

Technical Data Sheet

Permahyd[®]

General Application Instructions for Water-Borne Products

This product is for professional painting of vehicles only.



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Substrate preparation

When applying water-borne products, the substrate must always be prepared with great care using only products recommended for water-borne coatings.

Metal substrates should preferably be cleaned with Permahyd[®] Silicone Removers 7085, or 7096.

Clean sanded surfacer areas and old finishes with Permahyd[®] Silicone Removers 7085, or 7096 (see Data Sheet 770.2). Plastic surfaces must be carefully prepared in accordance with the System Data Sheet for painting plastics (see Data Sheet 901.1) and cleaned once more with Permahyd[®] Silicone Removers 7085, or 7096 before further recoating.

Masking

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

Spray guns/spray equipment

It is not advisable to use the same spray gun/spray equipment to alternately apply water-borne and conventional products. The components of spray guns/spray equipment coming into contact with water-borne products in the course of application must be made of a corrosion-resistant material (stainless steel). It is important to review the product TDS for proper spray gun set up prior to application.

Mixing containers

For mixing and adjusting the viscosity of water-borne products use only tins made of compatible plastic or coated containers.

Material temperature

Since the viscosity and thus the application characteristics of water-borne products depend to a great extent on the material temperature, water-borne products must be at least 65°F (18°C) at the time of viscosity adjustment / application.

- Store at min. 65°F (18°C) or allow corresponding warming time before viscosity adjustment/application.

Minimum reaction temperature

When applying water-borne products, the minimum reaction temperature given in the Technical Data Sheet must always be allowed for drying.

- See respective Product Data Sheet.

Maximum mixing temperature

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

- See respective Product Data Sheet.
- Store correctly.
- Cool down before mixing if required.

Application

The application of water-borne 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.

Assuming that in an up-to-date paint shop an application temperature of at least 68°F (20°C) is guaranteed, particular measures are required only with regard to the air humidity if it is outside the application range.

Controllable Factors	High Humidity	Low Humidity
Spray booth temperature	Increase Temperature	Decrease Temperature
Mixing ratio	Permahyd- use less VE6000 Hi-TEC – increase amount of 6050	Permahyd- use more VE6000 Hi-TEC – decrease amount of 6051
Spray gun size, set up	Smaller nozzle	Larger nozzle
Air pressure	Increase	Decrease
Spray gun distance	Increase distance to panel	Decrease distance to panel
Gun speed during application	Faster passes	Slower passes
Reducer selection	Permahyd- use VE6000 Hi-TEC – use 6050	Permahyd- use VE6000 with 6002 Hi-TEC – use 6051 with an addition of up to 10% VE6000

Intermediate and final flash-off times, recoating times

When applying water-borne 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
 - blow with air diffuser
 - Use Speed Dry air jet system
 - Increase air rate in the spray booth (Modern spray booths take account of this option.)
- Use of drying energy
 - IR
 - Combination booth
 - Oven

Important Regulatory Information

- For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components. Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.**
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SPIES HECKER, INC.
 47818 West Anchor Court
 Plymouth, MI 48170
 Tel. 800-447-7437 (800-44-SPIES)
 Fax 734-354-3405
www.SpiesHeckerUSA.com



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