



# Honigum

Overcoming opposites.



## **Honigum. Professional precision for all indications.**

Since its introduction in 1997 Honigum has evolved to one of the most successful and preferred impression materials worldwide. DMG continues to enhance its product portfolio to meet the dentists' varying needs. Thus, Honigum offers highest precision for all indications and techniques.

From mono-phase to double mixing, from correction impressions to secure implantological impression post fixations: the Honigum family offers a reliable solution for all indications.

Honigum-Heavy, -Light, -Mono, -Putty and Honigum-MixStar Putty have one aspect in common: the best material quality combined with an intelligent application.

The optimized MixStar cartridges can be comfortably mixed and dispensed in DMG's MixStar-eMotion and all other commercially available mixing devices. In order to distinguish the various product variants all cartridges are color-coded and the cartridges indicate the respective working times and the time in mouth in order to promote accurate treatment processes.

# Overcoming opposites.

Impression materials generally require compromises. They either exhibit good flow characteristics or stability. The VPS-based precision impression material Honigum, however, is different.

Thanks to the DMG-patented rheologically active matrix Honigum-Light, Honigum-Mono and Honigum-Heavy yield best results in both disciplines.

And the DMG Putty variants overcome the opposites at exactly the most critical point for the dentist and treatment. With its unique Snap-Set technology the hand-mix Honigum-Putty combines a comfortable working time with a very short setting time.

Honigum-MixStar Putty is offering a true automatically mixed putty consistency from the MixStar cartridge.

## Good reasons:

- Exceptional detail reproduction
- Outstanding stability in the tray and intraorally
- Remarkable flow properties under light pressure
- Balanced hydrophilicity
- Neutral taste and honey scent

Technical Data													
Honigum	Light		Mono			Heavy				Putty			
	Fast					Fast		Fast		Soft		Soft Fast	Rigid Fast
Mixing time [min]					0:30						0:30	0:30	0:30
Working time [min]	2:15	1:30	2:00	2:15	2:30	2:15	1:15	2:00	1:15	1:45	3:15	1:45	1:45
Setting time in the mouth [min]	3:30	2:00	3:15	2:30	2:45	3:15	2:00	3:15	2:00	3:15	3:15	1:45	1:45
Dimensional change 24 h [%]	≤ 0.5	≤ 0.5	≤ 0.4	≤ 0.4	≤ 0.4	≤ 0.4	≤ 0.4	≤ 0.4	≤ 0.4	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
Compression set [%]	≤ 0.35	≤ 0.35	≤ 0.7	≤ 0.7	≤ 0.7	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.6	≤ 0.5	≤ 0.5	≤ 0.5
Shore-A-hardness	≈ 47	≈ 47	≈ 47	≈ 47	≈ 47	≈ 67	≈ 67	≈ 67	≈ 67	≈ 66	≈ 62	≈ 62	≈ 70
Strain in compression [%]	≈ 4.5	≈ 3.9	3.0 - 5.5	3.0 - 5.5	3.0 - 5.5	≈ 1.4	≈ 1.4	≈ 1.4	≈ 1.4	≈ 2.0	≈ 2.2	≈ 2.2	≈ 1.7
Color													

## ■ Honigum-Light

### High precision correction-impression material

Honigum-Light is an innovative correction-impression material combining excellent flow properties with exceptional stability.

As a light-bodied material Honigum-Light is well suited for correction and double mixing impressions and can be combined with Honigum-Heavy or the Honigum-Putty materials.

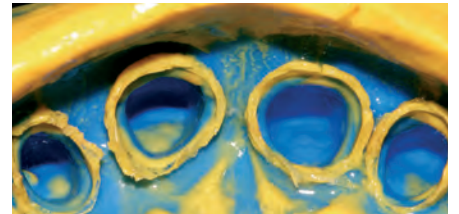
For its superior product characteristics Honigum received the best »clinical ratings« of all tested VPS materials from the noted »The Dental Advisor«.\*



Syringing the preparation with Honigum-Light.



Honigum-Light's extraordinary stability – no material run off or dripping.



Perfectly detailed reproduction of the oral situation with Honigum-Light and Honigum-Heavy.

\*Elastomeric Impression Materials. The Dental Advisor 2006; 23 (3): 1-7.

## DMG-patented cleverness: the rheologically active matrix

The rheologically active matrix allows for flexible behavior in a material's viscosity. That means: to be stable or flowable depending on the situation. Honigum-Light offers this capacity in a unique manner.

### Extraordinary stability

At low shear stress Honigum-Light exhibits significantly higher values as competitive materials (see graphic) thus proving its high stability. The material remains at the area where it was applied without running or dripping.

- Low shear stress = high viscosity
- = extraordinary stability

### Outstanding flow properties

Under shear stress (e. g. when inserting the tray into the mouth) the viscosity properties change and Honigum-Light overcomes the alleged opposites: the initially stable material flows below the preparation line and thus provides a perfect detail reproduction

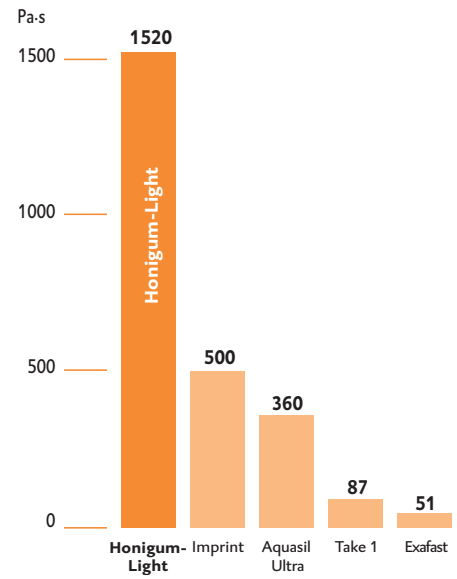
- High shear stress = low viscosity
- = outstanding flow properties

This quantum leap in the union of seemingly incompatible property profiles – exceptional stability and extreme flowability – is illustrated in the two graphics\*.

Features	Benefits
Extraordinary stability	No dripping or running on the preparation
Excellent flow properties	Perfect bubble-free detail reproduction of the oral situation
Balanced hydrophilicity	Penetrates even into the finest subgingival areas

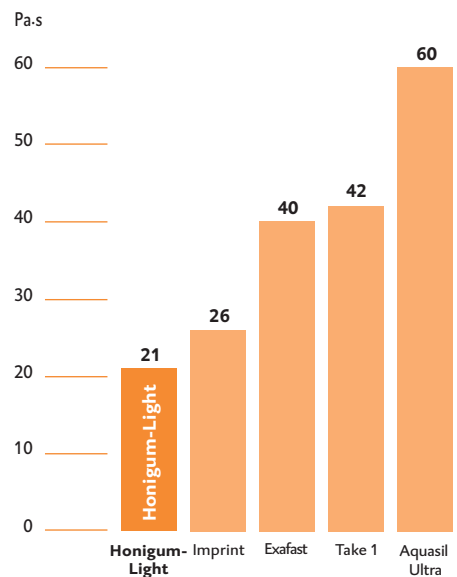
\*C. Luu, and C. Angeletakis, Kerr Corporation, Orange, CA, USA, Shear Thinning Behavior of Silicone Impression Materials, Poster#1849, IADR Honolulu, Hawaii, 2004.

## Viscosity at 10 Pascal/low shaer



At low shear stress Honigum-Light reaches highest values considering the stability.

## Viscosity at 1000 Pascal/high shear



At high shear stress Honigum-Light exhibits the best flow properties.

## ■ Honigum-Heavy

### Innovative pre-impression material

Honigum-Heavy was specially developed for all two-phase impression techniques, and, among other things, this material stands out with its exceptionally high final hardness. Thanks to its good fixation ability the noted Brånemark Center recommends Honigum-Heavy specifically for implant impressions.

Honigum-Heavy is available in two variants:  
normal and fast setting



### Honigum-Heavy

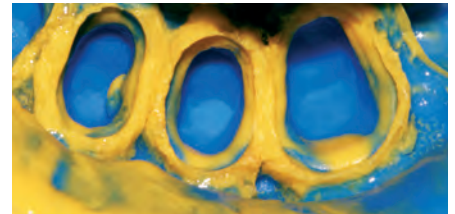
Recommended for  
Implantology  
from Brånemark Center



Bubble-free loading of the impression tray with Honigum-Heavy.



Honigum-Light exhibits outstanding stability when syringing the preparation.



Perfect double mixing impression with Honigum.



Precise reproduction of the preparation line on the model.

### Extremely high hardness

Honigum-Heavy exhibits easy cutting characteristics for providing pressure relief channels in corrective treatments. These are necessary in order to obtain an optimal detail reproduction with the secondary impression.

Especially for implant impressions Honigum-Heavy exhibits good fixation and torsion-preventing characteristics. For combined treatments with implants and prepared teeth double mixing impressions with Honigum-Light are recommended. For implant treatments Honigum-Heavy should be used as a mono-phase impression material.

### Good resistance

With the double mixing impressions Honigum-Heavy exhibits a good stability in the tray and optimal resistance when positioned. The light-bodied material Honigum-Light thus penetrates into the subgingival areas.

Whether correction impressions or double mixing technique: Impressions with Honigum-Heavy result in fitting restorations.

Features	Benefits
High hardness	Easy to cut pressure relief channels from the impression Very good fixation characteristics
Rheological matrix	Good insertion resistance Outstanding stability
Homogeneous and bubble-free material quality	Easy to use Perfect results Economical application



Syringing impression posts with Honigum-Heavy.



Individual impression tray (Supertec, DMG) with Honigum-Heavy.



Additional adhesion of the impression posts with the bis-acryl-based LuxaBite (DMG).



Transfer impression with Honigum-Heavy.

With the friendly assistance of Dr. Joachim Hoffmann, Jena, Germany.

## ■ Honigum-MixStar Putty

### Automatically mixed precision VPS in putty consistency

Honigum-MixStar Putty is dynamically mixed true putty from the MixStar cartridge.

In the tray the material can easily be preformed by hand and offers a very nice feeling of resistance on insertion when inserted into the mouth. Thanks to its balanced hardness, Honigum-MixStar Putty can be easily removed from the mouth and cut with an instrument.

Thus Honigum-MixStar Putty is the ideal partner for Honigum-Light and Honigum-Light Fast for double mixing technique and correction impressions.

Features	Benefits
Dynamically mixed true putty consistency	Ideal insertion resistance Kneadable by hand
Very good hardening properties from the start of mixing	No material waste Safe application
Excellent recovery after deformation Very good tear strength	Precisely detailed reproduction of the oral situation, save removal



Quick and hygienic loading of the tray with Honigum-MixStar Putty.



Filling the cavity with the correction impression material Honigum-Light.



Perfect impression of the preparation line with Honigum-MixStar Putty and Honigum-Light.



Perfectly fitting prosthetic restorations.



## ■ Honigum-Putty

### Hand-mix precision VPS in putty consistency

#### Snap-Set technology

Thanks to the DMG-developed Snap-Set technology the new Honigum-Putty offers a so far unrivaled combination of comfortable working time and short time in mouth. Its generous working time reduces the »mix stress« to a minimum.

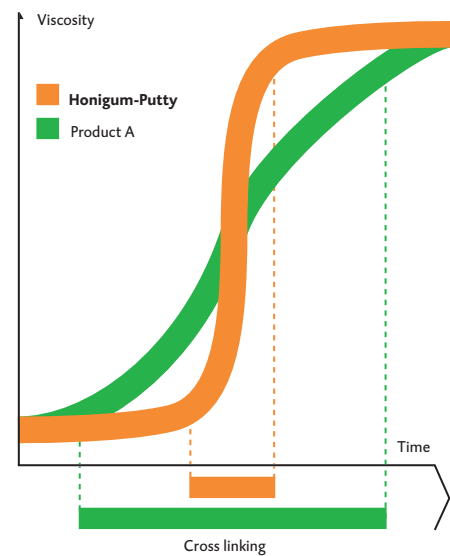
Deformations due to already set material are prevented, and micro movements are reduced by the quicker cross linking (see »Snap-Set« in graphic). For the patient the shorter time in mouth translates into significantly more comfort during the treatment.

#### Excellent recovery after deformation

Honigum-Putty offers extraordinary recovery after deformation thus facilitating a precise reproduction of the oral situation. A precise detail reproduction is guaranteed.

Features	Benefits
Snap-Set: Comfortable working time	Prevents mixing stress No premature setting of the material
Short time in mouth	High patient comfort Reduced micro movements
Excellent recovery after deformation	Highest precision

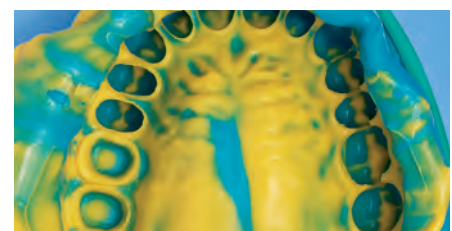
#### Snap-Set Technology



Honigum-Putty with a short, patient-friendly cross linking thanks to the unique Snap-Set technology.



Correction impression: Honigum-Rigid Fast optimally combined with Honigum-Light/-Light Fast.



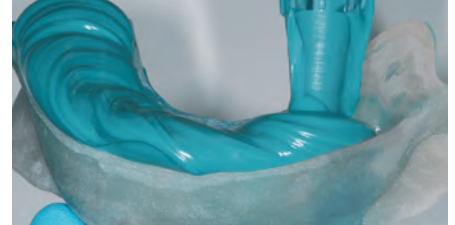
Double mixing impression: Honigum-Putty Soft and Honigum-Light. Also available as fast variants.

## ■ Honigum-Mono

### VPS-based mono-phase impression material

Honigum-Mono was specially developed for mono-phase technique to facilitate high precision impressions in only one step.

Specifically tailored to the dentists' needs the material is available in three different application systems: as hand-mix, in the practical 50 ml Automix cartridge, and in the ready-to-use, pre-filled 380 ml MixStar cartridge.



Easy loading into individual impression tray (Supertec, DMG) with Honigum-Mono.



Direct application of Honigum-Mono onto the prepared tooth.



Dimensionally stable impression of the entire mandibular arch.



Perfectly fitting final restoration.

### Extraordinary rheological matrix

Thanks to the rheologically active matrix Honigum-Mono offers the tray stability equal to a heavy-bodied material. At the same time, Honigum-Mono attains flow characteristics around the preparation like those of a light-bodied impression material (see graphic)\*.

### The precision formula

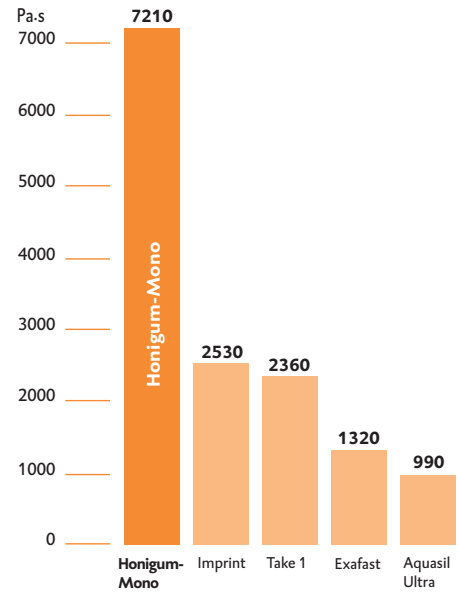
- Low shear stress = high viscosity  
= stable like a heavy-bodied material
- High shear stress = low viscosity  
= flowable like light-bodied material

Such accurate impression results with only one consistency – Honigum-Mono.

Features	Benefits
High stability und outstanding flow characteristics in only one phase	Precise reproduction of the preparation line Finest surface details
Excellent hydrophilicity	Optimal penetration into the finest areas
Lower hardness	Easy to remove from the mouth and the gypsum model

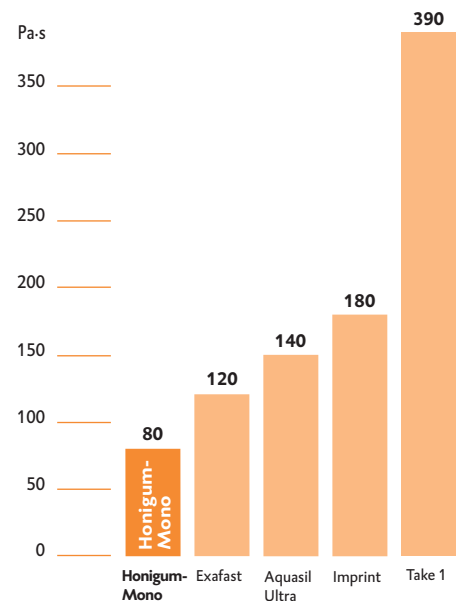
\*C. Luu, and C. Angeletakis, Kerr Corporation, Orange, CA, USA, Shear Thinning Behavior of Silicone Impression Materials, Poster#1849, IADR Honolulu, Hawaii, 2004.

### Viscosity at 10 Pascal/low shaer



Highest viscosity at low shear stress provides the best stability with Honigum-Mono.

### Viscosity at 1000 Pascal/high shear



At high shear stress Honigum-Mono exhibits the best flow characteristics in its material class.

## Honigum-Light

### Package

4 Cartridges @ 25 ml	
16 Automix-Tips, 16 Intraoral-Tips	
Honigum-Light	REF 909539
Honigum-Light Fast	REF 909639
2 Cartridges @ 50 ml	
12 Automix-Tips, 12 Intraoral-Tips	
Honigum-Light	REF 909831
Honigum-Light Fast	REF 909832

### Economy Pack

16 Cartridges @ 25 ml	
50 Automix-Tips, 50 Intraoral-Tips	
Honigum-Light	REF 909690
Honigum-Light Fast	REF 909691
8 Cartridges @ 50 ml	
50 Automix-Tips, 50 Intraoral-Tips	
Honigum-Light	REF 909835
Honigum-Light Fast	REF 909836

## Honigum-Mono

### Package

1 Cartridge @ 380 ml	
10 MixStar-Tips	REF 909568
2 Cartridges @ 50 ml	
4 Automix-Tips	
4 Intraoral-Tips	REF 909830
2 Tubes @ 135 ml	
1 Non-slip mixing pad	
2 Tube keys	REF 909551

### Economy Pack

5 Cartridges @ 380 ml	
50 MixStar-Tips	REF 909569
8 Cartridges @ 50 ml	
20 Automix-Tips	
20 Intraoral-Tips	REF 909834

## Honigum-Heavy

### Package

2 Cartridges @ 50 ml, 4 Automix-Tips	
Honigum-Heavy	REF 909766
Honigum-Heavy Fast	REF 909838
1 Cartridge @ 380 ml, 10 MixStar-Tips	
Honigum-Heavy	REF 909537
Honigum-Heavy Fast	REF 909638

## Economy Pack

8 Cartridges @ 50 ml	
16 Automix-Tips	
Honigum-Heavy	REF 909837
Honigum-Heavy Fast	REF 909839
5 Cartridges @ 380 ml	
50 MixStar-Tips	
Honigum-Heavy	REF 909538
Honigum-Heavy Fast	REF 909637

## Honigum-MixStar Putty

### Package

1 Cartridge @ 380 ml	
10 MixStar-Tips	REF 919374

### Economy Pack

5 Cartridges @ 380 ml	
50 MixStar-Tips	REF 919375

## Honigum-Putty

### Package

2 Jars @ 450 ml	
Honigum-Putty Soft	REF 919364
Honigum-Putty Soft Fast	REF 919365
Honigum-Putty Rigid Fast	REF 919366

### Economy Pack

8 Jars @ 450 ml	
Honigum-Putty Soft	REF 919369
Honigum-Putty Soft Fast	REF 919370
Honigum-Putty Rigid Fast	REF 919371

### Accessories

1 Automix-Dispenser Type 50 1:1	REF 909507
50 Automix-Tips Green 1:1	REF 909490
50 Intraoral-Tips Transparent	REF 909400
1 MixStar-eMotion	
Mixing device 230 V int.	REF 900480
50 MixStar-Tips	REF 909567
1 Bottle @ 10 ml	
Tray-Adhesive	REF 909394



## DMG

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