



Technical Data Sheet

T-WB

Product Information

T-WB is a revolutionary non-toxic super hydrophobic and oleophobic nano coating. It is water-based, breathable and eco-friendly. In addition, it is resistant to harsh detergents and demonstrates excellent easy-cleaning properties with continuous performance up to 10 washes.

Application Surfaces

- All types of textiles
- Suede and nubuck surfaces

Do not apply the product on surfaces including:

- Artificial Leather
- Stone
- Glass & Ceramic
- Wood
- Metal
- Hard and Smooth Thermoset&Thermoplastic Surfaces

Benefits & Key Features

- Water and oil repellency.
- UV protection.
- Chemical resistance.
- Stain resistance.
- Breathable coating.
- Easy to clean.

Instructions

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.

Manual Application

*It is recommended to try on a small area before covering the entire surface.

- Spray the product onto the surface in the essential amount with a trigger bottle.

Pressurized Spraying

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

- Any type of spraying systems capable of applying homogeneously can be preferred. A nozzle diameter of 1-2 mm is suitable.
- The distance between the surface and nozzle can be chosen between 10-20 cm depending on the other parameters.
- Spraying pressure can be chosen between 1-1.5 bar depending on the other parameters.
- The product should be sprayed onto the surface in the essential amount with a fine atomization

Padding

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

- Adjust the squeezing pressure to reach the target pick up value.
- Nasiol T-WB does not require high temperatures to cure. When adjusting the oven temperature and line speed, it is sufficient to pay attention to the dryness of the substrate at the oven exit.

Curing

Room Temperature Curing

Dry to touch: 6 h at 23°C - 50% RH

Fully curing: 24 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.

Durability

Up to 12-15 months



Specifications

Packaging	1-5-30 L
Appearance	Whitish Liquid
Chemical Resistance	11>pH>1
Salt Water Resistance	Yes
Moisture Resistance	Yes
Dry Film Thickness	90-100 nm
Consumption per Unit Area	60-100 mL/m ²
Density @23°C	1,01g/cm ³
pH Value	4-5
Application Temperature	+5°C to +45°C (≤50% RH)
Temperature Durability	150°C
Water Contact Angle	152° @10 µL (Polyester)
Water Contact Angle After “3000” Wet Scrub (ISO-11998:2006)	136° @10 µL (Polyester)
Water Sliding Angle	18° @60 µL (Polyester)
Oil Contact Angle	129° @10 µL (Polyester)
REACH Compliance	Yes
Hydrostatic Pressure (100% Cotton fabric) EN 20811:1993	14.6 cm H ₂ O

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.

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

Shake the product gently before use.

It is important to apply a significant amount to the substrate.

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

If product contacts with incompatible materials, wipe it off immediately with a dry and clean microfiber cloth.

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

Pressurized Spraying

If the surface seems excessively wet 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

Padding

If the substrate is still wet at the oven exit, you can;

- Decrease the line speed
- Increase the squeezing pressure
- Increase the oven temperature

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

- Decrease the line speed
- Decrease the squeezing pressure

Curing

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



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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.

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 +5°C to +45°C. If stored at temperatures below +5°C, there is a risk that the product may freeze and lose its performance characteristics. The shelf life of product is 24 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 6 months.

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.