



Technical Data Sheet

SHBC

Product Information

Nasiol SHBC is a two-part superhydrophobic coating applied on various surfaces to gain superhydrophobic and oleophobic properties against common liquids and stains whilst giving easy-to-clean effect. It can be applied to a variety of surfaces.

Application Surfaces

- All appropriate surfaces

Do not apply the product on any surface in order to obtain or expected to be:

- Resistance to abrasion and scratching
- Transparency

Benefits & Key Features

- Superhydrophobic.
- Stain resistance.
- Easy to clean.
- Anti-icing.

Instructions

* It is recommended to apply it to the final product after the trials are made and the optimum parameters are found.

- Surfaces should be dry and free of any dust, oil, grease and other contamination.
- Application should be made in a shaded and well-ventilated area.
- Electric spray guns with 2-3 mm nozzle diameter can be preferred for the application.
- The distance between the surface and nozzle can be chosen between 20-30 cm depending on the other parameters.
- Apply SHB consuming 80-100 mL for a 1 m² area.
- Allow SHB to cure for 15 minutes.
- Apply SHC consuming 80-100 mL for a 1 m² area.

Curing

Room Temperature Curing

Dry to touch: 1 h at 23°C - 50% RH

Fully curing: 12 h at 23°C - 50% RH

Accelerated Curing

It is possible to accelerate the curing process by applying heat by choosing the appropriate time and temperature according to the surface type.

Specifications

Packaging	1-5-30 L
Appearance	Whitish Hazy Liquid
Salt Water Resistance	Yes
Dry Film Thickness	8-10 µm
Consumption per Unit Area	160-200 mL/m ² (SHB+SHC)
pH Value	SHB: 5.0-5.3 SHC: 4.7-5.0
Application Temperature	5°C-30°C (≤50% RH)
Temperature Durability	-30°C to +175°C
Water Contact Angle	171° @10 µL
Water Sliding Angle	1° @60 µL
Oil Contact Angle	140° @10 µL

Durability

Up to 2 years (Without abrasion)

Application Tips

Ensure that the temperature and relative humidity (RH) of the application space are as close as possible to the given values to achieve the highest product performance.

If the ambient temperature or relative humidity value is higher than the suggested intervals/values, the product may cure faster than expected.

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Avoid direct sunlight during the application and only work on cool surfaces.

Surface should be dry and cleaned properly to remove any residual contamination.

If required, clean the application surface thoroughly by applying a clay bar and/or polish using appropriate tools and silica/wax free cutting compounds. Finally, prepare the surface by using Nasiol Clean to improve the bonding performance of the nano coating. Ensure that there isn't any residual contamination and dry the surface with a lint-free microfiber cloth.

Shake the product(s) well before use.

Always test the product on a smaller area out of sight before working on larger areas in order to observe further effects and compatibility with material(s).

Be careful of over spraying especially for the SHC product as it may result in cracks and residual particles on the surface.

Do not forget to keep the lid closed during the application.

The surface should look homogeneous after the application. If the surface looks too wet right after the application, you can;

- Decrease the flow rate
- Increase the spraying distance
- Increase the spraying pressure
- Expand the pattern
- Increase the line speed

If you couldn't apply enough amount and couldn't obtain a good repellency, you can;

- Increase the flow rate
- Decrease the spraying distance
- Decrease the spraying pressure
- Narrow down the pattern
- Decrease the line speed

Curing

When the coated surface is dry to touch, it can be handled/packed. Fully curing process will continue.

Even if you apply a heat treatment to accelerate the curing process, keep the coated surface away from water/contamination for 24 hours and don't perform harsh tests on it.

Ventilate the space/interior well for following hours of application.

Storage

To achieve a high quality of coating, keep the containers tightly closed in a dry, well ventilated space away from heat and ignition sources, stored at -3°C to +30°C. The shelf life of product(s) is 12 months from the date of production when stored in the unopened container under suggested storage conditions. After opening the container, it is recommended to use up the product within 1 month.

Disclaimer

The technical information described in this document is based on tests and other practical experience that Nasiol® believes are reliable. Nasiol® cannot guarantee anything but ready to use quality of the product at the time of shipment, disclaims any liability for product performance and incidental or consequential damages, according to self-implementation within the user's knowledge, beyond the manufacturer's control. Please refer to the Safety Data Sheet (SDS) before use of product.

Users should consult Nasiol® for guidance on the suitability of specific applications. Nasiol® reserves the right to change the given data without further notice