

System Data Sheet.

**Permahyd®
General Application
Instructions for
Waterborne Products**

For professional use only!
System Data Sheet No. 905.1/10/2007 - GB



Substrate pretreatment.

When applying waterborne products, the substrate must always be prepared with great care using only agents recommended for waterborne products.

Metallic substrates should preferably be cleaned with Permahyd® Wax and Grease Remover 7070 or Permaloid® Cleaning Agent 7020.

Clean sanded surfacer areas and old finishes with Permahyd® Silicone Remover 7080.

Plastic surfaces should be carefully prepared in accordance with the System Data Sheet for painting plastics (see Data Sheet No. 902.1 or 903.1) and cleaned once more with Permahyd® Silicone Remover 7080 before further treatment.

Masking

Use only waterproof masking tapes and masking paper or plastic sheeting.

Spray guns/ spray equipment.

Recommended spray guns

SATA Jet No. 2000/3000 with 1.2mm nozzle
SATA Jet No. 2000/3000 with WSB nozzle set
ITW DeVilbiss GTI Pro, nozzle size 1.2 mm
Iwata W400, WB2 with 1.25 mm nozzle

It is not advisable to use the same spray gun/spray equipment to alternately apply waterborne and conventional products. Those components of spray guns/spray equipment which come into contact with waterborne products during the course of application must be made of a corrosion-resistant material (stainless steel, plastic).

Mixing containers

For mixing and adjusting the viscosity of waterborne products use only tins made of plastic or coated tinplate.

Material temperature.

Since the viscosity and thus the application properties of waterborne products depend to a great extent on the material temperature, waterborne products must have a temperature of at least +18°C up to +35°C at the time of viscosity adjustment/application.

Minimum reaction temperature

When applying two-pack waterborne products, the minimum reaction temperature given in the Technical Data Sheet must always be allowed for drying (see respective TDS).

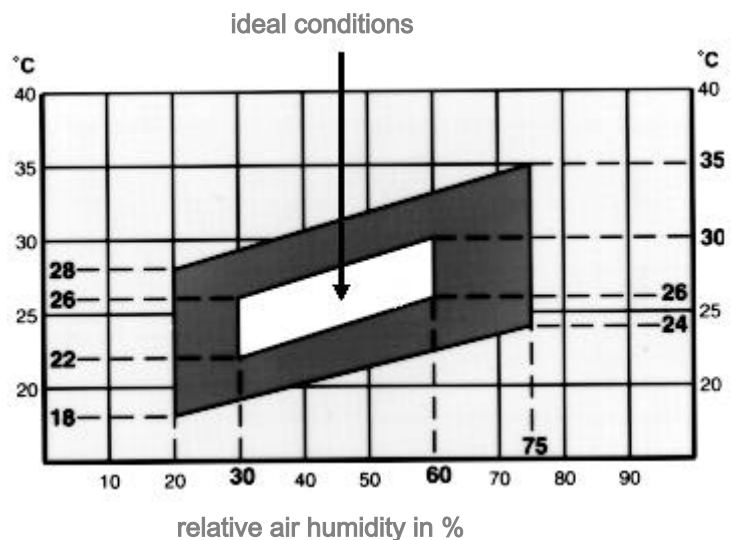
Maximum mixing temperature

If the maximum mixing temperature of two-pack waterborne products is exceeded, the pot life may be reduced by such an extent that application is no longer possible.

- see respective Technical Data Sheet of the product
- store in an appropriate place
- if required, cool down before mixing

Application.

The application of waterborne products is influenced to a great extent by temperature and air humidity. This may restrict the application or make it even impossible unless certain conditions are fulfilled. The application window for waterborne products gives the limit values.



Assuming that in a paintshop with up-to-date equipment an application temperature of at least +20°C is guaranteed, particular measures are required only with regard to the air humidity if it lies outside the application range.

Measures if relative air humidity is too high

Excessively high air humidity may cause color deviations, mottling of metallic colors and insufficient stability on upright surfaces.

These problems may be avoided by increasing the temperature in the spray booth as far as acceptable for the staff.

Measures if relative air humidity is too low

Inadequate air humidity may cause increased overspray and insufficient overspray absorption.

These problems may be avoided by reducing the application temperature, if possible. However, a minimum temperature of +18°C must be maintained.

Intermediate and final flash-off times, recoating times.

When applying waterborne products, the flash-off times between individual coats and final flash-off or recoating times are adversely affected by low temperatures and high air humidity. The drying processes between the individual coats and before further recoating can be accelerated by:

- accelerated evacuation of moist air by blowing off with variable or stationary air movers with or without drying (hand-held or stationary device, ceiling systems, ...)
- infrared drying
- low baking

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The relevant Material Safety Data Sheet and Warnings displayed on the product label need to be observed.

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