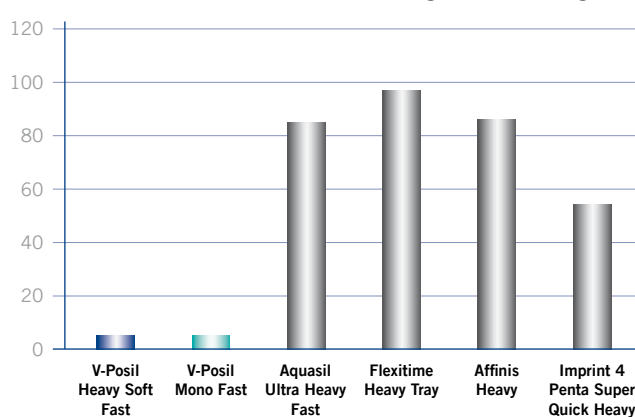
During removal from the patient's mouth, the impression is stretched over the equator of the teeth, which temporarily changes its dimensions. The material's excellent elastic recovery from deformation guarantees a dimensionally accurate reproduction of the oral situation.



Pouring – maintaining precision right to the end

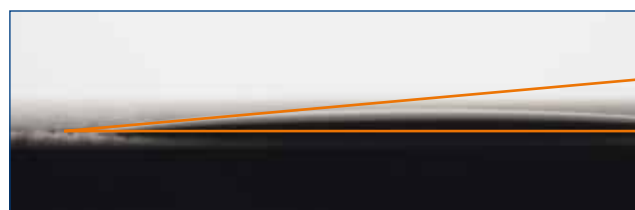
V-Posil is also advantageous during the pouring stage. In order to produce a precise restoration, it is important that the wet mixture flows easily into the impression when pouring. This also requires a small contact angle.

Addition silicone contact angle after setting



Source: VOCO in-house measurement

V-Posil Heavy Soft Fast and V-Posil Mono Fast show the smallest contact angle of all the tested materials after setting.



V-Posil Heavy Soft Fast / V-Posil Mono Fast, set, contact angle < 6°

Source: VOCO in-house measurement

The small contact angle of the set impression guarantees excellent wetting of the surface for precise pouring – a key requirement for accurate restorations.

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TECHNICAL DATA

Product	Mixing ratio	Maximum working time at 23 °C / 74 °F ≤ min.	Intraoral working time at 35 °C / 95 °F ≤ min.	Intraoral setting time at 35 °C / 95 °F ≥ min.	Shore A hardness (approx.)	Linear dimensional change (approx.) %	Elastic Recovery test (approx.) %	Strain in compression (approx.) %
V-Posil Putty Fast	5:1	01:30		02:30	63	-0,20	99,5	2,5
V-Posil Putty Fast	1:1	02:00		02:00	66	-0,25	98,5	3,0
V-Posil Heavy Soft Fast	5:1	02:00		02:00	55	-0,25	99,3	4,0
V-Posil Heavy Soft Fast	1:1	02:00		02:00	55	-0,25	99,3	4,0
V-Posil Mono Fast	5:1	02:00	01:00	02:00	58	-0,25	99,5	4,0
V-Posil Mono Fast	1:1	02:00	01:00	02:00	58	-0,25	99,5	4,0
V-Posil Light Fast	1:1	02:00	01:00	02:00	47	-0,20	99,6	4,0
V-Posil X-Light Fast	1:1	02:00	01:00	02:00	47	-0,20	99,6	4,5

Indications

V-Posil Putty Fast is used as preliminary material for

- two-step putty-wash impression technique
- one-step putty-wash impression technique
- two-step putty-wash impression technique using a foil (plastic putty spacer)
- one-step putty impression technique for forming functional peripheries

V-Posil Heavy Soft Fast is to be used as heavy bodied material for

- one-step impression technique (simultaneous technique) using dual viscosities
- two-step impression technique using dual viscosities
- functional impressions

V-Posil Mono Fast is to be used as a medium bodied tray or syringeable impression material for

- taking impressions over fixed / removable restorations and implants (i.e., transferring impression posts and bridge components)
- functional impressions
- fabricating crown and bridgework or inlays
- fabricating full or partial dentures
- reline impressions
- transferring root posts when fabricating posts and cores indirectly
- multi tray technique
- use in the simultaneous mixing technique as well as the putty-wash technique

V-Posil Light Fast and V-Posil X-Light Fast are to be used as syringeable impression materials for

- two-step putty-wash impression technique
- one-step putty-wash impression technique
- two-step impression technique using a foil (plastic putty spacer)
- one-step impression technique (simultaneous technique) using dual viscosities
- reline impressions
- fabricating full or partial dentures

Advantages

- **High precision** – strongly hydrophilic A-silicone for good wetting of oral structures
- **Treatment comfort** – long working time combined with a short intraoral setting time
- **Safe removal** – high toughness allows removal without damaging filigree structures
- **Perfect prosthetics** – good hydrophilicity and high recovery after deformation of the set impression makes the pouring out and thus the restoration perfect

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PRECISION IMPRESSION MATERIAL, A-SILICONE-BASED



Presentation

V-Posil Putty Fast

- REF 2561 Jar 2 × 450 ml, accessories
 REF 2562 Jar 8 × 450 ml, accessories
 REF 2564 Cartridge 2 × 380 ml

V-Posil Heavy Soft Fast

- REF 2565 Cartridge 380 ml, accessories
 REF 2566 Cartridge 2 × 380 ml
 REF 2567 Cartridge 2 × 50 ml, accessories
 REF 2568 Cartridge 10 × 50 ml
 REF 2196 Mixing tips type 16, 50 pcs.
 REF 2203 Mixing tips type 30, 50 pcs.

V-Posil Mono Fast

- REF 2569 Cartridge 380 ml, accessories
 REF 2570 Cartridge 2 × 380 ml
 REF 2571 Cartridge 2 × 50 ml, accessories
 REF 2572 Cartridge 10 × 50 ml
 REF 2196 Mixing tips type 16, 50 pcs.
 REF 2203 Mixing tips type 30, 50 pcs.
 REF 2133 Intraoral tips type 6, 50 pcs.

V-Posil Light Fast

- REF 2573 Cartridge 2 × 50 ml, accessories
 REF 2574 Cartridge 10 × 50 ml

V-Posil X-Light Fast

- REF 2575 Cartridge 2 × 50 ml, accessories
 REF 2186 Mixing tips type 7, 50 pcs.
 REF 2141 Intraoral tips type 3, 50 pcs.

VOCO Dynamic Dispenser

- REF 9140 Mixing device 230 V

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