

Technical Data Sheet.



Permahyd® Base Coat 250 / 255

Permahyd® Base Coat 250/255 is a high-grade waterborne base coat system based on a special technology of PU dispersions. It can be used to produce high-grade solid color and effect finishes.

- VOC compliant
- easy to use
- good vertical stability
- easy blending
- recoatable with Permasolid® HS clear coat

For professional use only!
VR Technical Data Sheet No. EN / 250_255 / 00

An Axalta Coating Systems Brand



Substrate.

Suitable substrates:

Fully cured, well preserved and lightly sanded original or old paintwork
Surfaces coated with a primer or a surfacer
Permasolid® HS surfacers
Priomat® 1K Wash Primer 4085
Permacron® 1:1 Elastic Primer Surfacer 3300 for plastic substrates

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, P500 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® HS 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).

Mixing ratio:



For the mixing ratio by weight, please refer to the mixing formulae of the solid colors or effect colors in Permahyd® Base Coat 250/255.

Pot life:

The ready-to-spray material should be used within one week if possible.



Stir stored material prior to use.

Converter:

Permahyd® Flex-TEC Converter 9011 (in the mixing formula)

A. Two-stage colors

Method of application:



Compliant

HVLP

**Application viscosity 4 mm,
+20°C, DIN 53211:**



mixing viscosity

Spray nozzle*:

1.2 - 1.3 mm

1.2 - 1.3 mm

Spray pressure*:

1.8 bar

-

Atomising pressure*:

-

0.7 bar

Number of coats:



Apply 2 - 3 coats with intermediate flash-off until the surface is fully covered.
Then apply 1 - 2 thin effect coats with reduced spray pressure (1.0 - 1.5 bar) and slightly more distance to the object to achieve the right effect/color.

Recommended film thickness:

10 - 25 µm dry film thickness



Flash-off until the surface appears fully matt (without blowing).

**Intermediate and final flash-off time
(before clear coat):**

Alternative ways to reduce the flash-off time:

1. Flash-off at 20 - 40°C with blowing device until the surface is fully matt
2. 5 - 10 min. final flash-off and dry for 10 - 15 min. at 60 - 65°C

* See manufacturer's instructions!

B. Three-stage colors

1. Base coat:

A special undercoat color is only necessary for three-stage effect colors
(for undercoat color, see color search tools CRplus or Internet)

To improve through-drying of three-stage Permahyd® Base Coat 250 / 255 colors, we recommend to mix the undercoat color with Permahyd® Additive 9007.

Undercoat color application:

Mixing ratio:



Permahyd® Base Coat 250
+ 5% Permahyd® Additive 9007

Pot life:

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

Application as with two-stage colors (see table before)

2. Effect finish:

Effect color application:

Apply Permahyd® Base Coat 255 (without Permahyd® Additive 9007)

	Compliant	HVLP
	mixing viscosity	
	1.2 - 1.3 mm	1.2 - 1.3 mm
	1.8 bar	-
	-	0.7 bar
	Apply 2 coats with intermediate flash-off time. Then apply 1 - 2 thin effect coats with reduced spray pressure (1.0 - 1.5 bar) to achieve the right effect/color.	
	10 - 25 µm dry film thickness	
	Flash-off until the surface appears fully matt (without blowing). Alternative ways to reduce the flash-off time: 1. Flash-off at 20 - 40°C with blowing device until the surface is fully matt 2. 5 - 10 min. final flash-off and dry for 10 - 15 min. at 60 - 65°C	

Ways to reduce flash-off times:

1. Small areas:

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

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 System Data Sheet No. SYS 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:

Blending system :

(to achieve a perfect color 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) Blending system for two-stage colors:

Apply 2 - 3 coats of Permahyd® Base Coat 250/255 to the area on which the surfacer was applied 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.

Then blend in 1 - 2 thin coats with reduced spray pressure (1.0 - 1.5 bar) to achieve the right effect/color.

After the respective final flash-off time, a clear coat can be applied.

c) Blending system for three-stage colors:

Blend in the area on which the surfacer was applied with ready-to-spray Permahyd® Base Coat 250 of the underground color (incl. Permahyd® Additive 9007) in 2 coats with intermediate flash-off. If possible, blend in immediately.

If the blending area is to be masked to avoid increased overspray or if the area on which surfacer was applied is not sufficiently covered by base coat, another thin coat should be applied with reduced pressure (1.0 - 1.5 bar). This coat can be blended into the adjacent area.

Blend in the effect color Permahyd® Base Coat 255 (without Permahyd Additive 9007) in two coats with intermediate flash-off after 5 - 10 min. flash-off and 15 min. drying at 60 - 65°C (allow object to cool down).

Blow dry with the spray gun after each coat.

Then blend in 1 - 2 thin effect coats with reduced spray pressure (1.0 - 1.5 bar) to achieve the right effect/color.

After the respective final flash-off time, a clear coat can be applied.

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 Permahyd® mixing colors can be used only as part of a color formula. If any of the mixing colors is applied on its own, the mixing color 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 further details, 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 further details, see System Data Sheet No. 905.2.

Note on safety:

This product is classified according to regulation (EC) 1272/2008 (CLP).

Please consult the Safety Data Sheet.

It is strongly recommended to use appropriate personal protection equipment during application.

Data.**Flash point:**

+46 - 80°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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