

### LED Lamps

Curing UV adhesives when bonding glass/metal









Bohle offers a comprehensive portfolio of UVA lamps for curing UV adhesives. The working lamp length should meet or exceed the length of the bonding joint. As a result, extreme tensions within the bonding joint are avoided which might lead to the failure of the bond. The lamps are particularly suitable for metal bonds and short bonding distances. For longer bonding distances, tube lamps of an appropriate size should be used to minimise tensions. All Bohle UVA lamps are equipped with special filter screens.



### At a Glance





Technical Data	UVA-LED Hand lamp 365nm BO 5500358	TwinLED B0 5500355
Wavelength	365 nm	365 nm and 395 nm, switchable
Possible UV adhesives	UVA curing adhesives*	all UVA and light curing adhesives
UVA intensity	> 200 mW/ cm² measured with Bohle UV gauge	> 200 mW/ cm² measured with Bohle UV gauge
Power consumption	70 W	Battery powered, energy-efficient
Size	Lamp approx. 225 x 180 x 120 mm, handle approx. 140 mm	125 x 40 x 70 mm
Weight	Lamp 1.9 kg	600 g
Temperature development	low	low
Area of application	Bonding metal parts, surface bonds up to approx. 25 x 25 cm max.	Bonding metal parts up to Ø 120 mm
Service life of light bulb	approx. 20000 h	approx. 20000 h
Connection	90 - 264 V, 47-63 Hz, cable-bound	100 - 240 V, 50/ 60 HZ, battery powered
Features	no transformer	4 separately programmable timers
	high performance	high performance
	short curing times	short curing times
	energy-efficient	energy-efficient
	no warm-up or cool-down phase, can be switched on and off as often as required	no warm-up or cool-down phase, can be switched on and off as often as required
		small
		lightweight
		portable
		silent

<sup>\*</sup> Bohle-light curing adhesives ("VIS" and 678-0) can be combined with UV-transparent glasses, because they are UVA and light curing. Other light curing adhesives (not from Bohle) are not possible..

# **UVA LED Hand Lamp**

Thanks to its high UV performance, the UVA LED hand lamp is particularly suitable for bonding metal parts and curing smaller bonding surfaces up to 25 x 25 cm. The positioning of the LEDs enables a uniform light exposure of the entire surface.

The UVA LED hand lamp does not require warm-up or cool-down times. Therefore, it is suitable both for on/off and permanent operation. The service life of the LEDs amounts to 20,000 operating hours. The UVA LED hand lamp has a power consumption of only 70 watts. It needs no ballast and is suitable for connection to all standard power supply lines (110/230 V and 50/60 Hz) around the world.

The UVA LED hand lamp operates with a wavelength of 365 nm. It is suitable for curing all UV adhesives when used on UV transmitting materials. UVA absorbing materials, such as laminated safety glass, cannot be cured with this lamp. The LED lamps with a wavelength of 405 nm required for this purpose are available upon request.





### Benefits:

- High performance
- Short curing times
- Enables the curing of larger surfaces
- Energy-efficient
- High durability lamp
- No warm-up or cool-down phase
- Can be switched on and off as often as required
- 110/230V and 50/60Hz

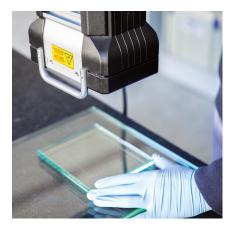


UVA LED hand lamp 365 nm

Art. No.

BO 5500358









### Verifix® Twin*LED*

The small and extremely powerful Bohle Verifix® Twin*LED* UV LED lamp is the new high-tech tool for UV bonding. It's cordless so fits into any bag and can be taken with you to the customer. The lamp achieves a high uniform light intensity without getting hot thanks to the LED technology. The adjustable cone of light enables bonding up to a diameter of 120 mm. The long LED service life ensures very low operating costs with an extremely fast return on investment. This powerful device pays for itself!









### Benefits:

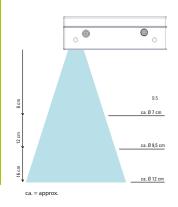
- Very high performance
- Short curing times
- Suitable for all types of bonding
- Small, light and easy to carry
- Energy-saving and quiet
- Good value for money
- No build-up of heat
- Instantly ready for use, no warming-up phase
- Can be fixed to objects such as a standard camera tripod

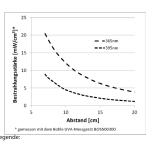
Description	Art. No.
Verifix® Twin LED UV-LED Lamp	BO 5500355
Spare battery	SP BT5559
Handle	BO 5500356
Tripod	BO 5500357

### Practical seminar at Bohle

If you are looking for an introduction into high quality bonding methods, then Bohle is the right partner for you! This seminar will teach you the basic technical knowledge you need to bond the most diverse materials crystal clear to each other. You will also do your own sample bonds.

Your contact person for seminars: Karolina Duvnjak, T +49 2129 5568-255, F +49 2129 5567-255, karolina.duvnjak@bohle.de The Bohle Verifix® UV LED Lamp TwinLED is suitable for bonding up to a diameter of approx. 120 mm. The size of the beam of light is regulated by the distance of the TwinLED to the bonding surface. The light intensity is very even over the entire area, thus ensuring stress-free bonding.





Bestrahlungsstärke = Exposure intensity

\*gemessen mit dem Bohle UVA-Messgerät BO5500300 = \*measured with the Bohle UVA measuring device BO5500300

## Glass/Metal Bonds



### Verifix® MV 760 UV Adhesive

Due to its outstanding properties, the UVA curing adhesive Verifix® MV 760 is extremely versatile and therefore ideal for glass/metal and glass/glass bonds. Verifix® MV 760 is mainly used for constructions that are subject to high static or dynamic forces. Its high elongation at break compensates for the expansion of different bonded materials without loss of adhesion.

Contents	Art. No.
1000 g	B0 MV7601K
250 g	B0 MV76025
100 g	B0 MV76010
20 g	B0 MV76002



### Verifix® 760VIS UV Adhesive

The UVA and light curing adhesive Verifix® MV 760VIS is suitable for universal applications due to its adhesive properties. It is therefore ideal for glass/metal and glass/glass bonds. This adhesive is mainly used for glass constructions subject to high static or dynamic forces. Important: Due to its composition, Verifix® MV 760 VIS is particularly appropriate for bonding laminated safety glass/laminated safety glass and laminated safety glass/metal.

Contents	Art. No.
1000 g	B0 MV76V1K
250 g	B0 MV76V25
100 g	B0 MV76V10



### Verifix® B 682 T UV Adhesive

Due to its very high final strength, this UVA curing adhesive is particularly suitable for statically and dynamically demanding bonds. Glass/metal bonds work particularly well with this adhesive. When the Bohle UV activator LF (BO 5209365 / BO 5209367) is used, the Verifix® B 682-T adhesive is able to cure without UV light (e.g. for coloured glass, laminated safety glass/metal bonds, etc.). When using the activator, the yellowing of the bond cannot be ruled out.

Contents	Art. No.
1000 g	BO 5209396
250 g	BO 5209395
100 g	BO 5209394
20 a	BO 5209393

# The Verifix® 682-T, MV760 and MV760VIS adhesives are also available with spacers.

The spacers contained in the adhesive enable the minimum



layer thickness of the adhesive to be observed. This ensures that there is enough adhesive between the bonding parts, also when bonding very heavy glass elements. Depending on the bonding process, this can also be an advantage when bonding metal parts, as the minimum layer thickness required can be achieved. The spacers do not affect the technical properties of the adhesive. If you have any questions, our experts are happy to assist you.



#### **Bohle Special Cleaner**

Ideal for preliminary cleaning prior to glass bonding or sealing. The Bohle Special Cleaner cleans and degreases glass, metal, ceramic and rubber. The special composition of the cleaner ensures very thorough cleaning. Particularly suitable for use with UV adhesives

Description	Art. No.
Empty bottle with label and spray head - 250 ml	BO 5107914
Refill 1 I	BO 5107911



### Metal Primer

For improved adhesion on aluminium, chrome or nickel-plated surfaces · for bonding with acrylate adhesives · Shelf life in original packaging: 12 months from the date of manufacture

Contents	Art. No.
1000 g	BO 5209489
100 g	BO 5209488



#### **UVA Measuring Device**

For measuring the intensity of UVA tube and hand lamps  $\cdot$  suitable for UVA and UVB range  $\cdot$  For testing the UVA transmittance of glass.

Measuring range	Art. No.

BO 5500300



### Pyrosil® Professional Kit

For improved long-term adhesion of challenging bonds. Especially suitable for regular use under industrial conditions, this kit has a larger burner with more contents, robust operating elements and a support base. This kit contains a burner with piezoelectric firing,  $2 \times 27.5 \, \mathrm{g}$  gas cartridges,  $2 \times 50 \, \mathrm{ml}$  of coupling agent and an application brush. Contents are sufficient to pre-treat approx.  $10,000 \, \mathrm{cm^2}$  of bonding surface. The flame burner is supplied empty.

Description	Art. No.
Pyrosil® Professional Kit	BO 5209491



### Swing Hinge round

High quality stainless steel hinge suitable for inset doors  $\cdot$  a threaded pin in the hinge enables the door to be removed after bonding.

↑ For inset doors · Diameter 20 mm · Height 18.5 mm · Glass thickness up to 12 mm · Door weight max. 10 kg · Packaging unit 2 items

Description	Art. No.
Swing Hinge, round	BO 5206260



#### Swing Hinge square

0 - 200 mW/cm<sup>2</sup>

High quality stainless steel hinge suitable for inset doors  $\cdot$  a threaded pin in the hinge enables the door to be removed after bonding.

• Shape square · Mounting glass/glass · Edge length 20 mm · Door weight max. 10 kg · Packaging unit 2 items



#### Cristallo Fix Hinge Set

With Cristallo Fix, Bohle has developed a hinge which enables glass doors to be bonded to glass cabinets and which can also be adjusted in three dimensions. The technically sophisticated product with an opening angle of 125° is equipped with a damper with spring closing mechanism and is equally suitable for inset or overlay doors. Instead of a conventional cross plate mounting, this new product uses a cabinet bonding plate with snap-on function which was specifically developed for this purpose · infinitely adjustable · with integrated damping technology.

 $oldsymbol{1}$  Mounting glass/glass  $\cdot$  Opening angle 125  $^{\circ}$   $\cdot$  Glass thickness 3 - 8 mm



### Verifix® Clix 90° Glass Door Hinge

This hinge is a top quality stainless steel hinge for glass/glass mounting. Suitable for inset doors. It is adjustable in three dimensions and has a snapon function for easy mounting and dismounting. Equipped with a self-closing spring mechanism, it is well suited for use with dampers BO 5500230/31 and BO 5500235/36. Please be aware when opening the door that it swings approx. 30 mm to the inside. Trim shelfs if necessary!

Description	Art. No.
Swing Hinge · square	BO 5500281

Description · Sales unit	Art. No.
Cristallo Fix Hinge Set · 1 item	BO 5206060

Description	Art. No.
Glass Door Hinge	BO 5206057



### **Further Information**

You can find further information (diagrams etc.) in our glass bonding technology catalogue.





Bohle Ltd. Fifth Avenue Tameside Park Dukinfield Cheshire · SK16 4PP

T +44 161 3421100 F +44 161 3440111

info@bohle.ltd.uk

