

update *clinical*

Ivoclar Vivadent AG
Bendererstrasse 2
FL-9494 Schaan
Principality of Liechtenstein
www.ivoclarvivadent.com

Licence to cure

The new bluephase® – LED for every use

Every material, every time and every indication – only the new bluephase offers this unique combination. It is the first LED light which is suitable for every clinical use in the dental office.



offers a light for unlimited use due to the innovative polywave LED.

The ability to polymerize all dental materials depends on the generated light. To date, conventional LED lights have not been suitable for this purpose due to the narrow emission spectrum. Like halogen lights, the new bluephase achieves a broad light spectrum of 380 to 515 nm. With the specially developed polywave LED, the bluephase light is suitable for all light initiators and thus its use is unrestricted.

The cordless design based on state-of-the-art lithium polymer batteries offers the ultimate in mobility. Unlimited freedom of movement is achieved via the ingenious Click & Cure function. The handpiece can be connected with the power cord of the charging base to enable continuous operation – no matter if the battery is discharged.

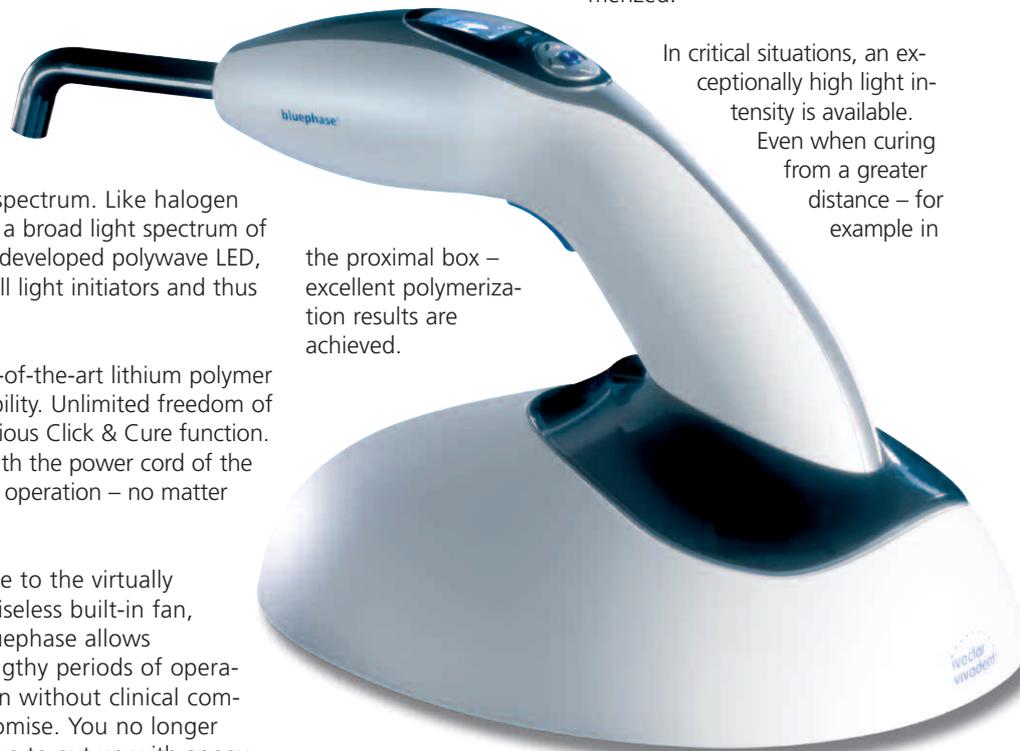
LEDs have revolutionised light curing and successfully introduced cordless polymerization to the dental practice. To date, LED units have been characterized by some limitations compared to halogen lights, particularly as regards the emission spectrum and operation time. The new development of bluephase of-

fers a light for unlimited use due to the innovative polywave LED.

multi-unit restorations, including the consecutive placement of up to 10 veneers.

The high light intensity of the powerful bluephase (1,200 mW/cm² +/- 10%) helps to reach large curing depths in the shortest possible curing times. Composites and adhesives can be cured in 10 seconds. Complete polymerization is also achieved in challenging treatment procedures, such as the polymerization of luting composites used to cement indirect restorations. The rotating 10 mm light probe allows all restored areas to be accessed with ease. Even large cavities can be entirely irradiated due to the large diameter of the light probe. Consequently, multiple polymerization cycles for MOD restorations are a thing of the past.

Special optics help the intense light of the bluephase to penetrate deep into the material to be polymerized.

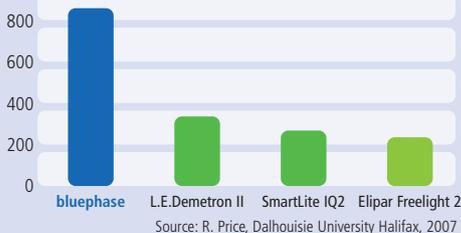


In critical situations, an exceptionally high light intensity is available. Even when curing from a greater distance – for example in

the proximal box – excellent polymerization results are achieved.

The new bluephase offers a wider application range than any other polymerization light before it. Every material, every time, every indication – only this unique combination gives you the licence to cure.

Residual light intensity (mW/cm²) from a distance of 8 mm



Due to the virtually noiseless built-in fan, bluephase allows lengthy periods of operation without clinical compromise. You no longer have to put up with annoying interruptions and irritating waiting times. bluephase facilitates extensive cementation procedures involving

bluephase® meter – the radiometer with the unique measuring principle

The light intensity is a decisive factor when it comes to the quality of light cured restorations. In order to ensure adequate polymerization at any time with the shortest possible curing times it is recommended to regularly check the performance of the curing light in use.

The innovative bluephase meter with its ingenious measuring principle is ideal for checking the light intensity of all curing lights with a circular light emission window. In contrast to conventional radiometers, the radiating surface is taken into account. Therefore, it is possible to accurately determine the actually available light intensity for the first time. The intelligent line sensor determines both the emitted light performance and the diameter of the light emission window. Based on these data, an integrated micro-processor then calculates the available light intensity.

The measuring process is very easy for the user. The light probe is exactly positioned on the line sensor by means of the centering gauge and the curing light is switched on. The intensity is shown on the display. The dentist can immediately react to

the result and thus ensure the quality of his/her patients' restorations. If the measured light intensity is lower than that stipulated by the manufacturer, the polymerization time has to be prolonged. If the obtained values are below 400 mW/cm², it is recommended to replace the curing light. If the intensity corresponds with the manufacturer's data, polymerization can be continued as usual.



Silamat® S6 – mixing with style

Form and function combined in an attractive design.

The mixing device has been designed by the internationally renowned and prize-winning designer Richard Amiel, who is also responsible for the appearance of the successful polymerization light bluephase. He prefers round but clear shapes.

His style is also reflected in the design of the Silamat S6. Thanks to the rounded shapes and the removable cover the unit can be cleaned easily.

«It is important to me that dentists and dental assistants like to work with the unit. Practices are becoming more modern and design-oriented. However, many units still look old-fashioned. Why not design a mixing device that ideally suits the modern practice?» These were the thoughts that inspired Richard Amiel to design the Silamat S6.



The Silamat S6 not only features a convincing design: The time-tested Silamat® technology leaves nothing to be desired as far as functionality is concerned. The patented mixing mechanism with a figure-eight mixing pattern helps to achieve homogeneous mixing results. Various types of mixing and injection capsules including types which are too large for conventional mixing devices can be used. The capsules can be loaded with only one swift hand movement. Simply set the desired mixing time in seconds and you're done!

Reliable bonding of tooth jewellery using Tetric EvoFlow[®]



The bonding of tooth jewellery is not part of the conventional range of services offered by dentists and has to be regarded as a cosmetic treatment on demand. Therefore, it is important to take great care in the bonding process and the selection of patients in order to avoid negative consequences.

The prerequisites for a successful result include good oral hygiene practices of the patient, the use of high-quality materials and particularly careful processing.

The proper application technique will be described in the article below using Skyce[®] as an example.

A healthy enamel surface is essential for the adhesive cementation of Skyce. The position of the ornament should be selected in such a way that no tilting or occlusal interferences can ensue. After selecting the size of the ornament, a rubber

dam (e.g. OptraDam[®]) should be placed in order to avoid the aspiration or swallowing of Skyce and to establish ideal conditions for the adhesive procedure.

In the present case, it was not possible to isolate the treatment field using a rubber dam, since the anteriors were connected with retainers. As an alternative, a lip and cheek retractor (OptraGate[®]) can be used in such cases. Subsequently, the enamel surface should be cleaned using polishing paste. After rinsing with water and air-drying, a surface area slightly larger than the diameter of the ornament is etched with phosphoric acid gel (Total Etch) for 60 seconds (Fig. 1). Following this, the etched surface should be thoroughly rinsed with water and subsequently dried with a strong stream of air. The conditioned surface should have a chalky white appearance.

After optional application of a bonding agent, which is dispersed to a thin coat (e.g. Heliobond and Excite[®]), a very small amount of Tetric EvoFlow is applied where needed (Fig. 2) and the tooth jewel is placed on it (Fig. 3). Skyce can be manipulated using a probe, to whose tip some boxing wax has been applied. As soon as the ornament has been placed, the patient has the chance to check its final position again before Tetric EvoFlow is light cured.

In order to remove the oxygen inhibition layer and thus to avoid discolouration, the Tetric EvoFlow encircling the ornament should be carefully smoothed out with rubber polishers (e.g. OptraPol). In the process, any contact of the polishers with the tooth jewel should be avoided. For high gloss finishing, a polishing brush, such as Astrobrush[®] should be used. The subsequent application of topical fluoride is recommended.

If the procedure indicated above is followed when bonding Skyce ornaments to the tooth structure, good retention and durable aesthetics are achieved. The use of flowable composites, such as Tetric EvoFlow, provides the advantage of a particularly high surface quality, shade stability and strength. Due to the good wetting properties of Tetric EvoFlow combined with its good stability, this material is particularly suitable for bonding tooth jewellery.

Dr. Arnd Peschke



Fig. 1: After cleaning the tooth surface with polishing paste (Proxylt), the enamel is etched with Total Etch for 60 seconds.



Fig. 2: A very small amount of Tetric EvoFlow T is applied to bond Skyce.



Fig. 3: Skyce is carefully placed on the surface wetted with Tetric EvoFlow and its position is adjusted.



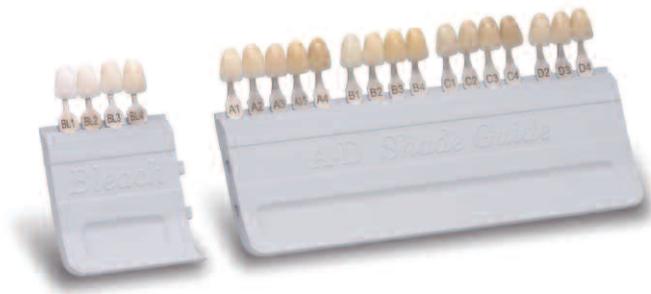
Abb. 4: After polymerization and careful polishing to remove the oxygen inhibition layer, Skyce shows impeccable aesthetics and is reliably bonded.

Arbeitsgemeinschaft A-D Shade Guide presents A-D shade guide

In order to support the team work of dentists and dental technicians in the selection of the tooth shade, a reliable, proven shade guide is required.

Millions of dentists and laboratories throughout the world have opted for the shade guide with shades from A1 to D4.

In order to offer this shade standard independent of a manufacturer, companies, such as **DeguDent**, **Heraeus Kulzer**, **Ivoclar Vivadent**, **Merz Dental** and **Wieland Dental+Technik** have joined forces to ensure the future supply of shade guides for dentists and dental technicians.



Dentists and laboratories greatly benefit from this measure, as they are not bound to use materials from only one manufacturer.

The objective of this consortium called «**Arbeitsgemeinschaft A-D Shade Guide**», which is open to all dental suppliers, is to render daily working procedures more accurate and thus more economical with an established shade standard.

In addition to the 16 established A-D shades, 4 new optional Bleach shades (BL1 to BL4) will be available.

The new A-D Shade Guide enables dentists and dental technicians to continue working with the proven A-D shades, as well as the four new Bleach shades in the future: **durable, reliable and with a high degree of shade match.**

Click & Bond™ with the VivaPen®

After the successful launch of the self-etching adhesive AdheSE One in the convenient VivaPen delivery form, the time-tested ExciTE will also be made available in the VivaPen as of March 2008*.

Advantages of the VivaPen

- Unique, pen-shaped delivery form for easy and clean **direct application**
- Exact dosing and the specially designed VivaPen brush cannula **saves material**
- **Easy access** to all cavities due to the individually adjustable VivaPen brush cannula



*The date of product launch may vary from country to country.

Which bonding type are you?

ExciTE®

Total-Etch dental adhesive

ExciTE is a light-curing single-component adhesive used in conjunction with the total-etch technique.

Your advantages with ExciTE

- Consistently high bonding values on enamel and dentin
- Low film thickness for accurately fitting indirect restorations
- Reduced postoperative sensitivities due to effective sealing of the dentin surface and monitoring of the clearly visible shiny layer



AdheSE® One

Self-Etch dental adhesive

AdheSE One is a self-etching light-curing all-in-one adhesive for direct restorative treatment procedures (composites, compomers).

Your advantages with AdheSE One

- Consistently high bonding values on enamel and dentin
- Storage at room temperature without compromising the quality due to patented stable monomers
- Acetone-free chemistry – consistent quality due to water as the solvent



Virtual® CADbite Registration – fast, strong, scannable

Virtual CADbite is the bite registration material from the CAD/CAM materials expert Ivoclar Vivadent. It is scannable and can be used for the optical recording of data when fabricating restorations with CAD/CAM/CIM systems, such as CEREC.

Virtual CADbite is an addition silicone, which may also be used for «conventional» bite registration techniques in conjunction with indirect restorative procedures. Due to the material's high final hardness of 32 Shore D and high fracture toughness, it is easy to trim and grind. Moreover, undesirable shifts are prevented when adjusting the position of the casts in the articulator. As Virtual CADbite requires an intra-oral set time of only 45 seconds, the risk of distortions or inaccuracies

due to patient jaw movements is substantially reduced. At the same time, Virtual CADbite provides sufficient working time to allow full-arch records to be taken.

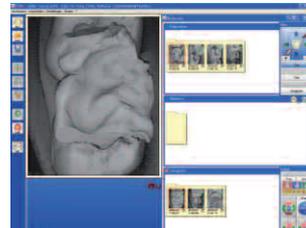
The fresh mint taste of Virtual CADbite makes bite registrations more pleasant for patients.



Contrast Spray has been sprayed to the teeth for optical imaging with the CEREC unit.



Application of the prepared and trimmed bite registration without additional application of powder.



Virtual CADbite during scanning. Result: good contrast and the brightness value corresponds to the powdered tooth surface.



Stained and glazed IPS Empress CAD restorations – there was no need for occlusal adjustments after cementation.

Accessories

OptraGate® ExtraSoft – comfortable and extra three-dimensional



Fig. 1 OptraGate ExtraSoft – heightened patient comfort in the area of the frenulum labii.

The prize-winning three-dimensional OptraGate from 2005 is an innovative auxiliary for easy and patient-friendly enlargement of the treatment field and relative isolation. The latex-free OptraGate allows lips and cheeks to be gently and evenly retracted to provide a full view of the anterior and posterior teeth. Based on the demand of customers for a more comfortable, pressure-relieving fit in the area of the frenulum labii, we have developed the OptraGate ExtraSoft (Fig. 1). In addition to optimizing the material quality, the inner ring now features an opening in this area (Fig. 3). Due to these modifications and

its three-dimensional flexibility, OptraGate ExtraSoft now even better suits the individual requirements of patients and is therefore comfortable to wear for patients, even during long treatment sessions. OptraGate ExtraSoft can be used in many different treatment procedures: dental photography, initial examination, prophylaxis, bleaching, periodontal treatment, direct and indirect restorative treatment, orthodontics and impression taking.

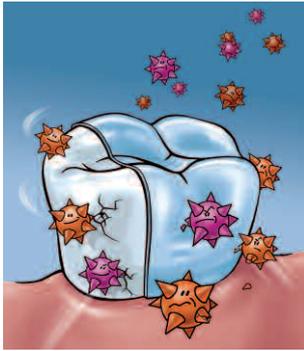


Fig. 2 NEW: economical Dispenser Box.

Another highlight is the new «Dispenser Box», which makes the daily working routine more economical. The lip and cheek retractors which are individually and hygienically wrapped can be easily taken from the dispenser.



Fig. 3 OptraGate ExtraSoft: modification of the inner ring in the area of the frenulum labii.



Cervitec® Plus – the protective varnish of the next generation

Initial customer feedback

Cervitec Plus is a protective varnish for ensuring the quality of restorative work and for professionally controlling bacteria in high-caries-risk patients.

Cervitec Plus. They also like the new delivery forms – a real Single Dose and an economical tube.

Patients experience significantly less limitations regarding eating and drinking after the varnish has been applied. In addition, the taste of the varnish is more pleasant.

Cervitec Plus is based on its predecessor Cervitec, whose effectiveness has been well-documented in many international studies.

Cervitec Plus contains the proven combination of chlorhexidine and thymol as the active ingredients. It is used to protect exposed root surfaces and reduce the bacterial activity on teeth. Cervitec Plus helps to reduce the caries risk and to prevent the inflammation of the gingiva or assist in its treatment. The varnish base of Cervitec Plus has been optimized. Therefore, tooth surfaces are wetted more thoroughly and adhesion of the varnish is improved. Because of its heightened moisture tolerance, the new varnish is easier to use.

New customers are very interested in Cervitec Plus, as the advantages are convincing. Customers think that Cervitec Plus is particularly suitable for the intensive protection of orthodontic patients after banding.

Conclusion

The clinically proven properties of the predecessor product, such as active ingredients and aesthetics, have been maintained while good features, such as user-friendliness and adhesion, have been further improved in the new Cervitec Plus. Consequently, it will be easier to keep teeth, crown and bridge work and implants in good condition for a long time.



Positive response

The modifications of Cervitec Plus have been well accepted by users who have been using Cervitec for years. They appreciate the easier application and the improved adhesion of

Tips from experts

Competence in Composites Useful tips from the expert team

I like to apply a flowable composite exactly where it is needed. What possibilities does Tetric EvoFlow offer?

Tetric EvoFlow can either be applied from the Cavifil with an extra thin tip or from the syringe with a mounted metal tip. The syringes are supplied with cannulas of a diameter of 1.1 mm. However, cannulas with a diameter of 0.9 mm can also be used. Consequently, it is possible to selectively apply the composite in particularly small cavities.

What is important during bleaching in connection with restorations?

Composite and ceramic restorations are not affected. However, only natural tooth structure is whitened. Therefore, existing restorations in the anterior region have to be replaced, if required. This means that the restoration has to be replaced after the bleaching process. In order to achieve reliable shade matching and optimum adhesion of the bonding agent, it is advisable to wait at least two weeks after bleaching.



Masthead

Editor: Ivoclar Vivadent AG

Editor-in-chief: Eva Ilzer, Bendererstrasse 2, FL 9494 Schaan E-Mail: eva.ilzer@ivoclarvivadent.com

Editorial staff: Irina Assmann, Marcella Büchel, Katrin Langer, Dr. Arnd Peschke, Thomas Ruhm, Dr. Marion Wanner, Cornelia Weigand, Dr. Axinja Wolf Layout: Christian Dünser

For questions please contact the respective office:

Australia: +61-3-9795-9599

UK: +44-116-284 7887 • and others: +423-235-36 36

www.ivoclarvivadent.com

XXXXXXXX0907/dRDV