

BriteGuard® Surface Protection

#### BriteGuard® – Smart surface protection

BriteGuard® is a registered brand of Bohle AG. For almost 90 years we have been developing, producing and selling products for glass processing and finishing. No matter what you plan to do with glass, our full product range offers you the suitable products and solutions — including surface protection. With BriteGuard® Bohle has developed a surface protection system that is setting new standards. At the heart of the system are two coating products BriteGuard® Surface Sealer for smooth surfaces and BriteGuard® Surface Sealer X for rough surfaces.

#### What is BriteGuard®?

BriteGuard® is a high quality, easy-to-use surface protection system for glass and glazed ceramic surfaces — with extraordinary properties:



#### **Excellent Efficiency**

BriteGuard® Surface Sealer reacts chemically with glass and glazed ceramics to form a high strength functional layer that protects against soil adhesion and glass corrosion.



#### **Exceptional Resistance**

BriteGuard® Surface Sealer can withstand mechanical wear as well as chemicals, heat, UV radiation and is significantly more resistant to such elements than other surface protection products.



#### Clearly structured modular system – Simple and effective

BriteGuard® Surface Sealer is available for smooth and rough surfaces. The modular system makes it very easy to select the necessary products.



#### Easy application without investment

BriteGuard® Surface Sealer can be applied as you choose. Whether with a cotton pad, spray bottle or applicator, whether by hand or machine: BriteGuard® protection is achieved in 3 easy steps without the necessity of expensive equipment.







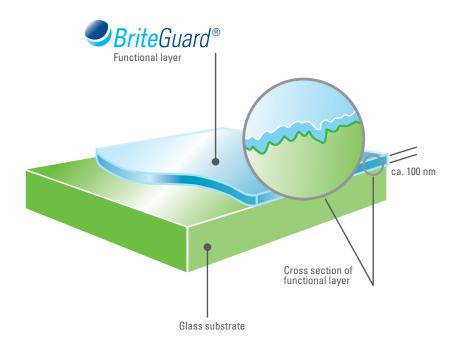
Claddings

Architecture

#### **Excellent Efficiency**

After BriteGuard® Surface Sealer has been applied, it reacts with the surface and forms a high strength functional layer that replicates the structure (topography) of the glass or glazed ceramic surface. The surface tension of this functional layer is extremely low (the contact angle measured with water is approx. 105°), ensuring that organic soiling (e.g. from soap residues, bird droppings or traffic pollution) and inorganic soiling (e.g. limescale or salty air) hardly adhere and can be removed very easily. Surfaces protected with BriteGuard® simply stay clean much longer and are very easy to clean. The low surface tension can be seen in the familiar beading effect that occurs when in contact with water. Because the functional layer widely prevents foreign bodies from reacting with the surface, glass corrosion (dulling of the glass) can also be effectively avoided.

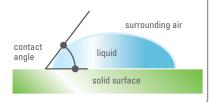
In the case of rough surfaces such as sandblasted and frosted glass, undesirable soiling like finger marks can be effectively avoided by treating the glass with BriteGuard® Surface Sealer X.



#### What is the contact angle?

The contact angle (also known as the wetting angle) is the angle formed between a drop of liquid on the surface of a solid material to the surface

The size of the contact angle between the liquid and solid material depends on the interaction between the materials on the contact surface. The smaller this interaction is, the larger the contact angle will be. By identifying the contact angle, certain properties of the surface (e.g. surface energy), can be determined. The larger the contact angle, the more difficult it is to wet the solid material and the less foreign bodies are able to adhere to the surface.



## www.BriteGuard.com



Conservatories



Glass doors



Shower cuhicles

#### **Exceptional Resistance**

Long-term tests prove - BriteGuard® Surface Sealer and Surface Sealer X have excellent long-term stability properties. Compared to competitors' products already on the market, BriteGuard® comes out ahead in all tested disciplines. In general it can be said: The BriteGuard® functional layer is not affected by normal wear and tear of the surfaces and keeps nearly all of its full effectiveness over long periods of time as simulated in our long-term test.

#### Wear Resistance

The BriteGuard® functional layer is exceptionally wear resistant. Even after 170,000 wipe cycles with a conventional squeegee and loaded with a weight of 450 g, the contact angle with water is still at 105°. After another 1,000 wipe cycles with the abrasive side of a standard household sponge and loaded with a weight of 300 g, the contact angle still measured 103° - after 10,000 cycles it measured on average of 100°.

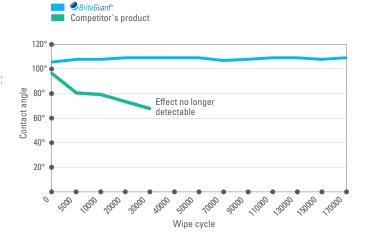
#### Chemical Resistance

The chemical resistance of BriteGuard® Surface Sealer is outstanding. Even storing the coated glass continuously for 500 hours in different chemicals and widely available cleaning agents had virtually no effect on the coating.

#### Resistance to Heat, Humidity and UV Radiation

The BriteGuard® functional layer even withstands temperatures up to 200°C, humidity and UV radiation without significant loss of functionality.

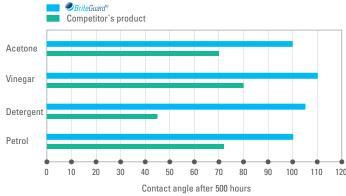
Acetone to 200°C, humidity and UV radiation without significant loss of functionality.





Wear Resistance

The Bohle test method uses a conventional squeegee which is automatically moved up and down across a coated glass pane. A wipe cycle consists of one movement up or down.





#### Chamical Resistance

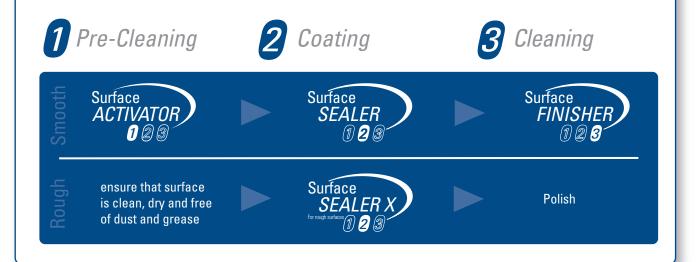
With the Bohle test method coated glass panes are subject to continuous exposure to various chemical substances and standard cleaning agents.

#### The BriteGuard® Modular System

#### **Application**

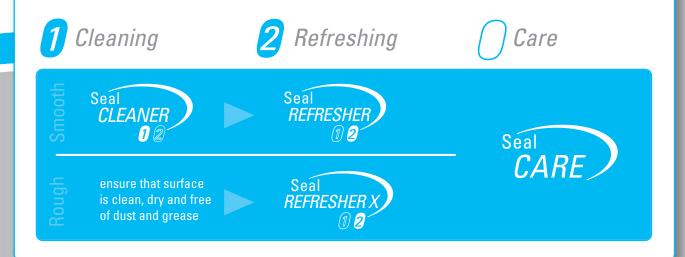
BriteGuard® Surface Sealer is available for smooth and rough surfaces. All you need to protect your surface is to decide between these two surface types and select the preferred pre-clean and final clean products in the BriteGuard modular system. Simple with no additional product steps required!

The BriteGuard® system works with minimal components. A clearly structured product range and a well thought out package design makes selection of the materials simple and easy.



#### Care and Maintenance

Despite the excellent resilience and protection of BriteGuard®, factors such as improper cleaning and glass maintenance can reduce the beading effect. In this case, we recommend the BriteGuard® Care Kits consisting of the Seal Cleaner and Seal Refresher or Seal Refresher X and a high quality microfibre cloth. With these kits you can easily restore the protection of your glass surface.



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#### Application without investment

In the past, complex training and high investments were always a part of the surface protection process. Not with BriteGuard®! You can immediately use BriteGuard® and start offering your customers high quality BriteGuard® protected glass without any heavy financial investments. BriteGuard® offers you application simplicity according to your capabilities and preferences. Manually apply with either a cotton pad, spray bottle or apply with compressed air.

Pre-cleaning with BriteGuard® Surface Activator
Correct pre-cleaning is essential for the successful protection of
the glass surface. Only when the glass surface is absolutely clean
can BriteGuard® Surface Sealer or BriteGuard® Surface Sealer X
combine with the glass to build a protective layer over the entire
surface. The glass can be cleaned either manually or with a glass
washing machine. BriteGuard® Surface Activator must be used as

combine with the glass to build a protective layer over the entire surface. The glass can be cleaned either manually or with a glass washing machine. BriteGuard® Surface Activator must be used as detergent for smooth glass surfaces at a ratio 1:10 with water. BriteGuard® Surface Activator removes organic as well as inorganic contamination from the glass surface and chemically prepares the glass for the coating.



Coating with BriteGuard® Surface Sealer (X)

The product can be applied either manually or with a sprayer. For manual coating you can use cotton pads or similar. Always apply the coating crosswise to make sure that sufficient material has been applied everywhere. Pay special attention to areas near the edges and around drill holes or cutouts.

BriteGuard® has a short reaction time of just 30 minutes at room temperature. If necessary, to better suit production rates, the reaction time can be influenced by changing the temperature.









Surface Activator

Surface Sealer

Surface Finisher

#### **3** Cleaning of Smooth Surfaces with BriteGuard® Surface Finisher

Final cleaning can either be done manually or with a glass washing machine. At this point after the coating has cured, excess material is removed. For this process, use BriteGuard® Surface Finisher and mix it with water at a ratio of 1:20. For the manual cleaning with sponge or chamois you can use cold water. For rough surfaces that have been coated with BriteGuard® Surface Sealer X, no final cleaning is required. Here the surface just needs to be polished with a microfibre cloth.



#### Care and Maintenance

Only if you can handle treated glass surfaces with care - durable protection is ensured. Although BriteGuard® is exceptionally resistant to wear and chemicals, the coated surfaces should not be cleaned with aggressive or abrasive cleaners or materials.

The BriteGuard® modular system offers Seal Cleaner and Seal Refresher for the basic cleaning and subsequent refurbishment. These two system components are not aggressive to the coating and the Seal Refresher refreshes the coating each time it is used. Seal Care is available for routine cleaning.



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Seal Refresher

#### **Products for Application**

### 1

#### Surface ACTIVATOR

The glass surface must always be pre-cleaned with Surface Activator, regardless of whether it looks clean or dirty. With BriteGuard® a single cleaner suffices.

B0 58 310 00 1 I B0 58 350 00 5 I 2

#### Surface SEALER

Surface Sealer is suitable for all smooth glass or glazed ceramic surfaces. It makes no difference whether the coated material will be used indoors or outdoors or whether you want to protect showers, partitions, conservatories, facades or glass furniture.

B0 58 105 00 500 ml B0 58 150 00 5 l 2

#### Surface SEALER X

Surface Sealer X was specially developed for rough surfaces. This can be glass that is satin finished or sandblasted.

B 0 58 205 00 500 ml B 0 58 250 00 5 l 3

#### Surface FINISHER

When smooth surfaces have been coated, you also need Surface Finisher for the final cleaning. Rough surfaces only need to be polished after they have been coated with Surface Sealer X.

BO 58 410 00 1 I BO 58 450 00 5 I





#### **Products for Care and Maintenance**



Seal Cleaner optimally prepares surfaces for treatment with Seal Refresher. Available in a kit with Seal Refresher.

BO 58 602 50 250 ml

BriteGuard

Seal



Seal Refresher is used to refresh the functional layer when its effectiveness diminishes (for example when it has been handled improperly). Available in a kit with Seal Cleaner.

BO 58 602 50

250 ml

#### Seal **REFRESHER X**

Seal Refresher X is suitable for refreshing the functional layer of rough surfaces. Available in a kit with high quality microfibre cloth.

BO 58 602 51 250 ml

BriteGuard

250m

Seal



#### Seal **CARE**

Seal Care is suitable for the routine cleaning of BriteGuard® surfaces.

BO 58 610 00 11





250 m

#### Suitable Accessories

#### Special Cleaning Cloth

Made of cotton · for drying glass surfaces

BC 50 523 00

#### Disposable Safety Mask

Respiratory protection when spraying chemicals

BC 50 401 00





## Window Washer with Fleece

Window washer with lint-free, easy-to-exchange fleece cover for general cleaning of glass surfaces.

B0 55 532 00 35 cm B0 55 533 00 45 cm

## Window Wiper Handle

Made of rustproof steel

BO 55 512 00

Wiping rail with rubber strip suitable for handle BO 55 512 00

B0 55 512 25 25 cm B0 55 513 00 35 cm B0 55 514 00 45 cm

#### Spray gun

Spray gun for empty bottles, with 28 mm thread. Adjustable from broad liquid jet to thin mist.

 B0 5810502
 Empty bottle 500 ml

 B0 5810503
 Empty bottle 1000 ml

 B0 5810504
 Spray gun







#### Microfibre Cloths

Industrial quality microfibre cloths for drying and polishing treated or untreated glass surfaces.

BC 50 560 00

## Protective Glasses

Protects eyes against irritation from accidental splashing of chemical products and when spraying

BC 50 401 10





#### **Cotton Pads**

Cotton Pads for the manual application of BriteGuard®, available in boxes of 7.6 x 7.6 cm.

BC 50 520 65 20 items BC 50 520 60 600 items

## Pad Holder with Pad

This holder is ideal for working with the BriteGuard® system together with the pad. In order to avoid the mixing of different products, the use of one pad per product is recommended.

BC 50 583 00 small · grey
BC 50 584 00 small pad
BC 50 583 10 large · blue
BC 50 584 50 large pad

## Dermatril Disposable Gloves

Very durable compared to conventional Latex disposable gloves · Dispensing box Chemical protection class cat. III

B0 50 075 10 size 10 B0 50 075 19 size 9







# www.BriteGuard.com

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