Technical Data Sheet.

Permahyd®
Base Coat Series
280.

waterborne

Permahyd® Base Coat Series 280 is a high-grade waterborne base coat system based on a special technology of PU dispersions.
It produces high-grade two-stage solid colour and metallic finishes.

- VOC-compliant
- easy to apply
- good vertical stability
- good hiding power
- recoatable with Permasolid® 2K clear coat

For professional use only!
VR Technical Data Sheet No. 0280/04/2007-GB

Substrate.

Suitable substrates:

Permasolid® 2K acrylic surfacers
Permahyd® 1K Primer Surfacer 4100
Intact old finish
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, P 400–500 grade

or wet with P 800-1000 grade.

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

Special notes:

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

Sanded through spots must be isolated with Permahyd® 1K Primer Surfacer 4100 or Permasolid® 2K surfacer.

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

Application.

Mixing containers: Plastic containers or tinplate cans with inner coating

Sieves: Material and glue must be waterproof

Reducer: Permahyd® Demineralised Water 6000
(according to ISO 3696)

Note: For safety reasons, mixtures which include both WB 817 micro silver extra and WB 831 translucent oxide may not be stored. (Risk of pressure increase in the closed tin!).

Any unused material is immediately to be disposed of properly (see "Special notes, Waste disposal").

Method of application:	**Compliant**	**HVLP**
Application viscosity 4 mm, +20°C, DIN 53211:	mixing viscosity	
Reducer at +20°C material temperature:	10%	
Spray nozzle*:	1.2 - 1.3 mm	WSB/1.3 mm
Spray pressure*:	2-2.5 bar	-
Atomising pressure*:	-	0.7 bar
No. of coats: (without intermediate flash-off)	1 spray operation = apply one tack coat, followed by a full coat With effect colours we recommend a finish coat.	
Special note:	With low-opacity colours it may be necessary to apply more coats after the appropriate flash-off time (when the surface appears matt).	
Flash-off: (before clear coat application)	+20 minutes at 20°C ambient temperature	

* See manufacturer's instructions!

Ways to reduce flash-off times:

1. Small areas:

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

Drying time:	at least 5 minutes

2. Larger areas:

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

Ceiling system:	10-15 minutes
Infrared drying:	3-5 minutes
Cooling time:	at least 5 minutes

Low baking at +60°C

Combi booth:	at least 10 minutes incl. heating-up time
Low-bake oven:	at least 5 minutes
Cooling time:	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® 2K clear coat
(see respective Technical Data Sheet)

Special notes:

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

a) Preparation:
Sand surfacer (dry with P 400-500 or wet with waterproof P 800-1000).

Sand adjacent areas on which 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) Blend-in system for metallics and solid colours:

Spray the area on which the surfacer was applied with Base Coat Series 280 (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-in, spraying with reduced pressure.

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

Special notes.

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 more 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

Base coat mixed with 10% Demineralised Water 6000

	white	black	silver
Solids content:	33.7 % by weight	20.6 % by weight	17.4 % by weight
	21.2 % by volume	18.0 % by volume	14.1 % by volume
Specific weight:	1.17 g/cm³	1.02 g/cm³	1.02 g/cm³
Coverage*:			
at 15 µm dry film thickness:	14.1 m²/l	12.0 m²/l	-
at 12 µm dry film thickness:	-	-	11.8 m²/l

VOC content:

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/litre.

* The coverage was calculated on the basis of the recommended dry film thickness and the solids content by volume (without reducer). No allowance was made for wastage during application.

Storage.

Guaranteed shelf life:	6 months in sealed original containers
Storage conditions:	 Frost-free! Storage temperature +5°C to +35°C Storing the product at temperatures below or above this impairs the quality of the product.

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