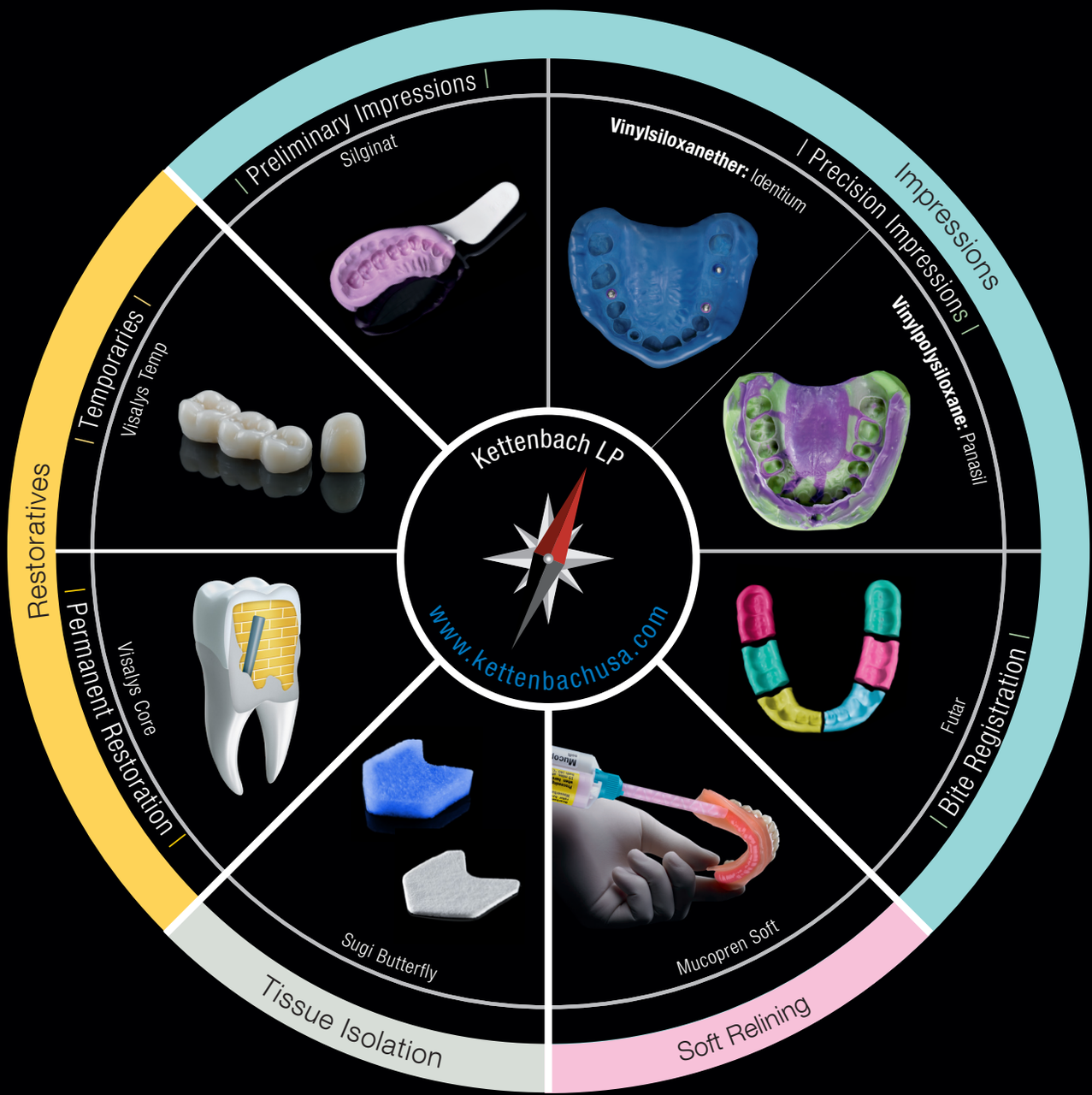
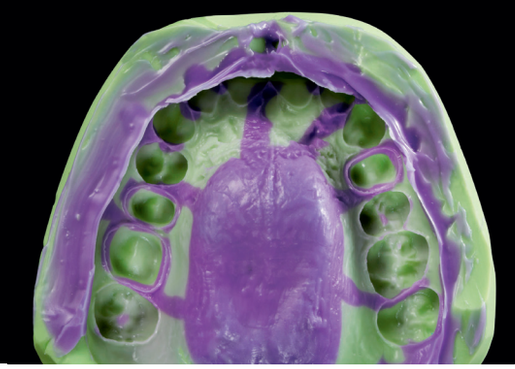
KETTENBACH
Simply intelligent

Product portfolio



Panasil®



Precision impressions even in extreme situations.

Elastomeric light body, medium body, heavy body and kneadable A-silicone impression materials for taking one-step and two-step impressions with modern curing characteristics.

Over 30 years of innovation quality and experience

Product properties

- ✓ Conventional A-silicones with maximum elastic recovery
- ✓ Most current setting characteristics
- ✓ “Genuine” putty from the 5:1 cartridge system or manually kneadable
- ✓ Diverse light-bodies with pronounced flowability and optimum hydrophilicity

User advantages

- ✓ **Economic material use,** precisely dispensable
- ✓ **Reduced risk of errors** due to quick-setting characteristics
- ✓ **Highly precise final impression phase**
- ✓ **Different viscosities** for many impression techniques and indications

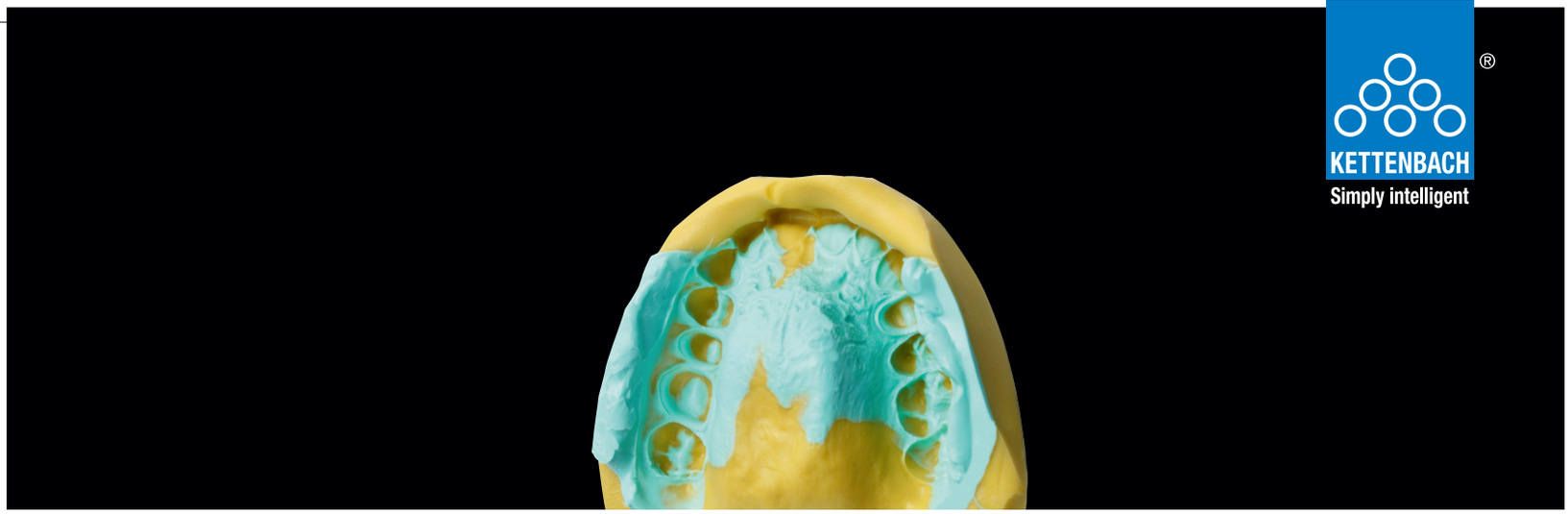
Benefits for the dentist

- ✓ **Maximum reliability and very easy handling when taking and removing impressions**
- ✓ Elastomeric and stable storage, thixotropic, hydrophilic and flowable under pressure
- ✓ **Short-setting characteristics and easy mixing saves valuable practice time**

DA DENTAL ADVISOR 2018 PREFERRED PRODUCT

DENTAL ADVISOR PREFERRED PRODUCT

PVS IMPRESSION MATERIAL



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Superior hydrophilicity means superior performance!

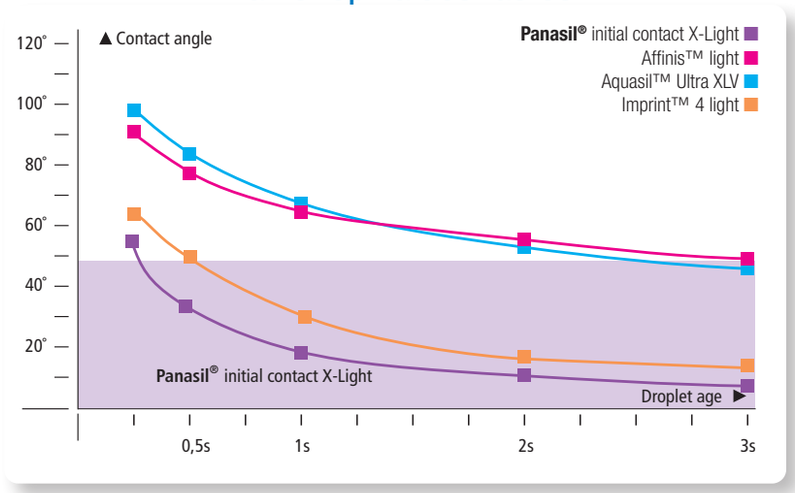
In a recent study*, A-silicones and polyethers were investigated with respect to their wetting properties using video and high resolution contact angle measurements during the working time.

On the basis of initial hydrophilicity (quantified via the initial contact angle) and hydrophilic kinetics (spreading capacity of the water drop), both initial hydrophilic and high hydrophobic A-silicones were observed.

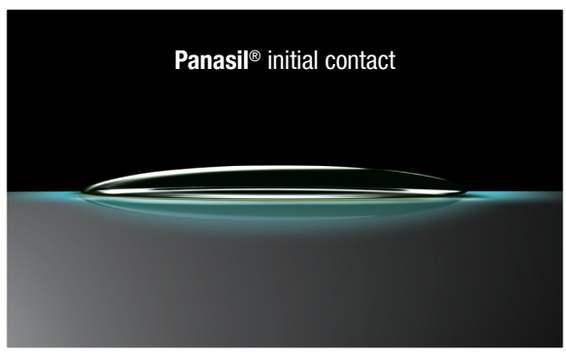
The time of initial contact and the speed with which the liquid spreads play a decisive role in improving the precision of an impression. Furthermore, it is important for the hydrophilicity to be retained throughout the entire working time of the material, not just at the beginning. The tested materials displayed a continuous decrease in hydrophilicity, while the hydrophilicity of the A-silicone Panasil® initial contact remained consistent throughout the entire working time.

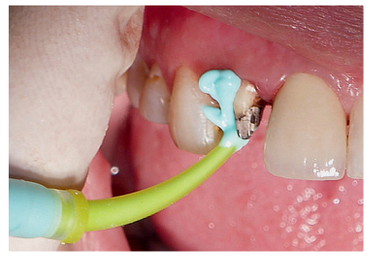
Comparison of spreading behavior begins 30 seconds after mixing starts and within the first 3 seconds after applying a water drop at 80% humidity. The test was performed on unpolymerized impression material.

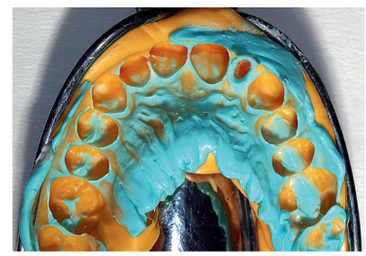
Attains top values fastest



Measurements were carried out of the Kettenbach company on the premises on the basis of respective DIN/ISO standard measurement specifications.







Photos by Hubert Christian Roggendorf, D.D.S. – Department of Prosthodontics Center of Dento-Maxillo-Facial Medicine, Rheinische Friedrich-Wilhelms University of Bonn, Germany

* Comparative test carried out by Kettenbach contact angle measured using the measuring device DAS 100, from Kruss, 2006. Evaluated using the circle-fit method.
** Affinis Light™, Aquasil Ultra XLV™, and Impregum™ are not registered or trademarked by Kettenbach.

Panasil®

KETTENBACH
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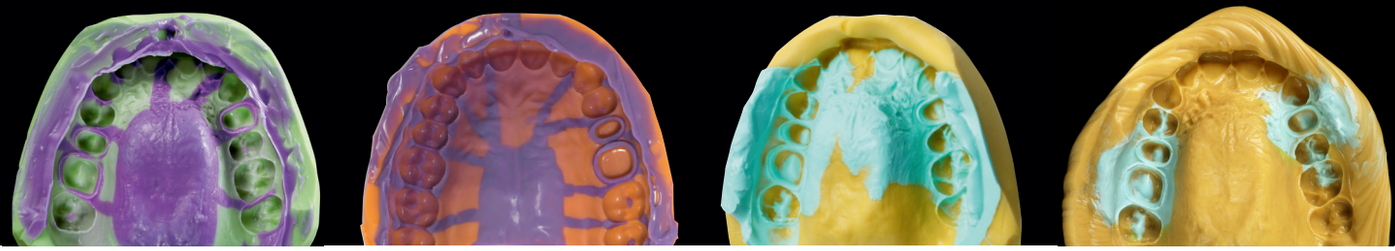


Applications

	monophase	binetics Putty Fast	binetics Putty Soft	Putty	Putty Fast Set	Putty Soft	tray Fast Heavy	tray Soft Heavy
Double mix impression	■	■	■	■	■	■	■	■
Fixation impression	■	■		■		■	■	
Functional impression	■	■	■	■		■	■	
Two-step impression		■	■	■	■	■	■	■
One-step impression	■	■	■			■		
Impression over fixed/ removable restorations	■	■		■		■	■	
Impression for forming functional peripheries	■	■	■		■	■		■

■ highly recommended ■ recommended

Technical Data

	Product name	Mixing ratio	Working time at 23° C/ 74° F ≤	Working time at 35° C/ 95° F ≤	Intraoral setting time at 35° C/ 95° F ≥	Total setting time* ≥	Hardness (approx.) Shore	Linear dimensional change (max.) %	Elastic Recovery test (approx.) %	Strain in compression (approx.) %
Mono-phase	Panasil® monophase	5:1	2 minutes	Not applicable	2 minutes	4 minutes	A 60	– 0.20	99.7	3.5
	Panasil® monophase	1:1	2 minutes	Not applicable	2 minutes	4 minutes	A 60	– 0.20	99.7	3.5
Putty	Panasil® binetics Putty Fast	5:1	1 minute 30 seconds	Not applicable	2 minutes 30 seconds	4 minutes	A 63	– 0.20	99.5	2.5
	Panasil® binetics Putty Soft	5:1	2 minutes	Not applicable	3 minutes	5 minutes	A 56	– 0.20	99.5	3.5
	Panasil® Putty	1:1	2 minutes	Not applicable	2 minutes	4 minutes	A 66	– 0.20	99.0	2.7
	Panasil® Putty Fast Set	1:1	1 minute 30 seconds	Not applicable	2 minutes	3 minutes 30 seconds	A 66	– 0.20	99.0	2.7
	Panasil® Putty Soft	1:1	2 minutes	Not applicable	2 minutes	4 minutes	A 60	– 0.20	99.0	2.7
tray/ Heavy	Panasil® tray Fast Heavy	5:1	1 minute 20 seconds	Not applicable	2 minutes	3 minutes 20 seconds	A 62	– 0.20	99.7	2.5
	Panasil® tray Fast Heavy	1:1	1 minute	Not applicable	2 minutes	3 minutes	A 62	– 0.20	99.5	3.0
	Panasil® tray Soft Heavy	5:1	2 minutes	Not applicable	2 minutes	4 minutes	A 55	– 0.20	99.7	3.0
	Panasil® tray Soft Heavy	1:1	2 minutes	Not applicable	2 minutes	4 minutes	A 55	– 0.20	99.5	3.0
	Panasil® tray Soft Heavy Fast	1:1	1 minute	Not applicable	2 minutes	3 minutes	A 55	– 0.20	99.5	3.0
WASH/ Light	Panasil® initial contact Regular	1:1	1 minute 30 seconds	1 minute	2 minutes 30 seconds	4 minutes	A 46	– 0.20	99.7	3.0
	Panasil® initial contact Regular Fast	1:1	1 minute	30 seconds	2 minutes	3 minutes	A 46	– 0.20	99.7	3.0
	Panasil® initial contact Light	1:1	1 minute 30 seconds	1 minute	2 minutes 30 seconds	4 minutes	A 46	– 0.20	99.3	3.5
	Panasil® initial contact Light Fast	1:1	1 minute	30 seconds	2 minutes	3 minutes	A 46	– 0.20	99.3	3.5
	Panasil® initial contact X-Light	1:1	1 minute 30 seconds	1 minute	2 minutes 30 seconds	4 minutes	A 46	– 0.20	99.3	3.5
	Panasil® initial contact X-Light Fast	1:1	1 minute	30 seconds	2 minutes	3 minutes	A 46	– 0.20	99.3	3.5

* Total setting time (removal from the mouth) from the start of mixing.

Futar®

KETTENBACH®
Simply intelligent

Six times the maximum precision and comfort.

Fast-setting, syringeable bite registration material (A-silicone) with a high final hardness for exact recording of occlusal relationships.

Market leader in Germany[1]
20 years Futar® =
20 years quality +
20 years innovation

Product properties

- ✓ Hard (Shore-A 90) or extra-hard (Shore-D 43) material
- ✓ Quick and extra-quick or extra-long working time
- ✓ Short and extra-short intraoral setting time
- ✓ Elastomeric, stable storage, can be cut or trimmed, very thixotropic

User advantages

- ✓ No rebound when aligning the models
- ✓ Precise results, maximum convenience, top quality
- ✓ Product range provides the correct material for every indication
- ✓ Market leader in Germany over 20 years[1] and also recipient of many awards

Benefits for the dentist

- ✓ Easy handling during application, removal and alignment
- ✓ Quick-setting characteristics save time in the practice
- ✓ Wide range of products always ensures the optimum material
- ✓ Consistently top quality from the market leader = reliability of a precision registration

DENTAL ADVISOR 2018 TOP AWARD WINNER
DENTAL ADVISOR TOP AWARD BITE REGISTRATION 2)

Technical Data

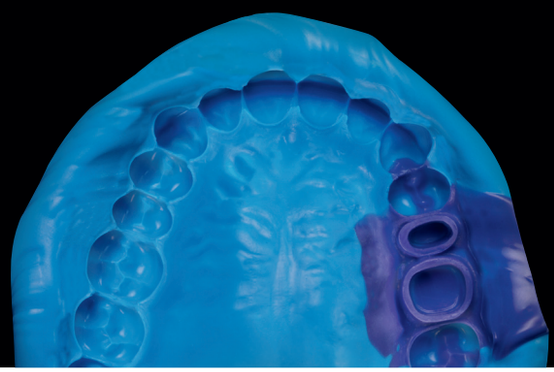
Product / Information	Futar®	Futar® Fast	Futar® D	Futar® D Fast	Futar® D Slow	Futar® Cut & Trim Fast
Working time at 23° C / 74° F ≤	30 seconds	15 seconds	30 seconds	15 seconds	1 minute 30 seconds	15 seconds
Intraoral setting time at 35° C /95° F ≥	1 minute 30 seconds	45 seconds	1 minute 30 seconds	45 seconds	3 minutes	45 seconds
Total setting time* ≥	2 minutes	1 minute	2 minutes	1 minute	4 minutes 30 seconds	1 minute
Hardness (approx.) Shore	A 90/ HD 58	A 90/ HD 58	D 43/ HD 76	D 43/ HD 76	D 43/ HD 76	D 35/ HD 60

* Total setting time (removal from the mouth) from the start of mixing.

[1] according GfK Germany [2] 5+ rating for Futar Fast only

Impression | Precision impression | Monophase/Double mix

Identium®



The best of both worlds.

Heavy, medium and light body, elastomer impression material on a vinyl Vinylsiloxanether® basis for the one-step impression technique, combines the advantages of polyether and A-silicone.

Your real alternative to Polyether

Product properties

- ✓ The best of polyether
- ✓ The best of A-silicone
- ✓ Even shorter intraoral setting time

User advantages

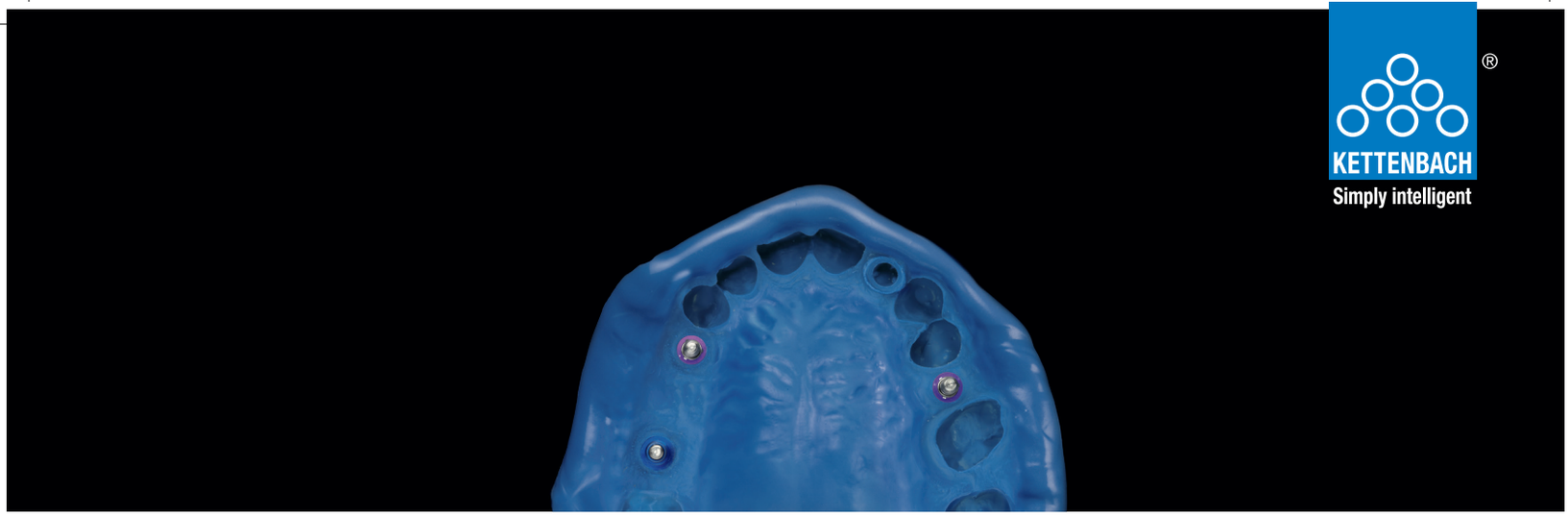
- ✓ Pronounced flowability, optimum hydrophilicity
- ✓ Odorless and tasteless
- ✓ High final hardness immediately after setting ensures optimum fixation
- ✓ Extra-long intraoral working time, making it ideal for large restorations
- ✓ No gag reflex
- ✓ No distortion

Benefits for the dentist

- ✓ Excellent flowability which yields remarkable hydrophilicity
- ✓ Very short intraoral setting time saves valuable chair time
- ✓ Wide range of applications (pick-up, functional and crown/bridge impressions): you still only require one material!
- ✓ Easy removal from the mouth and model, ensures a stress-free impression-taking process

90 seconds quicker and more hydrophilic than Polyether!

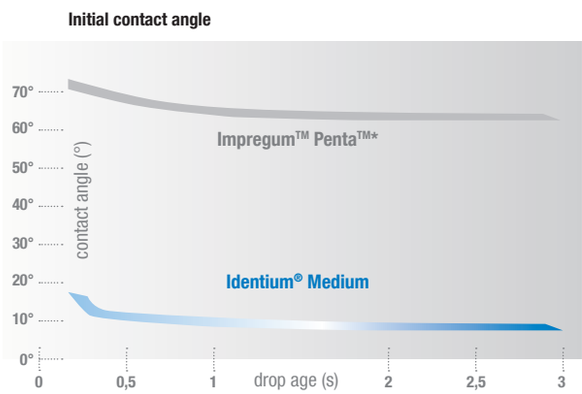
THE DENTAL ADVISOR ++++



Best hydrophilicity means best performance!

Smart hydrophilicity concept for perfect wetting

Thanks to its highly dynamic surface conditioning, Identium® reaches optimum values for hydrophilicity and offers exceptional wetting even in a moist environment with the lowest achievable contact angle (less than 10° after 1 second).



The smaller the contact angle, the more hydrophilic is the behavior of the material.

Comparison of spreading behavior begins 30 seconds after mixing starts within the first 3 seconds after applying a water drop at 80% humidity. The test was performed on unpolymerized impression material.

With a contact angle of less than 10° after one second, Identium® reaches maximum values for hydrophilicity. In contrast to other materials available in the market, Identium® succeeds in quickly developing high hydrophilicity and then maintaining it over the entire working time. The result: well-defined impressions, even in extreme situations.

Technical Data

Product name	Mixing ratio	Working time at 23° C/ 74° F ≤	Working time at 35° C/ 95° F ≤ 1)	Intraoral setting time at 35° C/ 95° F ≥	Total setting time* ≥	Hardness (approx.) Shore	Linear dimensional change (approx.) %	Elastic-Recovery test (approx.) %	Strain in compression (approx.) %
Identium® Medium	5:1 jumbo cartridge	2 minutes	80 seconds	2 minutes 30 seconds	4 minutes 30 seconds	A 60	– 0.20	99.0	2.3
Identium® Medium Fast	5:1 jumbo cartridge	1 minute 15 seconds	40 seconds	2 minutes 15 seconds	3 minutes 30 seconds	A 60	– 0.20	99.0	2.3
Identium® Heavy	5:1 jumbo cartridge	2 minutes	80 seconds	2 minutes 30 seconds	4 minutes 30 seconds	A 60	– 0.20	99.0	2.8
Identium® Heavy Fast	5:1 jumbo cartridge	1 minute 15 seconds	40 seconds	2 minutes 15 seconds	3 minutes 30 seconds	A 60	– 0.20	99.0	2.8
Identium® Light	1:1 cartridges	2 minutes	80 seconds	2 minutes 30 seconds	4 minutes 30 seconds	A 46	– 0.20	99.0	3.8
Identium® Light Fast	1:1 cartridges	1 minute 15 seconds	40 seconds	2 minutes 15 seconds	3 minutes 30 seconds	A 46	– 0.20	99.0	3.8

*Total setting time (removal time from mouth) from start of mix.

1) With a reduced working time the total setting time of 3 minutes 30 seconds for the fast set version and 4 minutes 30 seconds for the regular set version has always to be heeded.

Building up

Visalys® Core

KETTENBACH®
Simply intelligent

Secure bonding with your adhesive.

Visalys® Core is the first core build-up material to feature the unique Active-Connect-Technology for bonding reliably to all popularly used brands of single and multi-stage adhesives. Therefore, Visalys® Core even enables dual-curing core build-up materials to bond to universal adhesives – without an additional activator.
Using Visalys® Core for building up the core and cementing the root post creates a “seamless post and core” without weak points and consisting of only one material.

Top bond strength with all popularly used brands of adhesives!

Benefits for the dentist

- ✓ Active-Connect-Technology: Top bond strength with all popularly used brands of single and multi-stage adhesives – without an additional activator!
- ✓ One material, two applications: Core build-up and cementation of root posts
- ✓ Excellent positional stability yet good flowability and low extrusion force
- ✓ Dual-curing: Saves time due to optional light-curing, reliable self-curing even in deep areas
- ✓ Highly stable due to very good compressive strength
- ✓ Minimal smear layer

DA DENTAL ADVISOR 2018 TOP AWARD WINNER
DENTAL ADVISOR TOP AWARD
COMPOSITE CORE MATERIAL

ACT Active Connect Technology

free of Bisphenol A

Silginat®

Scan Impression System

KETTENBACH®
Simply intelligent

The new standard for taking impressions of the opposing arch

Medium body, elastomer A-silicone with alginate-like consistency, specially developed for taking impressions for the opposing arch, temporary crowns/bridges and for the fabrication of splints.

Storable and can be poured several times

Product properties

- ✓ Optimum elastic recovery
- ✓ High dimensional stability
- ✓ Very thixotropic, high flowability and tear resistance
- ✓ Neutral or Strawberry scent

User advantages

- ✓ A-silicone with alginate-like properties
- ✓ Impression can be stored
- ✓ Maximum precision, easy removal from the mouth
- ✓ Easy handling with familiar components

Benefits for the dentist

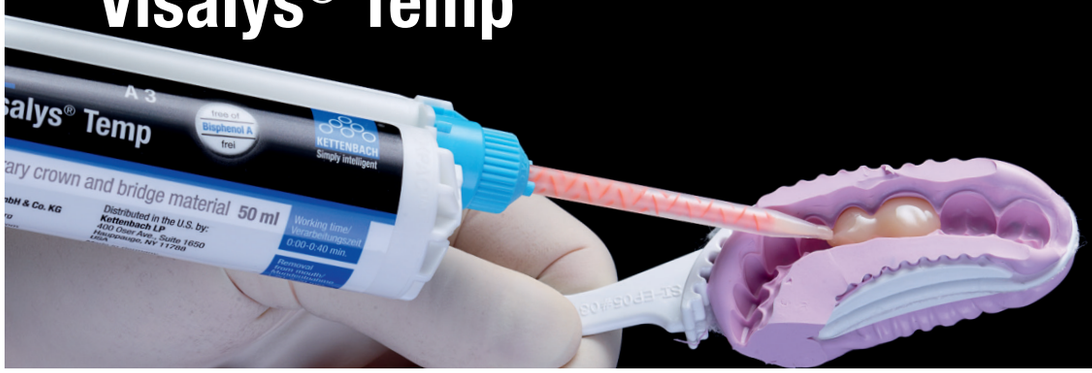
- ✓ Bite registration, precision and opposing arch impression taking using the same material – optimally coordinated
- ✓ Can be poured several times, even after a long period of storage
- ✓ Ideal impression material for the fabrication of temporary restorations and splints
- ✓ Standardized, hygienic procedures in line with quality management

THE DENTAL ADVISOR ++++½ 2011 Preferred Products

For temporary crowns and bridges

Can be poured several times

Visalys® Temp



free of **Bisphenol A**

For strong temporary crowns and bridges.

Two-component material based on a multifunctional acrylic composite. Suitable for the fabrication of temporary crowns, partial crowns, inlays, onlays and veneers.

Outstanding properties for very strong temporary restorations.

Product properties

- ✓ Very stable and fracture-resistant
- ✓ Setting with minimum inhibition layer
- ✓ Very smooth surface
- ✓ Free of Bisphenol A

User advantages

- ✓ Also suitable for long-term temporary restorations
- ✓ Minimum smear layer, low heat build-up
- ✓ High inherent sheen, easy to polish
- ✓ No allergic potential due to softening agent

Benefits for the dentist

- ✓ Long, problem-free time in situ, fewer repairs
- ✓ Easy handling, satisfied patients
- ✓ Easy to process, can be precisely trimmed with minimal dust formation
- ✓ No health exposure of patient and user; therefore meets the requirements of tomorrow.

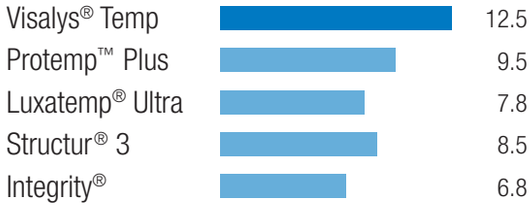
DENTAL ADVISOR 2018 TOP AWARD WINNER
DENTAL ADVISOR TOP AWARD
UNIVERSAL PROVISIONAL

KETTENBACH®
Simply intelligent

The result: exceptionally stable

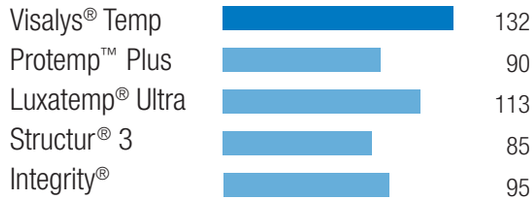
High flexural strength combined with high impact strength reduces the risk of the temporary restoration fracturing in the mouth as a result of high or sudden masticatory loading – e.g. when biting unexpectedly on a cherry stone.

Impact strength [kJ/mm²]



Measurement at the University of Erlangen, Germany, according to DIN EN ISO 179, DIN 53453

Flexural strength [MPa]

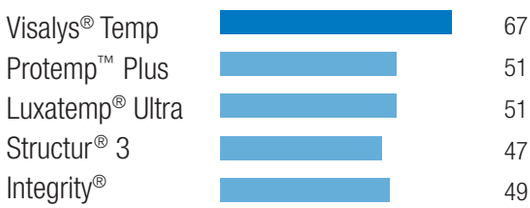


Internal measurements Kettenbach, according to DIN EN ISO 10477 (Feed rate:1 mm/min)

The higher the diametral tensile strength, the lower the risk that, e.g. the margins of the temporary restoration may break off.

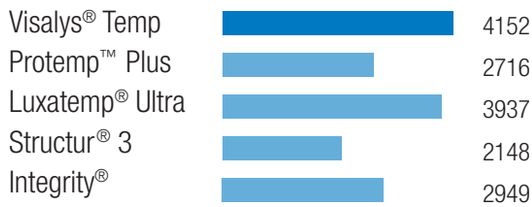
A high E-modulus means that the temporary restoration is resistant to deformation and reliably conserves the intraoral situation until the permanent restoration is fitted.

Diametral tensile strength [MPa]



Internal measurements Kettenbach, according to ADA Specification No. 27:76

E-modulus [MPa]



Internal measurements Kettenbach, test set-up according to DIN EN ISO 10477

Soft reline

Mucopren® Soft

KETTENBACH®
Simply intelligent

Holds to the denture. And does what it promises.

Permanently soft reline material based on polyvinyl siloxane for direct and indirect application.

For denture relining without compromises!

Product properties

- ✓ Smooth, hydrophobic silicone surface
- ✓ Silicone-based sealing
- ✓ High tear-resistance
- ✓ Patented adhesive

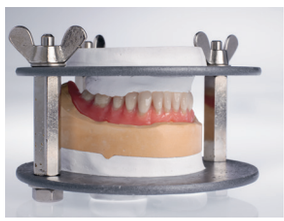
User advantages

- ✓ Resistant to contamination
- ✓ Good trimability
- ✓ Excellent bond strength to the denture
- ✓ For direct and indirect application

Benefits for the dentist

- ✓ Optimum requirements for hygienic denture conditions
- ✓ Long period in situ and comfort
- ✓ Modern material characteristics ensure easy, reliable handling
- ✓ Very efficient, value creation remains in the dental practice


Direct reline


Indirect reline


Can be easily trimmed


Easy to seal

Sugi® Butterfly

KETTENBACH®
Simply intelligent

Sugi® Butterfly – for Dental Tissue Isolation.

Uniquely prepared Versatile Cellulose Sponge Material made from a special formulation of pure cotton and regenerated cellulose, natural biocompatible components. Used for absorption of oral fluids and tissue isolation during dental procedures.

The biocompatible Sugi® Sponge has been in medical use for 50 years

Product properties

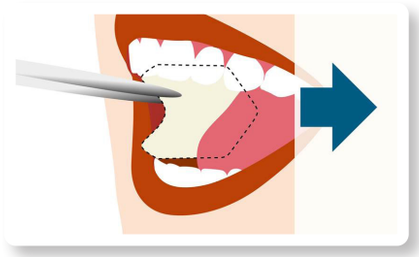
- ✓ Highly absorbent (15 - 17 times)
- ✓ Made of pure cotton and regenerated cellulose
- ✓ Fast wicking
- ✓ No linting
- ✓ High tensile strength

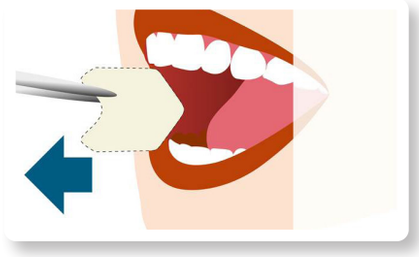
User advantages

- ✓ Comfortable for the patient
- ✓ Remains soft and elastic
- ✓ Can be sterilized
- ✓ Biocompatible natural components

Benefits for the dentist

- ✓ Protects soft tissue during operation
- ✓ Keeps area dry, no suction needed
- ✓ Cost effective solution





Accessories

KETTENBACH®
Simply intelligent

Product	Intro pack, Regular set	Refill pack, Regular set	Intro pack, Fast set	Refill pack, Fast set
380 ml cartridge 5:1	380 ml + accessories	2 x 380 ml	380 ml + accessories	2 x 380 ml
Silginat®	REF 14712	REF 14713	-	-
Silginat® Strawberry	REF 14714	REF 14715	-	-
Identium® Medium	REF 14716	REF 14717	REF 14718	REF 14719
Identium® Heavy	REF 14724	REF 14725	REF 14726	REF 14727
Panasil® monophase Medium	REF 14708	REF 14709	-	-
Panasil® binetics Putty Fast	-	-	REF 14700	REF 14701
Panasil® binetics Putty Soft	REF 14702	REF 14703	-	-
Panasil® tray Fast Heavy	-	-	REF 14704	REF 14705
Panasil® tray Soft Heavy	REF 14706	REF 14707	-	-

2 x 450 ml jar 1:1	Normal pack: 900 ml	Economy pack: 4 x 900 ml
Panasil® Putty	REF 11101	-
Panasil® Putty Fast Set	REF 11141	-
Panasil® Putty Soft	REF 11121	REF 11123

50 ml cartridge 1:1	Intro pack, (1 x 50 ml)	Normal pack, Regular set (2 x 50 ml)	Bonus pack, Regular set (10 x 50 ml)	Bulk pack, Regular set (24 x 50 ml)
Panasil® monophase Medium	-	REF 13501	-	-
Panasil® tray Soft Heavy Fast	-	REF 13561	-	REF 13563
Panasil® tray Fast Heavy	-	REF 13551	-	REF 13553
Panasil® tray Soft Heavy	-	REF 13541	-	REF 13543
Silginat®	REF 13846 (6 x 50 ml)	-	-	REF 13847
Silginat® Strawberry	REF 13826 (6 x 50 ml)	-	-	REF 13827
Identium® Light/Fast	-	REF 13701/REF 13711	-	-
Panasil® initial contact X-Light/Fast	-	REF 13401/REF13461	REF 28300	REF 13402/REF 13463
Panasil® initial contact Light/Fast	-	REF 13411/REF13471	REF 28310	REF 13412/REF 13473
Panasil® initial contact Regular/Fast	-	REF 13431/REF13481	-	-
Futar®	-	REF 11912	REF 28277	-
Futar® Fast	-	REF 11926	REF 28276	REF 11927
Futar® D	-	REF 11932	REF 28278	-
Futar® D Fast	-	REF 11961	REF 28279	REF 11967
Futar® D Slow	-	REF 11951	-	-
Futar® Cut & Trim Fast	-	REF 11975	REF 28275	-
Mucopren® Soft	-	REF 15687	-	-
Mucopren® Soft	REF 28105 50 ml Mucopren Soft, 50 ml Mucopren silicone sealant, 10 ml Mucopren adhesive, 7 green mixing tips (Ø 6,5 mm), 20 blue mixing tips (Ø 3,2 mm), 1 brush holder, 20 single-use brushes, 1 steel cutter, accessories			

50 ml cartridge 1:10	Normal pack: 50 ml cartridge, 15 blue-orange mixing tips	Bonus pack: 5 x 50 ml cartridge, 15 blue-orange mixing tips
Visalys® Temp, shade A1	REF 13780	-
Visalys® Temp, shade A2	REF 13781	-
Visalys® Temp, shade A3	REF 13782	-
Visalys® Temp, shade A3,5	REF 13790	-
Visalys® Temp, shade B1	REF 13784	-
Visalys® Temp, shade BL	REF 13788	-

Product	Intro pack: 5 ml, 1:1 1 x 5 ml double syringe, 10 brown mixing tips, 5 intraoral tips, 5 endo tips, 1 plunger	Normal pack: 10 ml, 1:1, 2 x 5 ml double syringe, 20 brown mixing tips, 10 intraoral tips, 10 endo tips, 2 plungers	Normal pack: 25 ml, 1:1, 1 x 25 ml cartridge, 20 yellow mixing tips, 20 intraoral tips
Visalys® Core, white	-	REF 13860	REF 13870
Visalys® Core, dentin	-	REF 13861	REF 13871

Accessories

KETTENBACH
Simply intelligent

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