

INSTRUCTIONS FOR USE



COMP FLOW:

Dentines: A1/B1 ref. 1912001, A2 ref. 1912002, A3 ref. 1912003, A3.5 ref. 1912008, A4 ref. 1912009, B3/B4 ref. 1912010, C2/C3 ref. 1912011, D2/D3 ref. 1912007.

Incisals: S57 ref. 1912004, S58 ref. 1912005, S59 ref. 1912006, S60 ref. 1912012.

Effects: Clear ref. 1912039, Light ref. 1912041, Red ref. 1912042, Blue ref. 1912043.

Opaquers: Light ref. 1912015, Medium ref. 1912000, Dark ref. 1912016.

INDICATIONS

A light curing, single component crown and bridge facing material. The crown or bridge framework should be waxed-up using standard techniques and provided with retainers.

APPLICATIONS

Fixed restorations

- Crowns, bridges, adhesive bridgework
- Inlays, onlays, implant-supported super structures, laminate veneers, long-term temporary restorations

Removable restorations

- Conical and telescopic crowns
- Attachment matrices
- Customizing acrylic denture teeth

➤ Comp Flow Opaque

The Comp Flow Opaque is initially applied like a wash using a stiff, short-haired brush. Apply the opaque in three thin coats to achieve full coverage. Allow each coat to polymerize separately. An opaque coat without full coverage will have a negative influence on the colour effect. The viscosity of the opaque can be optimized through stirring on a mixing block. Particular attention should be paid to the application of very thin coats in retention areas.

Spektra LED: 30 sec

Sektra fast: 3 min

Spektra 2000: 3 min

PLC Spektra: 3 min

Useful tips

The surfaces of the framework should be cleaned of any grease and polish residue. The Comp Flow Opaquer should only be applied in very thin layers.

Opaque coats that are too thick prevent optimum polymerization and thus weaken the bond. Extension of the polymerization time does not result in a greater hardening depth.

Working time for the materials

Depending on the lighting conditions 1-3 min.

Storage

The material should be stored at 5-25°C. Close the syringe properly immediately after use and protect against the effects of direct light.

Shelf life

The maximum shelf life is printed on the label of each syringe. Do not use after the expiry date.

Each syringe contains 3 g.



Comp Flow Dentina

Extrude the dentine material from the syringe and apply it to the entire area to receive the facing, tapering a thin layer toward the incisal area. Depending on the shade, use a spatula to contour a slightly corpulent dentine core.

Intermediate polymerization times:

Spektra 2000 90 sec

Spektra LED 30 sec

Spectra SL 400 90 sec

PLC Spectra 1 min

Q-PLC 10 sec

If a veneer is coated using thicknesses exceeding 2 mm, the intermediate polymerization time must be extended to 8 min.

Modelling aid

To make the mass somewhat smoother and prevent it from sticking to the modelling tool, a drop of modelling aid can be added to the composite and mixed in with it.

➤ Comp Flow Incisal

Extrude the desired incisal material from the syringe and apply it to the incisal half of the facing, over the dentine layer. The incisal material is used to provide the facing with its final contours. Once the facing has been contoured as desired, polymerize it.

Intermediate polymerization times:

Spektra 2000	90 sec
Spektra LED	30 sec
Spectra SL 400	90 sec
PLC Spectra	1 min
Q-PLC	10 sec

The entire surface of the facing should be coated with Comp Cover prior to final polymerization. This prevents formation of a further smear layer and facilitates trimming and finishing.

Final polymerization times in a light curing unit:

Spektra 2000	9 min
Spektra LED	30 min
Spectra SL 400	7 min
PLC Spectra	9 min

Fixation of surface properties

After light curing as described previously, the facing exhibits an increased yellow value due to the catalyst. In order to achieve the final shade and retain it, the restoration must be light cured again.

Spektra 2000	7 min
Spektra LED	not needed
Spectra SL 400	8 min

PLC Spectra	9 min
PLC-F.I.N.	30 min

Finishing the facing

Silicone polishers (square-edge or knife-edge wheels or cylinders), tungsten carbide cutters and diamond instruments are suitable for finishing.

POLISHING

Facings should be polished with a handpiece mounted goathair brush, polishing paste and soft woolen buffs. Careful finishing and polishing of the surface is essential if optimum results are to be achieved and virtually precludes deposits (nicotine, caffeine etc.) which cause discoloration.

Please note: Like all acrylics, Comp Flow produces fine dust while being trimmed. It is advisable to work over a dust extractor.

CORRECTION AND REPAIR

Roughen the facings up to 2 mm around the margin of the area to be corrected or repaired, brush Comp Bonding onto it and light cure it to create a new smear layer.

Intermediate polymerization times:

Spektra 2000	90 sec
Spektra LED	30 sec
Spectra SL 400	90 sec
PLC Spectra	1 min
Q-PLC	10 sec

Should the polymerized layer of Comp Bonding have a whitish appearance, it has been polymerized excessively and must be removed. Repeat the above mentioned procedure, but reduce the polymerization time. The appropriate composite material should then be applied and polymerized.

Facings split off

- Wax-up the framework properly to ensure that the composite materials are always supported regardless of the prevailing occlusal conditions.
- Avoid precontacts.

- Apply the individual materials in the correct thickness and polymerize for the correct periods.
- Add retention beads.
- Do not apply too much Comp Metal Primer.
- Once the primer has dried in air for 2 minutes, apply the opaque without further delay.

Air voids

- Rotate the plunger to extrude the paste out of the syringe and scrape it off – do not use an instrument to remove the paste from the syringe.
- Apply sufficient material for the facing and spread it.
- Do not mix composite materials, rather apply coats on top of each other.

Discoloration and plaque

- Check the luminous power of the light curing units.
- Polish the surface thoroughly to seal it.
- Ensure that the restorations are positioned correctly in the light curing units.
- Apply the composite materials in the correct thickness and adhere to the polymerization times.

GUARANTEE

Our technical instructions, regardless of whether they are provided verbally, in writing or during practical demonstrations, are based on our own experience and should only be considered guidelines.
As our products are subject to continued development, we reserve the right to modify them.

Composition of Comp Flow:

Filler, inorganic (57 % by weight and 51 % by volume)

Glass filler (mean particle size: 0.7µm)

Pyrogenic silicic acid (mean particle size: 0.04µm)

Monomers (43 % by weight)

Urethane dimethacrylate

Butanediol dimethacrylate

Bis GMA

Additional substances (1 % by weight)

Initiators, stabilizers, pigments

WORKING TIMES

1-3 minutes, depending on the light conditions.

DEPTH OF POLYMERIZATION

The depth of polymerization is 2.0 mm. To ensure optimum physical properties, no layer should be more than 2.0 mm thick. A light curing unit with an emission spectrum of 310-500 nm should be used. The requested physical characteristics can only be obtained with immaculate lamps. Therefore, a regular check of the light intensity according to the values quoted by the manufacturer is necessary.

STORAGE

To achieve the correct shelf-life, do not store this material above 25°C. If, during high temperature periods outside, the Composite is kept in a refrigerator, it must be removed well before use to resume its original contouring properties. Close the syringe tightly after use and protect it against direct light. Turn back spindle about one turn, in order to keep the material from leaking out.

COMP EFFECTS:

Light curing composite for building up occlusal surfaces, palatal surfaces and cusps as well as full-coverage veneers.

COMPOSITION

Monomer matrix

Diurethane dimethacrylate; Bis-GMA; 1,4-butane dioldi-methacrylate

Total filler content

Inorganic filler: 75% by weight (52% by volume); glass filler (mean particle size: 0.7 µm); pyrogenic silicic acid (mean particle size: 0.04 µm)

INDICATIONS

- Cosmetic adjustments
- Indirect laminate veneers
- Vestibular facings on temporary full and partial dentures
- Posterior facings
- Inlays
- Onlays
- Full-coverage veneers

Shelf-life

The maximum shelf-life is printed on the label of each syringe. Do not use after the expiry date.

Side-effects

With proper use of this medical device, unwanted side-effects are extremely rare. Reactions of the immune system (allergies) or local discomfort, however, cannot be ruled out completely. Should you learn about unwanted side-effects – even if it is doubtful that the side-effect has been caused by our product – please kindly contact us.

CONTRA-INDICATIONS/INTERACTIONS

If a patient has known against or hypersensitivities towards a component of this product, we recommend not to use it or to do so only under strict medical supervision. The dentist should consider known interactions and cross reactions of the product with other materials already in the patient's mouth before using the product.

As phenolic substances (such as eugenol) inhibit polymerization, do not use materials containing these substances.

DISPENSING AND APPLICATION

These occlusal materials must **not be applied directly** to metal or opaquer. Once the bonding agent and opaquer have been applied to the metal framework, it must be coated with a layer of composite as described in the composite instructions. This flexible intermediate layer absorbs loads and stress. The shade is then selected from the enamels and the occlusal materials built up. The layer must be at least 2 mm thick. Once they have been built-up, composite materials only require intermediate polymerization before applying Comp Effects.

Indirect inlays/fabricating inlays

Pour the impression with high strength stone in the laboratory. Once the model has set, remove the impression. Block out the undercuts and apply an oil-free separating agent to the model. Build up the inlay layer-by-layer on the model, starting with the proximal and deep occlusal areas. Maximum thickness of each layer: 2 mm. Shade modifiers may be applied between the dentine and enamel to create special effects. Each layer must be cured individually with a standard light curing unit (approx. 20 seconds in a Spektra LED). The finished inlay is then released from the die and conditioned for 3 minutes in a Spektra LED. The occlusal surface should be trimmed with fissure burs. The inlay is polished using goat hair brushes, polishing paste and soft woolen buffs in a handpiece. Careful trimming and polishing of the surface is essential for optimum results and virtually prevents deposits (nicotine, caffeine etc.) accumulating on the surface and affecting the shade.

Please note: As with all composites, produces fine dust during trimming. It is advisable to use a dust extractor.

Placing inlays, onlays, laminate veneers

Remove the temporary restoration and clean the cavity. Place a rubber dam, clean and dry the prepared tooth surfaces. Exert gentle pressure on the restoration to ensure that it fits precisely. Once the tooth has been cleaned, it is etched and the bonding agent applied and cured with a commercially available curing unit (refer to the separate instructions). A luting composite is then applied as described in its manufacturer's instructions, the inlay placed in the cavity and gently pressed into position.

Caution: If the inlay is more than 2 mm thick, a dual-curing composite should be used. Excess composite is removed and the remaining composite cured with a commercially available light curing unit as described in its manufacturer's instructions. Remove excess composite with fine grit diamonds and diamond finishing strips. Check the occlusion and adjust where necessary.

High lustre polishing

Trimming and polishing are carried out with the finishing and polishing set.

Caution: Avoid entrapping bubbles during mixing. Individual layers should not be thicker than 2 mm (we recommend 1-1.5 mm). Due to the influence of oxygen in the atmosphere, a thin non-cured film (smear layer) remains on the surface of every layer. This smear layer ensures that the layers bond together chemically and must not be touched or contaminated with moisture.

We recommend applying Comp Cover prior to final curing. This gel prevents the material reacting with oxygen and allows the surface to cure fully. The working time beneath a dental light is approximately three minutes, depending on the lighting conditions. If extensive contouring is required, the lighting intensity should be reduced or the material covered with an opaque foil.

Curing

The intermediate light curing time for all shades is approximately 60-90 seconds per layer when using a commercially available light curing unit. The final shade and hardness is not attained until the final layer has been applied and cured (refer to table 1).

Curing details

A light curing unit with an emission spectrum of 350-500 nm must be used for curing. As the required physical properties are only attained if the light curing unit is functioning properly, its luminous intensity must be checked regularly as described by the manufacturer.

Usage and storage

Do not store above 25°C. Do not use after the expiry date printed on the syringe label. Ensure that the material is at room temperature before use. For use by dental professionals only. After dispensing material, withdraw the plunger slightly to prevent the nozzle becoming blocked. After dispensing material, close the syringe immediately and always keep it closed. Avoid exposure to direct sunlight. If the material is not cured fully, it may discolour, its full mechanical properties will not be achieved and irritation of the pulp cannot be ruled out. This product was developed specifically for the range of indications described. It must be used as described in the instructions. The manufacturer cannot be held responsible for damage due to incorrect handling or processing.

NOTE

Please supply the dentist with the above information, if this medical device is used to produce a special model. Please also consider the safety data sheets.

Vita®* Colours	Comp Flow Opaquer	Comp Flow Dentina	Comp Flow Incisal
A1	light	A1/B1	S 58
A2	light	A2	S 58
A3	light	A3	S 59
A3,5	medium	A3,5	S 59
A4	medium	A4	S60
B1	light	A1/B1	S 57
B3	light	B3/B4	S59
B4	medium	B3/B4	S59
C2	medium	C2/C3	S59
C3	dark	C2/C3	S59
D2	light	D2/D3	S60
D3	dark	D2/D3	S 59

* Vita is a registered trademark of Vita Zahnfabrik H. Rauter GmbH & Co. KG, Bad Säckingen