# Diamond Coat

Nanoprotect-Diamond Coat is a transparent ceramic hybrid coating for almost all types of smooth surfaces. The sealant contains both inorganic and organic components. Common competitive products are based on one of the two technologies. While organic components are responsible for an easy-to-clean effect and flexibility, the inorganic components are responsible for both rigidity and weather resistance. The hybrid result is a permanent, scratch-resistant non-stick coating with weather resistance and flexibility.

Nanoprotect-Diamond Coat forms an ultra-thin layer and is therefore a real sealant with barrier properties.

**Benefits in an overview:**

- Transparent sealing; virtually invisible (colour deepening possible due to higher layer structure)
- Permanent (3-5 years); non-yellowing, weatherproof
- Anti-stick coating;"easy-to-clean" effect with strong water and dirt repellency
- Protection against micro-scratches, pencil hardness up to 9H
- Heat resistant; refractory up to 600°C
- Flexible; can also be used on bendable surfaces
- Corrosion protection; genuine sealing with barrier properties
- Chemical resistant between pH 1 and 12.5; Excellent graffiti protection
- Food safe; high proportion of inorganic groups
- Multifunctional; suitable for plastic, metal, natural stone and already painted surfaces

**Areas of application:**

- Sealing of automotive paints:
  - ✓ Protection against micro-scratches and small stone impacts
  - ✓ Easy cleaning, low dirt adhesion
  - ✓ Protection against damage by bird droppings
  - ✓ Colour preservation

- Sealing of lacquered surfaces:
  - ✓ Protection against scratches
  - ✓ Easy cleaning, low dirt adhesion
  - ✓ Graffiti protection
  - ✓ Colour preservation

- Sealing of mineral surfaces:
  - ✓ Stain protection, acid protection
  - ✓ Easy cleaning, low dirt adhesion
  - ✓ Graffiti protection
  - ✓ Colour preservation
  - ✓ Protection against scratches

- Sealing of metals:
  - ✓ Protection against corrosion and oxidation
  - ✓ Easy cleaning, low dirt adhesion
  - ✓ Protection against scratches

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- Sealing of plastics:
  - ✓ Protection against scratches
  - ✓ Easy cleaning, low dirt adhesion
  - ✓ Graffiti protection
  - ✓ Colour preservation

**Technical data:**
Ceramic hybrid coating with organic and inorganic content

**Application:**
The surface must be thoroughly cleaned, dry, free of grease and silicone, wax or polish residues. Use undiluted. Application temperature min. 3°C. Substrate temperature between 3°C and 40°C Do not use in direct sunlight. Previous varnishes must be completely dry. For metals, any corrosion spots must be thoroughly removed. The product is solvent-based, so the compatibility with the surface should always be tested at inconspicuous points before use.

The surface to be coated must be thoroughly cleaned with a residue-free cleaner. We recommend butyl acetate or isopropanol for pre-cleaning.
Apply a small amount of the product on a lint free cloth and spread thinly on the surface with circular movements, without pressure. Apply the product as far as possible to avoid the formation of stripes due to uneven layer build-up. After a waiting time of 2 minutes, polish the coating with the same cloth using a small amount of pressure, leaving no streaks. To increase the layer thickness, this process can be repeated several times (max. 4 times) every 5 minutes. A higher layer thickness improves the abrasive protection and increases the visibility of the product (light colour deepening). Recommended layer thicknesses are between 600nm and 3µm.

Recommended data for spray application: HVLP, 2-3 bar, nozzle 0,8 - 1,3mm

Nanoprotect-Diamond Coat is dust-dry after approx. 15 minutes and can be exposed to water after 24 hours. The complete formation of layer hardness and chemical resistance is achieved after approx. 7 days. The initial formation of product properties can be accelerated by heating the coated surface (ideally 80°C for 30 minutes, then wait 4 hours). However, complete through-drying is always only achieved after 7 days.

For several years, the product will weather evenly and without staining. Damaged areas can be repaired at any time. The product then only binds to the defects. In the case of a large-area renovation coating, coating residues should be removed abrasively beforehand. CeO2 polish is ideal for this purpose.

Details in the processing depend heavily on the surface to be treated. We are happy to advise you in detail on this topic.

**Yield:**
Depending on the type of application approx. 20 m² per 100ml

**Health:**
Contains no free nanoparticles that may be hazardous to your health.

**Container sizes:**
10ml bottle, 30ml bottle, 50 ml bottle, 100 ml bottle, 1.0 litre bottle. Other container sizes are to be agreed after consultation and depending on the transport route.

**Labelling / transport:**
UN 1993. Classified as "flammable" according to ADR/RID/IMDG/IATA.

**Storage:**
At least 24 months in the closed original container. Use only glass or aluminium containers with a safety closure. Protect from frost and direct sunlight.

**Protective measures/Notes:**
When processing, the instructions and the safety recommendations on the packaging must be observed. We would like to point out that when handling chemicals, the necessary safety measures have to be complied with. Keep out of the reach of children. This technical information has been compiled on the basis of the latest state of the art and our experience. However, with regard to the variety of substrates and object conditions, the user is not released from his obligation to check our materials on their own responsibility for their suitability for the intended use under the respective object conditions in terms of craftsmanship. As application and processing are outside our control, no liability can be derived from the content of the technical data sheet. The information and instructions in the safety data sheet shall be complied with in all cases. No liability is assumed for improper handling. In the case of a reprint, this printed copy loses its validity.

**All information about our products you find here:**
http://bit.ly/Nanoprotect-Informationen

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