

MADE
IN
GERMANY



XACTNANO

640 Q² Quantum Quartz 9H Ceramics Coating



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Auto and Aerospace 9H Ceramics Coating for Automotive Surfaces

This highly advanced coating has been specially developed for the demanding requirements of the auto, aviation, marine, military and transport sectors. It is extremely resistant to corrosion, abrasion, and temperatures, and can be applied to metal, plastic, powder-coated, and painted surfaces. Curing can occur at ambient temperature but the additional application of heat is also advantageous. The coating forms an extremely strong bond with the surface, and creates an abrasion-resistant finish with very high resistance to solvents.

The thin and transparent coating possesses extreme stability, and a degree of hardness up to 9H can be achieved. Suitable for all kinds of vehicles (including vintage cars), motorcycles, caravans, and boats.

Short features

Application Temperature	m ² per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
+5°C - +35°C	up to 130m ²	up to 10 years	24 months in the original bottle, 6-12 months after opening	+5°C - +20°C	7 days at 20°C, 1 day at 60°C, Surface is dust-dry after-2 hours

What is a ceramics coating?

Our **Auto and Aerospace 9H Ceramics Coating** is a glass coating based on silanes. The coating can be applied as either a thick layer of approximately 10 microns on to surfaces which are not highly reflective or the coating can be applied and then buffed thus reducing the coating thickness to approximately 2 microns. This latter procedure is normally used in the auto sector. The coating is neither paint, wax nor a sealant, and cannot flake off or be washed off. The coating forms a durable ("covalent") bond with the paint, and it can only be removed by strong abrasive forces. The coating cannot be dissolved by standard chemicals which are commonly used in the auto sector.

The coating provides a highly glossy appearance but like all surfaces abrasion will eventually impact on the coating. The useful life of the coating will depend on the amount of abrasion that the surface is subjected to.

What is 9H?

We use the familiar "pencil hardness" to describe the hardness of a layer. The measuring range is between 6B (smoothest) and 9H (hardest). The **Auto and Aerospace 9H Ceramics Coating** achieves a hardness grade of *8H (drying at indoor temperature) up to 9H (heat drying).

*The hardness of a coating is measured when the coating is applied to a metal test bed. If the coating is applied to a soft painted surface the hardness of the coating will remain constant but the underlying soft painted surface and the coating can be distorted if point loading pressure is applied.

Properties

- Clear, colourless liquid based on silanes. Contains solvents.
- Extremely abrasion-resistant, with very high adhesive properties, and high impact strength
- Hydrophobic, oleophobic and stain-resistant

- Suitable for spray or manual application.
- After polishing the surface will become "ultra shiny"
- "Easy-to-clean" effect - surfaces stay cleaner for longer, and all cleaning becomes very easy, thus extending the cleaning intervals and reducing cleaning and maintenance costs.
- Highly effective for up to 10 years
- Application with electric polishing machine possible
- Material consumption for an entire car, approx. 50ml

Temperature resistance

The coating is heat-resistant up to 750°C, and cold-resistant up to -90°C.

Oxidation and corrosion resistance

Bare metal will oxidize over time, as will painted surfaces. The **Auto and Aerospace 9H Ceramics Coating** is very dense and it protects paint and metal against contact with water and oxygen, and is therefore a highly effective corrosion resistant layer.

High resistant against chemicals

The coating is 100% resistant against chemicals/solvents, to which vehicles are generally exposed.

The Auto and Aerospace 9H Ceramics Coating can also be applied to:

Rims, head lights, (windscreens), windowpanes, door handles. Also suitable for a wide range of other materials... non-ferrous metals, galvanized (zinc-coated) metals/steel, painted and powder-coated surfaces, anodized aluminium, and plastics.

50ml, Art. No. 640-50
100ml, Art. No. 640-100
1.000ml, Art. No. 640-1



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Application of the Auto and Aerospace 9H Ceramics Coating for Automotive Paint

The **Auto and Aerospace 9H Ceramics Coating** can be applied to almost any (car) paints. To attain optimum performance it is essential that the target surface is to perfectly clean; it must be completely free from waxes, silicone coatings, etc., otherwise the coating will not be able to bond to the surface. Before full application, please always carry out a test on an inconspicuous location (eg. in the engine compartment or the car). Do not apply the coating to freshly painted surfaces as the paint must completely cured before application.

Cleaning and surface preparation.

This product is a product for professionals, therefore it is recommended to practice the application to "get a feel" for the application process. In addition the polishing process should be practiced so that the desired level of gloss finish is attained.

First, meticulously pre-clean the car paint; for this you may use common cleaner, or our pre-cleaner Biosativa®. After completion of the general cleaning process, deep clean the surface with alcohol (e.g. at least 70% isopropyl or ethanol alcohol, we supply these liquids if required) so that all contaminants are removed. The use of a clay bar cleaning process is also suitable. The simple message is that the coating should only be applied to surfaces which are free of contamination.

The better you perform the pre-cleaning, the better the adhesion and subsequent longevity of the coating.

The application process.

Please ensure that the application is performed in a well ventilated and dust-free area. We recommend that you use a protective mask during application as the liquid has a strong odour. Wearing protective gloves is also recommended. Please read the MSDS information.

The surface to be coated should be not too hot; so do not coat the car paint if the car was located directly under the sun before, otherwise the liquid will "flash off" and initial curing will be too rapid, and the polishing will be considerably more difficult. Ideally the process should be conducted at an ambient temperature of 25°C. (+/-5°C)

Plan your work. Apply the coating in small sections eg. one body panel at a time. We recommend that you work in a team, e.g. one person applies the finishing, and the other person polishes it promptly.

Step by step instructions:

- 1** Prepare the surface as already described.
- 2** Use a thin and smooth microfiber cloth to apply the finish (a cloth of approximately 25 x 25cm is recommended). Completely moisten the cloth with **Auto and Aerospace 9H Ceramics Coating**. Apply the finish swiftly and evenly by wiping (always in one direction).
- 3** Next, (after 1-2 minutes) polish the coated surface, without excessive pressure, using a smooth cotton or microfiber cloth (ensure that a lint free fabric is used). Do not wait longer than 2 minutes before this first buffing action. You must ensure not to aggressively remove too much of the finish. Ensure that all blemishes are removed. If for some reason you delayed the polishing process, and „high spots“ occur, immediately apply another layer of the finish; this will soften the layer below, and you may polish anew. Finish the buffing with a fine soft peach skin texture microfiber.
- 4** In warm conditions the coating becomes dust dry after 2 hours and touch dry after 5 hours. After this, the finishing will be dry enough that you may use the vehicle again but the coating is still far from being fully cured and so avoid brushing against the surface with bags or keys.

The coating will cure faster if the surface is hot and so it will be advantageous to place the car in direct sunlight after the first 2 hours of curing.

Within the following 10 days the vehicle should not be cleaned as complete curing takes at least 8 days (depends on the temperature and the humidity), otherwise the finish may be damaged, especially if a drive through car wash is used.



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