

**Auto  
motive**

# Functional Coatings

Your benefit?  
Our service!





## GBneuhaus GmbH

We make the world  
a better place.



*GBneuhaus is your specialist for functional surface coatings. We optimize your products with our innovative coating solutions and through that we can make the world a better place. We constantly improve our knowhow in the use of the sol-gel-process. We will find an individual solution for your product according to your wishes by using the best fitting thin coat system and realize it in serial production at our production place.*

**Michael Petry**, Managing Director



# Functional coatings for the automotive sector

## Your benefit? Our service!

As your service partner for functional surface coatings, we want to help you to make your products even more effective. The application of our coatings is possible on plastics, metals and alloys and on glass. Thereby it is also possible to realize even very complicated geometries. Thanks to our many years of experience, we are able to develop an individual solution for your surface – according to your needs.

Our coatings can improve defined properties and create new functions. For the automotive sector, we offer four effective solutions for the improvement of the performance of vehicle components, for example for interior: Our antiviral and antimicrobial coating SANPURE®, UV-protection and anti-scratch coating GBprotect plastics, Easy-to-clean coating GBhydrophobic and antistatic coating GBantistatic.

Thanks to our three-stage coating process, it is possible for you to get an own impression of the effectiveness of our coatings. Our experts will be gladly available for any further questions or inquiries. We are looking forward to create an unbeatable advance for your products. Your benefit? Our service!



Antimicrobial coating

4 | 5



UV-Protection  
Anti-Scratch

6 | 7



Anti-Static coating


8 | 9



Easy-to-clean coating

10 | 11





# SANPURE® Antimicrobial coating



The antimicrobial and antiviral coating SANPURE® protects surfaces permanently and for long-term against bacteria, viruses and other dangerous pathogens. The coating effectively prevents the multiplication of this pathogens and that leads to a lasting increase of hygienic safety on the surface.

# SANPURE®

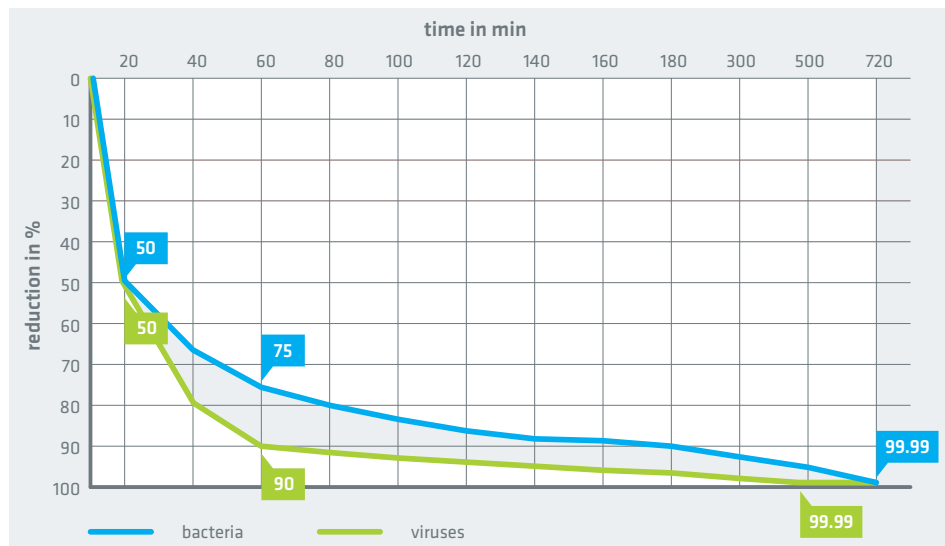
## Antimicrobial coating

### SUBSTRATES

- » plastics (PC, PA, PMMA, ABS and more)
- » glass (borosilicate glass, soda-lime glass, quartz glass and more)
- » metals and alloys (steel, aluminum and more)

### PROPERTIES

- » reduces the reproduction of dangerous germs between cleaning cycles
- » maximum temperature load: 200 °C
- » film thickness from 1.500 up to 2.500 nm
- » lifelong antimicrobial effectiveness (according to ISO22196 / JIS Z 2801:2010 significantly antimicrobial)
- » **antiviral effect:** virus reduction > 90 % after one hour (lg 1.35), virus reduction > 99.99 % after 8 hours (lg 4.5); testing of virucidal coated germ carriers in practical virucidal carrier test based on RKI guideline (1995) and ISO 21702:2019 against the bovine coronavirus (BoCV; strain: S379 Riems) – screening test S1
- » **physiologically harmless** (biocompatibility according to DIN EN ISO 10993-5)
- » **abrasion resistant** (based on DIN EN 60068-2-70, min. 100.000 cycles)
- » **scratch resistant** (scratch hardness according to DIN EN ISO 1518 depending on the substrate up to 20 N, pencil hardness according to ISO 15184 up to 10 H)
- » **abrasive hardness** (cross-cut test according to DIN EN ISO 2409)
- » **no change in haptic or optic quality of substrates**
- » **chemical-proof to customary detergents and disinfection methods**
- » **transparent, individually coloured on request or proof of presence by fluorescence particles**
- » **combination with Easy-to-clean-coating possible**



### TECHNOLOGY

- » dip coating or spraying
- » application process is defined individually according to geometry and requirements of the substrate

### COATING

- » certified according to REACH and RoHS
- » certified according to ISO 9001:2015; processes comply with IATF 16949
- » environmental management conforms to ISO 14001



# GBprotect plastics

## UV-protection and anti-scratch coating



Being used outdoors, plastic components are exposed to the ultraviolet radiation of the sunlight, detrimental chemical substances in the atmosphere and mechanical influences. GBneuhaus provides a range of innovative nano-coatings, including the GBprotect plastics application that provides protection against these hazardous influences as well as it ensures that high-quality components retain their optical features and maintain their performance.

# GBprotect plastics

## UV-protection and anti-scratch coating

---

### SUBSTRATES

- » plastics (PC, PMMA, ABS and more)

---

### PROPERTIES

- » protection against UV-radiation and detrimental substances in the atmosphere
- » reduction of UV-spectrum (200 – 380 nm) to less than 1%
- » combined filter effect in the visible spectrum on request
- » combination with hydrophobic effect on request
- » maximum temperature load: 200 °C
- » film thickness from 5 up to 10 µm
- » scratch resistant (scratch hardness according to DIN EN ISO 1518 depending on the substrate up to 20 N, pencil hardness according to ISO 15184 up to 10 H)
- » abrasive hardness (cross-cut test according to DIN EN ISO 2409)
- » chemical-proof to customary detergents and disinfection methods
- » mechanically flexible

---

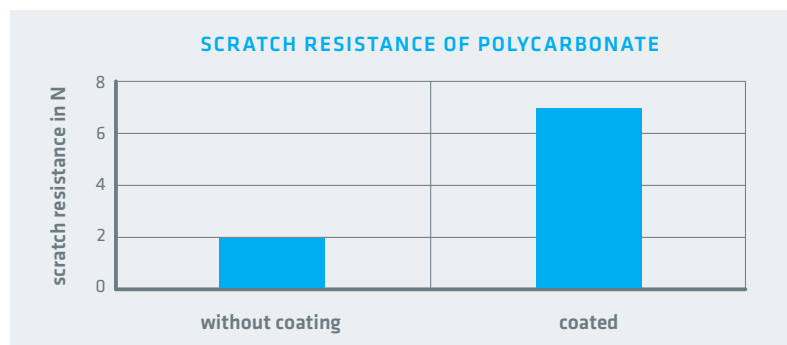
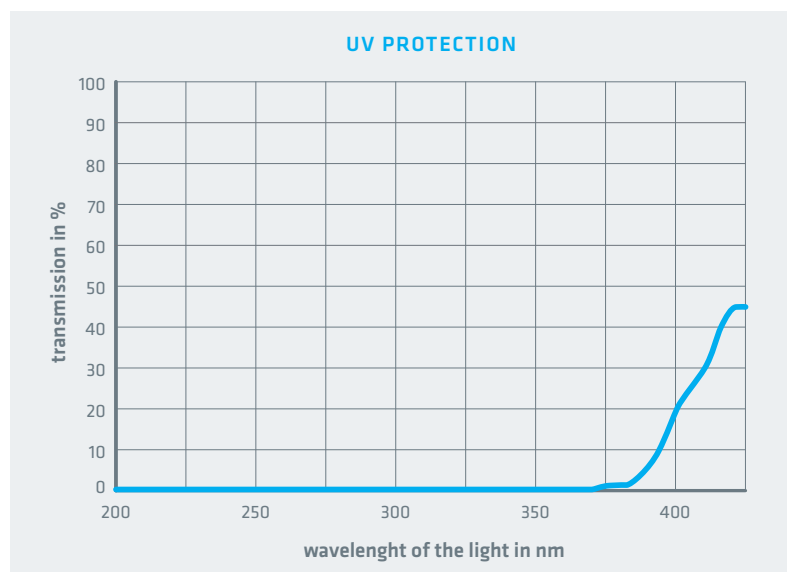
### TECHNOLOGY

- » dip coating or spraying
- » application process is defined individually according to geometry and requirements of the substrate

---

### COATING

- » certified according to REACH and RoHS
- » certified according to ISO 9001:2015; processes comply with IATF 16949
- » environmental management conforms to ISO 14001



# GBantistatic

## Antistatic coating



Static charges are the reason for damages and pollution of many different parts inside the vehicle. Our innovative nano coating GBantistatic protects surfaces made of plastics or glass against electrostatic charge.



# GBantistatic

## Antistatic coating

---

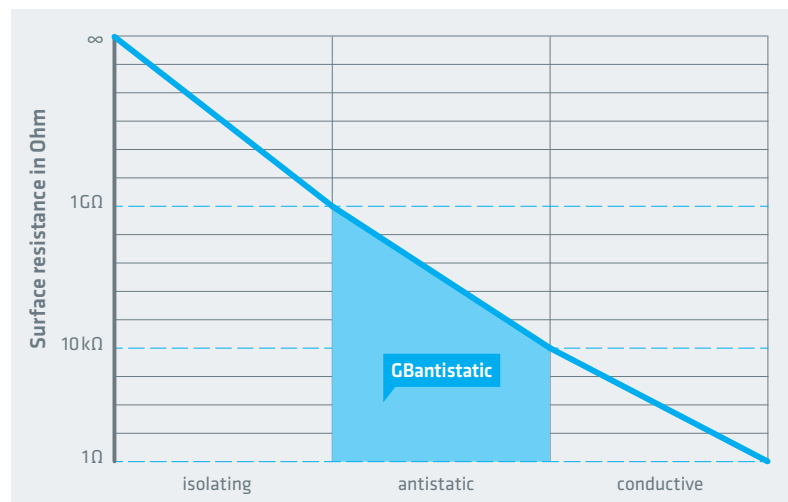
### SUBSTRATES

- » plastics (PC, PMMA and more)
- » glass (borosilicate glass, soda-lime glass, quartz glass and more)

---

### PROPERTIES

- » prevention of electrostatic charging on surfaces (according to DIN EN 6079-32-2)
- » specific surface resistance  $R = 100 \text{ k}\Omega \dots 100 \text{ G}\Omega$  (according to DIN EN 60093:1993-12)
- » maximum temperature load:  $500 \text{ }^\circ\text{C}$
- » film thickness from  $1.500$  up to  $2.500 \text{ nm}$
- » no change in haptic quality of substrate
- » scratch-resistant (scratch hardness according to DIN EN ISO 1518 depending on the substrate up to  $20 \text{ N}$ ; pencil hardness according to DIN EN ISO 15184 up to  $10 \text{ H}$ )
- » abrasive hardness (cross-cut test according to DIN EN ISO 2409)
- » chemical-proof to customary detergents and disinfection methods
- » mechanically flexible



---

### TECHNOLOGY

- » dip coating or spraying
- » application process is defined individually according to geometry and requirements of the substrate

---

### COATING

- » certified according to REACH and RoHS
- » certified according to ISO 9001:2015; processes comply with IATF 16949
- » environmental management conforms to ISO 14001

# GBhydrophobic Easy-to-clean coating



In order to make it easier to clean surfaces of automotive interior components, it is possible to coat substrates with a hydrophobic layer. This easy-to-clean effect can be realized by GBneuhaus due to the water-repellent coating GBhydrophobic for surfaces made of metals, plastics or glass.

# GBhydrophobic

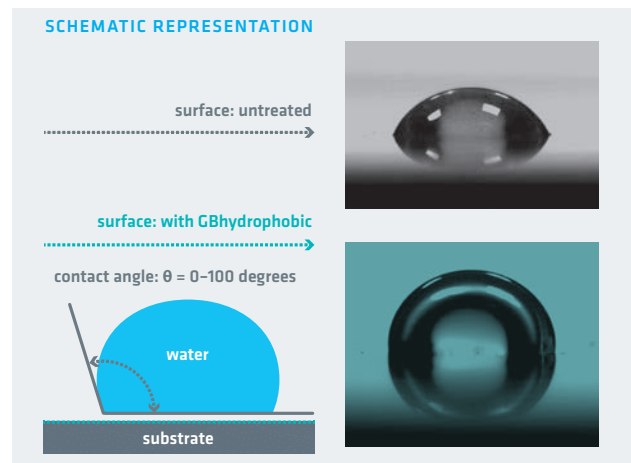
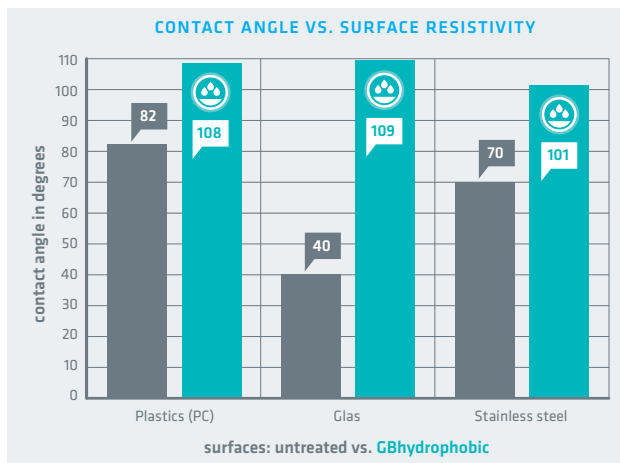
## Easy-to-clean coating

### SUBSTRATES

- » plastics (PC, PA, PMMA and more)
- » glass (borosilicate glass, soda-lime glass, quartz glass and more)
- » metals and alloys (steel, aluminum, copper, brass and more)

### PROPERTIES

- » contact angle for water  $\theta \geq 100^\circ$  (according to DIN 55660-3:2011-12)
- » maximum temperature load: 200 °C
- » combinable with antimicrobial function (SANPURE®)
- » film thickness from 1.500 up to 2.500 nm
- » no change in optic and haptic quality of substrate
- » scratch-resistant (scratch hardness according to DIN EN ISO 1518 depending on the substrate up to 20 N; pencil hardness according to DIN EN ISO 15184 up to 10 H)
- » abrasive hardness (cross-cut test according to DIN EN ISO 2409)
- » chemical-proof to customary detergents and disinfection methods
- » transparent, individually coloured on request



### TECHNOLOGY

- » dip coating or spraying
- » application process is defined individually according to geometry and requirements of the substrate

### COATING

- » certified according to REACH and RoHS
- » certified according to ISO 9001:2015; processes comply with IATF 16949
- » environmental management conforms to ISO 14001



*We are looking forward  
to your request.*

GBneuhaus GmbH  
Am Herrnberg 10  
98724 Neuhaus am Rennweg  
Phone: +49 3679 726030  
Fax: +49 3679 726033

[sales@gbneuhaus.de](mailto:sales@gbneuhaus.de)

[gbneuhaus.de](http://gbneuhaus.de)