

Self-Assembling Nano-Hydrophobic Auto Glass Treatment

DESCRIPTION

Nanoprotect® AG is a one component, ultra thin, hydrophobic Nanotechnology surface treatment for automotive glass surfaces. The product uses molecular bonding with the substrate to form a nano scale surface structure that is repellent to water.

Chemical engineered nanoparticles self assemble into this monolayer (one particle thick) and protect the substrate from contaminations and permanent etching stains. Conventional repellent chemicals like Silicone and Teflon and Fluorocarbons are not necessary.

Nanoprotect® AG does not change the slip resistance of glass and therefore does not create a slippery surface appearance. The bonding is chemical resistant and abrasion resistant. Abrasive cloths, such as steel wool cannot remove the particles.

Water runs off easily from the treated surface and dirt particles are washed off by rain or when rinsed with water (easy to clean effect – self-cleaning effect).

RECOMMEND FOR

Nanoprotect® AG protects exterior glass, car windows, car windscreens, external mirrors, glass sunroofs, glass headlights.

FEATURES & BENEFITS

- Economical
- Long lasting (up to 30,000kms on windscreens)
- Easy to clean/self cleaning properties
- One component, easy to apply
- Environmentally friendly
- Saves maintenance costs
- Effective on old and new surfaces
- Improves driving safety in rain and snow
- Better night vision
- Easy to remove ice and snow build-up
- Highly chemical resistant
- Dirt and water repellent
- Hard water stains can be simply wiped off
- Excellent protection against acid rain
- No chemicals needed to remove contaminant
- Does not harm adjoining surfaces
- Excellent abrasion resistance
- Longer windscreen wiper life
- Heat resistant and UV-Stable

SPECIFICATIONS

Supply Form	Liquid
Colour	Clear
Density	Approx. 0.8
Solvents	Alcohol, denatured
Flashpoint	<21°C / 69.8°F
Storage Temperature	Not below 1°C
Application Temperature	-5°C-30°C / 23°F-86°F

SURFACE PREPARATION

Proper surface preparation insures maximum adhesion to the substrate molecules.

Surfaces must be dry and free from dirt, grit, dust, grease etc.

Use Nanoprotect® Glass Cleaner or a Nanotec approved cleaner.

Ensure the surface is free of any cleaning residue. Calcium stain should be removed.

Do not touch the cleaned glass with bare hands.

MIXING & PRIMING

Not required.

METHOD OF APPLICATION

Do not dilute.

Avoid applying to hot surfaces. The evaporation rate will be increased, application time will be longer and consumption of the treatment may be higher.

The application takes place in a processing step, whereby the coating is to be sprayed on and wiped in.

Spray on a small amount (one to two pump actions) on to the glass and wipe it on like you would to clean glass. Spray on a small amount and polish in the wet treatment in a circular overlapping polishing motion, treating section by section. Spray the next area and repeat the process.

Ensure the whole surface gets treated.

Nanoprotect® AG can also be sprayed on to the towel and applied in the same way.

Only a small amount is needed. 100 ml is enough to treat up to 20 square meters (215 square foot) or approx. 10-15 car windscreens.

Only water affected areas should be treated, ie. the outside of a window.

The repellent effect and the life span can be slightly expanded by a double application with 15 minutes

between the treatments. However this is not necessary for a standard use.

Do not touch the glass with bare hands before and for at least 30 minutes after the application.

Nanoprotect® AG can be sprayed on with commercial ultra low volume devices. For recommendations on industrial application devices please contact Nanotec.

Nanoprotect® AG is invisible once dry - take adequate precautions to ensure entire surface is covered if application is interrupted.

The glass has to be fully exposed to weathering or to regular surface wetting to show its full effect. Glass that is not in contact with rain and water cannot show the self-cleaning properties, but will remain easy to clean.

Reapplication after the service life can be done by simply repeating the application process.

TOOLS

Hand application can be done with microfibre mitt, microfibre cloth and for small areas even with a high quality paper towel.

For larger areas, Nanoprotect® AG may be applied with a low pressure sprayer or atomizing sprayer.

CURING

Nanoprotect AG is rainproof after 30 minutes at 20°C / 68°F.

The water repellent properties will develop during the self-assembling process in 1-10 hours, depending on the temperature during the curing time.

Heat will accelerate the curing.

ESTIMATING DATA

Coverage depends on age, absorbency and porosity of the substrate. Application by hand will require 5-10 ml for each square meter of glass surface.

CLEANING

Tools should be cleaned with water immediately after use.

SHELF LIFE

Nanoprotect® AG can be stored in tightly sealed original containers for 12 months, if kept dry and at moderate temperatures.

It is important to reseal containers after use.

PACKAGING

Nanoprotect® AG is available in 100ml, 1 litre, 4 litre jerry can, 20 litre drums and 1000 litre pallet tanks.

PRECAUTIONS

READ ALL SAFETY DIRECTIONS AND WARNINGS ON PACKAGING BEFORE USE.

REFER TO MATERIAL SAFETY DATA SHEET FOR HANDLING PROCEDURES.

Nanoprotect® AG contains alcohol.

Provide adequate ventilation when applied in a confined area.

Adequate personal protection should be worn. This may include the wearing of a respirator.

Keep away from children.

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