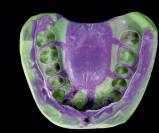
Panasil[®] initial contact is more hydrophilic!

Even under extreme situations Panasil® initial contact offers reliable performance







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

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

Contact Angle Comparison*

throughout the entire working time.

unpolymerized impression material.

Time Properties	x-light	x-light fast	light	light fast	regular	regular fast
Working Time 23c/74	1:30 min.	1:00 min.	1:30 min.	1:00 min.	1:30 min.	1:00 min.
Working Syringe Time 35c/95	1:00 min.	0:30 min.	1:00 min.	0:30 min.	1:00 min.	0:30 min.
Intraoral Setting Time 35c/95	2:30 min.	2:00 min.	2:30 min.	2:00 min.	2:30 min.	2:00 min.
Total Set Time	4:00 min.	3:00 min.	4:00 min.	3:00 min.	4:00 min.	3:00 min.

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 of the A-silicone Panasil® initial contact remained consistent observed.



Panasil® initial contact



Affinis Light ™**



Aguasil Ultra LV ™**



Aquasil Ultra XLV ™**



Impregum ™**

Panasil® brand is available in a variety of viscocities and set times.

- 13401 Panasil[®] initial contact X-Light, cartridge Normal pack (2 x 50 ml, 12 mixing tips)
- 13461 Panasil® initial contact X-Light fast, cartridge Normal pack (2 x 50 ml, 12 mixing tips)
- 13411 Panasil® initial contact Light, cartridge Normal pack (2 x 50 ml, 12 mixing tips)
- 13471 Panasil[®] initial contact Light fast, cartridge Normal pack (2 x 50 ml, 12 mixing tips)
- 13431 Panasil® initial contact regular, cartridge Normal pack (2 x 50 ml, 12 mixing tips)
- 13481 Panasil® initial contact regular fast, cartridge Normal pack (2 x 50 ml, 12 mixing tips)

Monophase Materials

- 13501 Panasil® monophase Medium, cartridge Normal pack (2 x 50 ml, 12 mixing tips)
- 14708 Panasil® monophase Medium, Intro pack, for use in Sympress Dispenser (1 x 380 ml, 10 dynamic mixers)
- 14709 Panasil® monophase Medium, Refill pack, for use in Sympress Dispenser (2 x 380 ml)

Heavy Body Materials

- 13551 Panasil® tray Fast Heavy, cartridge Normal pack (2 x 50 ml, 6 mixing tips)
- 14704 Panasil® tray Fast Heavy, Intro pack, for use in Sympress Dispenser (1 x 380 ml, 10 dynamic mixers)
- 14705 Panasil® tray Fast Heavy, Refill pack, for use in Sympress Dispenser (2 x 380 ml)
- 13541 Panasil® tray Soft Heavy, cartridge Normal pack (2 x 50 ml, 6 mixing tips)
- 13561 Panasil® tray soft fast heavy, cartridge Normal pack (2 x 50 ml, 6 mixing tips)
- 14706 Panasil® tray Soft Heavy, Intro pack, for use in Sympress Dispenser (1 x 380 ml, 10 dynamic mixers)
- 14707 Panasil® tray Soft Heavy, Refill pack, for use in Sympress Dispenser (2 x 380 ml)

Putty Materials (Mixed and dispensed by the Sympress Dispenser)

- 14700 Panasil® binetics Putty Fast, Intro pack, for use in Sympress Dispenser (1 x 380 ml, 10 dynamic mixers)
- 14701 Panasil® binetics Putty Fast, Refill pack, for use in Sympress Dispenser (2 x 380 ml)
- 14702 Panasil® binetics Putty Soft, Intro pack, for use in Sympress Dispenser (1 x 380 ml, 10 dynamic mixers)
- 14703 Panasil[®] binetics Putty Soft, Refill pack, for use in Sympress Dispenser (2 x 380 ml)

Putty Materials (Hand mixed)

- 11101 Panasil® Putty, jar (2 x 450 ml, 2 scoops)
- 11121 Panasil® Putty Soft, jar (2 x 450 ml, 2 scoops)
- 11141 Panasil® Putty Fast, jar (2 x 450 ml, 2 scoops)



www.kettenbach.com

For U.S. orders buy direct from Kettenbach at: 16052 Beach Blvd. Ste 218 Huntington Beach, CA 92647 Toll free fax: 1-888-892-9820 . Local fax: 714-891-7860 Toll free phone: 1-877-532-2123 . Local phone: 714-892-9820 Canadian orders, please contact Cerum at 1-800-661-9567

Precise Detail Predictable Results The Power of Panasil®



Panasil® initial contact Panasil® monophase Medium Panasil® tray Panasil® binetics Putty Panasil® Putty









VPS Impression Materials

1-877-532-2123

^{*} 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 LightTM, Aquasil Ultra LVTM, Aquasil Ultra XLVTM and ImpregumTM are not registered or trademarked by Kettenbach.

A wide range of choices for a wide range of indications

Panasil® impression materials are addition-curing vinyl polysiloxane (VPS) elastomeric materials with hydrophilic properties, high tear strength, dimensional accuracy and a high resistance to permanent deformation. Panasil® materials provide superior precision and performance in extreme situations. With a variety of viscosities and set times, Panasil® can provide a custom combination to suit your specific needs.



Panasil® initial contact X-Light *normal or fast set* Panasil® initial contact Light *normal or fast set* Panasil® initial contact Regular normal or fast set

Panasil® initial contact has a unique initial hydrophilicity, allowing the material to immediately overcome any remaining moisture in the mouth. You can be assured of an exact impression of the preparation margin, even in situations with a deep sulcus or an especially moist

Panasil® initial contact is also highly thixotropic, with outstanding flow properties and a short intra-oral setting time.

Panasil[®] initial contact, available in three viscosities x-light (very low viscosity), light (low viscosity) and regular (medium viscosity), can ideally be combined with Kettenbach final impression materials: Panasil® binetics putty, Panasil® monophase Medium, Panasil® tray and the classic Panasil® Putty.





- Unique initial hydrophilicity immediately overcomes moisture and provides direct contact with the moist tooth
- Accurate impressions of the preparation margin
- Clinical conditions (moist oral cavity) improve the initial
- The material flows well under pressure, yet doesn't drip



Panasil® monophase Medium

Panasil® monophase Medium is a hydrophilic medium viscosity impression material that offers significant advantages for taking transfer impressions. During application, Panasil® monophase Medium demonstrates favorable wettability at first contact with moist surfaces and adapts perfectly around the preps.

- Less distortion while the material is setting
- Retains inner copings or frameworks firmly
- Easily removed from the mouth with high tear strength
- Dimensionally stable
- Convenient Sympress Dispenser or cartridge delivery system



Panasil® tray Fast Heavy Panasil® tray Soft Heavy Panasil® tray Soft Heavy Fast

Panasil® tray is high viscosity material with its "fast", "soft" and "soft fast" versions of addition-curing preliminary impression material.

- User and patient friendly setting characteristics
- Highly thixotropic
- Easy to remove from mouth
- No taste or smell
- Pressure builds up rapidly
- High patient acceptance
- Easy handling
- Convenient Sympress Dispenser or cartridge delivery

Time Properties		Sympress (5:1)	Cartridge (1:1)
Working Time	23C/74F	2:00 min.	2:00 min.
Working Syringe Time	35C/95F	1:00 min.	1:00 min.
Intraoral Setting Time	35C/95F	2:00 min.	2:00 min.
Total Setting Time		4:00 min.	4:00 min.
Shore Hard	dness	A58	A58



Panasil® tray Fast Heavy

Working Time 23c/74F	1:20 min.	1:00 min.
Intraoral Setting Time 350/95F	2:00 min.	2:00 min.
Total Setting Time	3:20 min.	3:00 min.
Shore Hardness	A62	A62

Panasil® tray Soft Heavy

Working Time 23c/74i	2:00 min.	2:00 min.
Intraoral Setting Time 35c/95i	2:00 min.	2:00 min.
Total Setting Time	4:00 min.	4:00 min.
Shore Hardness	A55	A55

Working Time	23C/74F	1:00 min.
Intraoral Setting Time	35c/95F	2:00 min.
Total Setting Time		3:00 min.
Shore Hardness		A55

Time Properties	Sympress (5:1)	Cartridge (1:1)
Working Time 23C/74F	2:00 min.	2:00 min.
Working Syringe Time 35c/95F	1:00 min.	1:00 min.
Intraoral Setting Time 35c/95F	2:00 min.	2:00 min.
Total Setting Time	4:00 min.	4:00 min.
Shore Hardness	A58	A58



orking Time 23c/74F	2:00 min.	2:00 min.
traoral Setting Time 35c/95F	2:00 min.	2:00 min.
otal Setting Time	4:00 min.	4:00 min.
Shore Hardness	A55	A55

Panasil® tray Soft Heavy Fast

Working Time	23C/74F	1:00 min.
Intraoral Setting Time	35c/95F	2:00 min.
Total Setting Time		3:00 min.
Shore Har	dness	A55





Time Properties	Sympress (5:1)	Cartridge (1:1)
Working Time 23C/74F	2:00 min.	2:00 min.
Working Syringe Time 35c/95F	1:00 min.	1:00 min.
Intraoral Setting Time 35c/95F	2:00 min.	2:00 min.
Total Setting Time	4:00 min.	4:00 min.
Shore Hardness	A58	A58



Exact dosage with less waste

Panasil® binetics Putty Soft

Panasil® binetics Putty Fast

- Good elastic properties
- Easy and hygienic mixing
- Easily removed from the mouth
- Convenient Sympress Dispenser delivery system

Panasil® binetics Putty is a real putty in 5:1 jumbo cartrigde,

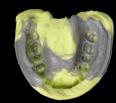
allowing exact dosage and reduced material usage. Supplied in

Kettenbach's Sympress Dispenser, Panasil® binetics Putty can

also be used in most competitive dispensers. Panasil® binetics

Putty is available in two versions: putty fast or putty soft.





Manual Kneading

Panasil® Putty Panasil® Putty Soft

Panasil® Putty Fast

Panasil® Putty impression material is an elastomeric impression material with excellent hydrophilic properties, dimensional accuracy, high tear strength and resistance to permanent deformation. Panasil® Putty is available in three versions: putty, putty fast or putty soft.



23C/74F	2:00 min.
35C/95F	2:00 min.
	4:00 min.
ardness	A66
	35C/95F

Panasil® Putty Soft

Working Time	23C/74F	2:00 min.
Intraoral Setting Time	35c/95F	2:00 min.
Total Setting Time		4:00 min.
Shore Hardness		A60

Panasil® Putty Fast

Time Properties		
Working Time	23C/74F	1:30 min.
Intraoral Setting Time	35C/95F	2:00 min.
Total Setting Time		3:30 min.
Shore Hardness		A66



- Excellent resistance
- Forms functional peripheries
- Outstanding elastic properties with non-sticky, supple texture
- No taste or smell
- Choice of viscosities and set times
- Easily removed from the mouth

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