

9H Ceramics Coating for Automotive Bodywork

Application Instruction

The Auto 9H Ceramics Coating can be applied to almost any (car) paint. To attain optimum performance it is essential that the target surface is 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). Do not apply the coating to freshly painted surfaces as the target surface must completely cured and stable before application.

This technology is only suitable for „professional“ application, 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.

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 contains solvents. Wearing protective gloves is also recommended (Please refer to the MSDS).

The surface to be coated should not be 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”, 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 coating, and the other person polishes it promptly.

Step by step instructions:

- 1. Mask off areas you do not wish to coat or which may be sensitive to solvents**

Mask off sensitive areas such as Plastic parts carefully.



2. Pre-Cleaning



First, **meticulously pre-clean** the car paint and the rims; for this you may use a standard cleaner (free of waxes or silicones) or our pre-cleaner Biosativa®.

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



After completion of the general cleaning process, deep clean the surface with alcohol (e.g. at least 70% isopropyl or ethanol alcohol), so that all contaminants are removed from the surface. 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.

Advice for pre-cleaning: cleaning dough/clay bar



Remove swirl marks and micro scratches prior to application of the coating.

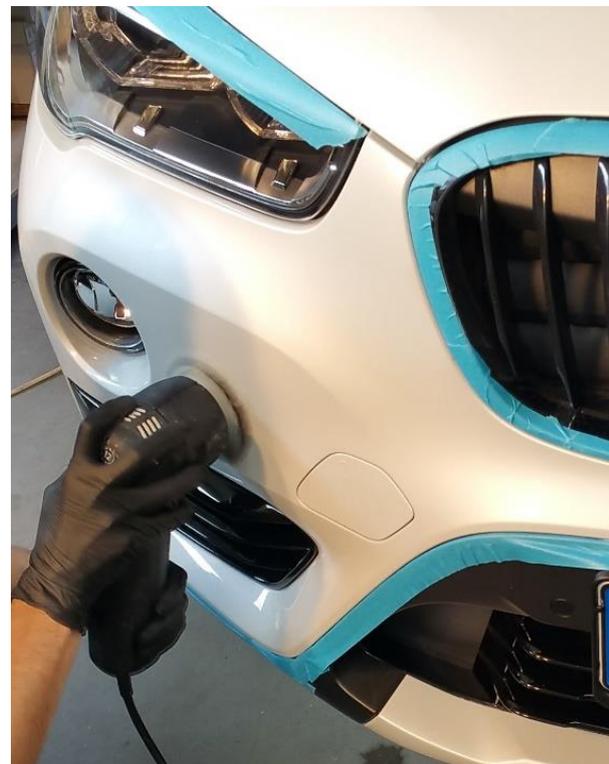


Example of cutting compound:

Use the correct grade for the finish required

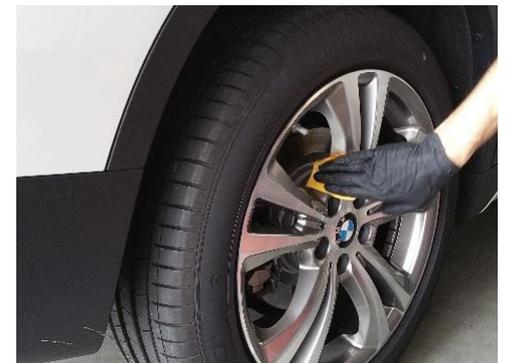


Examples for polishing pads:



3. Application of the coating:

Use a thin and smooth micro-fiber cloth to apply the finish (a cloth of approximately 10 x 10cm is recommended).



Completely moisten the cloth with 9H Ceramics Coating. Apply the finish swiftly and evenly by wiping (always in one direction).

We recommend that you use a protective mask (e.g. 3M) during application as the liquid has a strong odour. Wearing protective gloves is also recommended.

4. Buffing/Polishing the coating

Polish the coated surface 1-2 minutes after the body panel has been coated*. Do not use excessive pressure. Use a medium to smooth micro-fiber cloth. 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 micro-fiber.



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.

**This coating is used in several sectors including the aerospace and marine sectors. In some instances it is not necessary to buff the surface as the coating offers an inherently high gloss finish; however on highly polished substrates such as car body work we suggest that the surfaces are buffed according to our instructions in order to avoid the potential of „prismatic effect“ which results from light bouncing off the car paint work and through the highly dense glass layer. By buffing we reduce the thickness of this glass layer and thus remove the potential for the afore mentioned prismatic effect.*

The manual pressure mentioned should be the same as that used when one manually waxes a car. You may note that initially the micro-fibre „drags“ slightly as you buff the surface This drag will soon dissipate as you continue to buff. The final buffing action with a peach/soft micro-fibre will ensure that there are no swirl marks.

How long should I buff the body panel?

As a general rule it is expected that you should buff a car door for approximately 60-90 seconds with the first buffing action and then 60-90 seconds with the second buffing action. This buffing time will of course increase if the car door is very large. If for any reason you delay in buffing the surface (let us say that there has been a local emergency and you have coated a panel then returned to it after 25 minutes) then the buffing period will be longer and the „drag“ encountered will be significantly more noticeable... but continue with the process and you will probably salvage the process. It will just take more effort. The application of a second layer can also be used to overcome problems with delayed buffing.