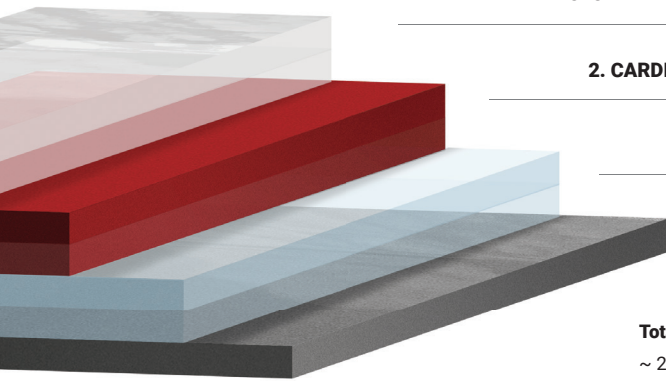


Technical instructions

CARDIP® peelable paint

Before processing, it is important to understand the design of the CARDIP® peelable paint system:

The CARDIP® peelable paint is built up in a multi-layer process from the 1K AQUA+ BaseCoat 5080 (film base) and 2K ClearCoats. Basically, the surface is always coated first with min. 2 layers of CARDIP AQUA+ BaseCoat 5080 PURE (=clear). This is followed optionally by 2 or more additional coats of CARDIP AQUA+ BaseCoat 5080 PURE for a clear protective film with +200µm dry film thickness - OR - 2 or more coats of CARDIP AQUA+ BaseCoat 5080 mixed 2:1 with waterborne paint for a colored film with +200µm dry film thickness. The spray film must always be finally sealed with min. 2 coats of CARDIP ClearCoats (matte or gloss).



3. CARDIP® 2K HS ClearCoat (Satinmatte / Highgloss)

2. CARDIP® Aqua+ BaseCoat (Pure / with WB-Paint)

1. CARDIP® Aqua+ BaseCoat (Pure = Clear)

0. Original paint / Substrat

Total film thickness

~ 200-250 µm

Dry film thickness

~ 40 µm per layer

For processing by the specialist!

The substrate must have an intact paint with a 2K clear coat (all modern automotive paints) that is at least 4 weeks old. During application, ensure that the specified layer structure is adhered to in all (vehicle) areas and check the substrate for function and compatibility with CARDIP products. Required dry film thickness for functioning peelable paint coating: min. 150 µm.

Adhesion tip: Sand heavily used areas such as the undersides of bumpers and sills with fine (!) abrasive paper (P2000) before coating to achieve stronger adhesion of the film on this area. After removing the film, these areas can simply be polished again.

1. PREPERATIONS



1.1 Cleaning

Before starting work, wash the vehicle or component thoroughly.



1.2 No silicon / fat

Avoid the use of cleaners containing silicone and grease.



1.3 No contaminants

Remove all contamination from the surface.



1.4 No polish / wax

Avoid using polishes and waxes before application of CARDIP peelable paint.



1.5 Drying

Dry the vehicle or component completely.



1.6 Disassembly

Check the vehicle or component for interfering components (door handles, emblems, trim strips, rubber, etc.) and dismantle if necessary. **Spray entire vehicles in as many individual parts as possible to keep the overspray as low as possible and to achieve the best possible surface!**



1.7 Masking

Mask off the vehicle or component as if for painting. Tape headlights, grilles, trim and windows cleanly and accurately for best results. Place whole strips of tape to achieve sharp edges and reliably cover the components that are not to be coated.



1.8 Cleaning

After you have prepared the vehicle for coating, clean the vehicle with CARDIP® ETA-Cleaner 101 to completely remove grease and impurities from the surface.

(!) Do not use other degreasers and especially water cleaners, otherwise it may lead to incompatibility with the CARDIP Aqua+ BaseCoat 5080!

Tip 1.6 Disassembly: When coating entire vehicles, you should disassemble as many components as possible and not spray on the vehicle. For example, engine hoods, trunk lids, doors, etc. By disassembling the large components, less overspray occurs during application and you achieve a smoother surface.

Tip 1.7 Masking: In the interior areas of the vehicle (door entry, engine compartment edge, trunk entry, etc.), set a sharp edge about 5mm in front of the outer edge by evenly applying tape + paper to cover the interior.

Tip 1.8 Cleaning: Immediately before coating, we recommend cleaning the surface with a dust cloth.

2.COATING / APPLICATION

2.1 CARDIP® AQUA+ BaseCoat 5080 (Pure = Clear)

The layer design starts on each surface with 2 coats of pure CARDIP® Aqua+ BaseCoat 5080. For processing, Aqua+ BaseCoat 5080 must be diluted with Reducer 500. The optimum addition quantity varies depending on the spray gun, the size of the component to be coated and the ambient temperature. In general, the addition rate is 10-20 wt% Aqua+ Reducer 500 to Aqua+ BaseCoat 5080. Under standard conditions, an addition rate of +10-14% is recommended for small parts, +15-18% for whole body parts, as well as complete vehicles, and +20% for very large surfaces and/or high temperatures. After addition, ensure thorough homogenization.

Apply wet coats on flow directly at the beginning and with each subsequent coat of pure Aqua+ BaseCoat 5080. When coating entire car bodies, apply BaseCoat 5080 from bottom to top. For example, start at the side sills and work your way up to the roof. Allow each coat to flash off completely before applying the next coat. The applied layer is flashed off as soon as the light blue marking agent has completely disappeared. For faster flash-off we recommend the strongest possible air circulation at max. 35° C for 10-15 min.

Note on intermediate drying: When applying the clear protective film (PPS), we recommend dispensing with intermediate drying and allowing the individual layers to flash off at ambient temperature (25°C), as the light blue marking agent cannot escape if drying is too fast.

Never heat Aqua+ BaseCoat 5080 above 35° C!

After 2 wet coats of Aqua+ BaseCoat 5080, all areas on the vehicle should be completely wetted and there should be a film thickness of about 60-80µm of clear film.

Now there are 2 options to choose from:

1st option: Clear protective film (PPS) Paint Protection Spray

For a clear protective coating, apply further coats of pure Aqua+ BaseCoat 5080 as at the beginning. For reliable protection against stone chipping and layer thicknesses of >200µm, min. 2 additional layers are required. Depending on the requirements profile, more coats can also be applied for even higher layer thicknesses. This is particularly recommended for heavily stressed areas such as sills or bumpers. The application of several layers can also be carried out on partial areas and can also be combined with the colored layer structure to achieve a stronger and better protective, colored film coating.

Finally, apply CARDIP 2K HS ClearCoats 8080 / 8090 according to point. 2.2!

Tip: You build up the layer structure of the clear protective film as described in option 2 for colored film coating, but you mix in transparent (non-colored) waterborne paint instead of pigmented waterborne paint.

2nd option: colored film coating

For a colored film coating, mix Aqua+ BaseCoat 5080 in a ratio of 2:1 with undiluted water-based paint in your desired color. Check the products for compatibility and function in advance! Mix homogeneously! Effect colors / pigments such as fine silver can also be pre-diluted with Aqua+ Reducer / Adjustment Additive 500 before adding to Aqua+ BaseCoat 5080.

Now apply the colored Aqua+ BaseCoat 5080 on top of the previous 2 clear coats like a classic waterborne coating. For a functioning coating, apply at least 2 more coats. Apply base shades and effect layers according to the same principle before and after.

In exceptional cases, sensitive and fine glazes such as Candy can also be applied pure / without adding Aqua+ BaseCoat 5080 to the previous layer buildup / base color, provided that the previous layer contains a paint component! In this case, check the layer build-up in advance for functionality and ensure that you have built up at least 4 layers and 200µm layer thickness!

Fog out effect color shades onto the dried surface! For fogging, the Aqua+ BaseCoat/ Waterborne Paint mixture can be thinned with Aqua+ Reducer/Adjustment Additive 500. In exceptional cases, a thin layer (!) of pure water-based paint can also be used, provided that the previous layer contains a paint component! Finally, apply CARDIP 2K HS ClearCoats 8080 / 8090 according to point. 2.2!

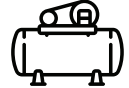
You need...



Paint gun
Full spectrum



Paint booth
25° C / 77 °F



Compressed air
1.7 bar at gun

For the application of CARDIP® AQUA+ BaseCoat 5080 we recommend:

SATA JET 5000B RP/HVLP 1.2- 1.3 mm or equal.

Tip Option 1: Clear protective film (PPS)

Special case: For colors that react sensitively to discoloration caused by coatings (white, silver, black), apply the transparent protective version (PPS) in 3 layers instead of 4 layers, especially in the case of partial coating, in order to counteract possible changes in the appearance caused by excessive layer thicknesses - or use the colored version in the default car color (Option 2) for the last layer. You may replace the missing layer of BaseCoat by a third layer of ClearCoat instead.

Tip Option 2: Tinting with water-based paint

When tinting BaseCoat 5080 with water-based paint, pay attention to the viscosity! Do not add any additives such as crosslinking agents to the water-based coating (e.g. as with Nexa Autocolor). These tasks are performed by BaseCoat 5080, the waterbased paint serves only for pigmentation, not for film formation! Basically, we recommend adding undiluted waterborne varnish to BaseCoat 5080, which has been diluted in advance with 10-20% Reducer 500, in a ratio of 2:1.

2 parts diluted BaseCoat 5080 to 1 part undiluted waterborne paint without additives. Some mixtures are more viscous than others (e.g. colors with a high metallic content). In this case, the waterborne paint should be diluted by 5-10% before adding to the BaseCoat, ideally with Reducer 500, optionally also with the reducer of the paint system, in order to achieve a suitable overall viscosity of the colored BaseCoat, otherwise more surface texture is to be expected.

Fogging: If you fog the coating, as in the case of metallic, before applying the clearcoat, dilute the mixture of BaseCoat 5080 and waterborne paint by an additional 10-20% with Reducer 500 in order to create as little structure as possible during fogging.

2.2 CARDIP® 2K HS ClearCoats 8080 UltraGloss / 8090 SatinMatte

After building up 150-200µm layer thickness in 4 layers, pure (clear) or with paint component, and achieving the desired color effect, the coating must be sealed with the CARDIP special clear coat. Before applying the clear coat, the previous coating must be completely dry. Intermediate drying for 15 min. at 35°C is recommended before applying the clear coat. **Except for the clear protective film (PPS)!**

Both variants of CARDIP 2K HS ClearCoat are applied in min. 2 coats wet on flow. A flash-off time of 15 min. should be observed between the coats. If required, a 3rd coat of clearcoat can also be applied.

Apply a thin dusty layer first before spraying the first wet coat!

✓ **The coating is now finished.**

For the application of CARDIP® 2K HS ClearCoats 8080/8090 we recommend:

SATA JET 5500B RP 1.2 mm or equal

Mixing ratio ClearCoat Gloss / Matt:

3:1; 3 parts ClearCoat to 1 part hardener + 10% thinner.

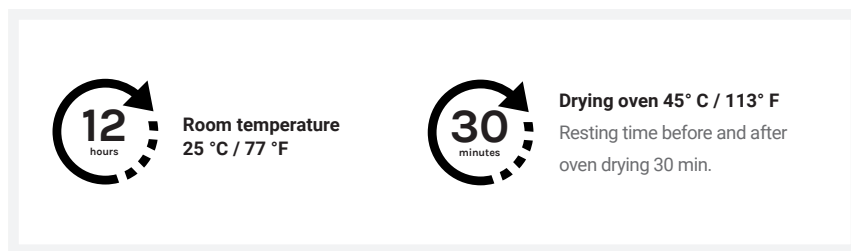
Ex: 3000ml ClearCoat + 1000ml hardener = 4000ml

+ 400ml thinner = 4400ml ready to spray.

If necessary, the proportion of thinner can be increased.

For the processing of ClearCoat Matt 20% thinner is required.

2.3 Drying after clear coat



Tip: For an even more uniform result, you can finish the glossy variant of the spray film (ClearCoat UltraGloss) like a conventional paint, by sanding and polishing. You can sand both dry and wet. Sanding marks up to P2000 grit can be polished up by sanding polish, just like a normal paint.

Alternatively, the clearcoat can also be sanded more coarsely in between and then reapplied to achieve an even smoother surface and more color depth.

2.4 Finish

Remove the masking paper and adhesive tape and reassemble the disassembled components. When removing the adhesive tape, make sure that the film has not bonded to the adhesive tape at any point. If it does, separate the bond with a clean cut. During assembly, ensure that the film coating between the components cannot become detached due to excessive pressure or movement. Directly underlay contact points / friction points with adhesive tape or fleece and do not overtighten attachment points.

Approx. Consumption rates

2.1 Aqua+ BaseCoat 5080



2.2 2K HS ClearCoats 8080 / 8090



CARDIP® peelable paint multi-layer-process



3. ClearCoat
2+ layers

2. Aqua+ BaseCoat pure
Opt. + WB-Paint 2:1
2+ layers

1. Aqua+ BaseCoat pure
2+ layers