

Technical Data Sheet.

Permahyd® Pearl Base Coat 285.

Permahyd® Pearl Base Coat 285 is a high-grade waterborne base coat based on special PU dispersions.

It can be used for two- or three stage pearl effect colours on passenger cars and commercial vehicles.

When recoated with Permasolid® HS clear coat, it produces a high-gloss, weather resistant top coat.

For professional use only!
VR Technical Data Sheet No. EN / 0285 / 00



Substrate.

Suitable substrates:

Permasolid® 2K acrylic surfacers
Intact old finish
Priomat® 1K Wash Primer 4085
Permacron® 1:1 Elastic Primer Surfacer 3300
for plastic substrates

See "Special notes"

Substrate pretreatment:



Thoroughly clean original or old finish and Permasolid® surfacer with Permahyd® Silicone Remover 7080 or, if heavily soiled, first with Permaloid® Silicone Remover 7010.



Sand dry with random orbital sander and dust extraction, P400 – 500 grade



or
wet with P800 - 1000 grade.



Before further treatment, carefully clean sanded areas once more with Permahyd® Silicone Remover 7080 to remove all dust, paint residue from sanding and other impurities.

Wipe away any surplus Silicone Remover with a lint-free cloth, taking care to avoid streaks.
(see Technical Data Sheet 7080)

Special notes:

Sanded-through spots must be isolated with Priomat® 1K Wash Primer 4085.

Sanded through spots may not be larger than Ø 5.0 cm.

Areas which have been sanded down to bare metal must be coated with Priomat® Wash Primer 4075 or Priomat® 1K Wash Primer 4085 before Permasolid® 2K surfacer can be applied.

Application.

Mixing containers:

Plastic containers or tinplate cans with inner coating

Sieves:

Waterborne base coats are to be filtered through waterproof 125µm quick sieves before application by cup system (e.g. SATA or 3M).

Reducer

Permahyd® Demineralised Water 6000 (acc. to ISO 3696)
Permahyd® Special Water 6002 slow
[Use at very low humidity (below 30%)]
Please use the Permahyd mixing stick.

1. Base coat

A special undercoat colour is only necessary for three-stage pearl colours:

Apply Permahyd® Base Coat 280
(for undercoat colour, see colour search tools CRplus or Internet)

Note:

To improve through-drying of three-stage colours of Permahyd® Base Coat 280/285/286, we recommend to mix the undercoat colour with Permahyd® Additive 9007.

Use only in the undercoat colour with three-stage application of Permahyd® Base Coat 280/285/286.

Undercoat colour application:

Mixing ratio:



Permahyd® Base Coat 280
+ 5% Permahyd® Additive 9007

Pot life:

Ready for use max. 30 minutes at 20°C.

Method of application:

Reducer at
+20°C material temperature:

Spray nozzle*:






Spray pressure*:

Atomising pressure*:

Number of coats:

Drying:
(before effect colour)

Cooling:
(before effect colour)

	Compliant	HVLP
	10%	
	1.2 - 1.4 mm	1.3 - 1.5 mm
	2 - 2.5 bar	-
	-	0.7 bar
	1 spray operation = 1.5 coats**	
	after 5 - 10 minutes final flash-off 15 - 20 minutes at 60 - 65°C See Special notes	
	allow to cool down for 10 minutes	

* See manufacturer's instructions

** It may be necessary to apply an additional coat

Special notes.

2. Pearl base coat:

Effect colour application:

Method of application:

Application viscosity
4 mm, +20°C, DIN 53211:
Reducer at
+20°C material temperature:

Spray nozzle*:

Spray pressure*:

Atomising pressure*:

No. of coats:
(without intermediate flash-off)

Special note:

Flash-off time:
(before clear coat)






Ways to reduce flash-off times:

1. Small areas:

Permahyd® Additive 9007 cannot be used for multi-colour finishes.

When using a tack cloth, only use the latest generation of tack cloth with antistatic properties as this leaves no chemical or adhesive residue on the surface, e.g. Spies Hecker Tack Cloth, article No. D13295540.

Apply Permahyd® Pearl Base Coat 285

	Compliant	HVLP
	mixing viscosity	
	10%	
	1.2 - 1.3 mm	WSB/1.3 mm
	2 - 2.5 bar	-
	-	0.7 bar
	1 spray operation = apply one tack coat, followed by a full coat. With effect colours we recommend a finish coat	
	With low-opacity colours it may be necessary to apply more coats after the appropriate flash-off time (when the surface appears matt). The total film thickness (including the undercoat colour in Permahyd® Base Coat 280) may not exceed 45 µm.	
	20 minutes at +20°C ambient temperature	

It is also possible to blow off with the spray gun after waiting at least 5 minutes. Surface matting can be accelerated by blowing off with an air diffuser (hand-held or stationary device).

Drying time: at least 5 minutes

* See manufacturer's instructions!

2. Larger areas:

Surface matting can be accelerated by using stationary air diffusing units (e.g. ceiling system), infrared drying or low baking.

For application on large areas, see also System Data Sheet 0280.

<u>Ceiling system:</u>	10 - 15 minutes
<u>Infrared drying:</u>	3 – 5 minutes
<u>Cooling time:</u>	at least 5 minutes

Low baking at +60°C

<u>Combi booth:</u>	at least 10 minutes incl. heating-up time
<u>Low-bake oven:</u>	at least 5 minutes
<u>Cooling time:</u>	at least 5 minutes

The flash-off and drying times depend on the temperature, humidity and air settling rate in the booth, and on the number of coats applied. The surface must, however, first appear completely matt.

Recoating.

Recoat with:

Permasolid® HS Clear Coat
(see respective Technical Data Sheet)

Special notes.

1. The original finish dictates whether a two-stage or three-stage pearl colour (with a special undercoat colour) is required.

The respective undercoat colour is shown in our colour search tools CRplus or Internet.

2. Blend-in system: to achieve a perfect colour transition from repair to adjacent areas)

a) Preparation:

Sand surfacer (dry with P400 - 500 or wet with waterproof P800 - 1000).

Sand adjacent areas on which no surfacer was applied lightly but thoroughly with sanding pad (fine).

Thoroughly clean the whole surface with Permahyd® Silicone Remover 7080 to remove any dust, paint residue from sanding or any other impurities.

Wipe away any surplus silicone remover with a lint-free cloth, taking care to avoid streaks. Allow the moisture on substrates which have been wet sanded or cleaned to evaporate completely.

b) Two-stage pearl colours:

Spray the area on which the surfacer was applied with Permahyd® Pearl Base Coat 285 (at spray viscosity) so that it forms an opaque film. Extend the area of application of each subsequent coat through a process of overlapping so that only a fade out area is left.

Extend this fade out area and blend, spraying with reduced pressure. After the respective final flash-off time, a clear coat can be applied.

c) Three-stage pearl colours:

Blend in the area on which the surfacer was applied with ready-to-spray Permahyd® Base Coat 280 (see Undercoat colour application) using reduced pressure.
(Keep to the drying times given)

Spray Permahyd® Pearl Base Coat 285 (at spray viscosity) on the same area, extending the area of application of each subsequent coat through a process of overlapping to ensure that it matches the original finish.

Blow dry with the spray gun after each coat.

Product application:

Spraying equipment must be suitable for applying waterborne products; manufacturers' instructions must be followed.

For further details, see System Data Sheet No. 905.1.

The mixing colours in this top coat series can be used only as part of a colour formula. If any of the mixing colours is applied on its own, the mixing colour may react differently to that which is described / specified in this Technical Data Sheet.

Cleaning of tools:

Rinse with Permahyd® Demineralised Water 6000 before and after use.

Then wash out with Permaloid® Washing Thinner 7020/7989.
For detailed information, see System Data Sheet No. 905.0.

Waste disposal:

Collect liquid waterborne waste separately from conventional liquid waste. If the two are mixed, it may be impossible to dispose of the mixture, or at best difficult, and therefore expensive.

For detailed information, see System Data Sheet No. 905.2.

Health and safety:

A face mask must be worn when applying waterborne products.

Data.

Flash point:

above +23°C

VOC content:

2004/42/IIB(d)(420)420

The EU limit value for this product (product category IIB.d) in ready to use form is max. 420 g/litre of VOC.

The VOC content of this product in ready to use form is max. 420 g/l.

Storage.

Storage conditions:



Frost-free!

Preferred storage temperature +15°C to +25°C.

Optimum storage temperature approx. +20°C.

Short-term storage (approx. 4 weeks) at +5°C to +35°C is possible.

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