



Technical data sheet

PROTECTION MADE EASY

Polysilco HS Universal

Description and destination of the product

Polysilco HS Universal is a one-pack moisture curing polyurethane paint.

The outstanding properties of **Polysilco HS Universal** are :

- Universal adherence : very good adherence on aluminium, galvanisation and steel.
- Good anticorrosion properties on above mentioned substrates by use of an active modified (zinc free) phosphate anticorrosive pigment.
- Perfect high performance primer when blast clean is not possible.
- Very good drying and hardening properties, also by low temperatures (up to 0°C).
- Can be applied by roller, brush or sprayer.
- High solids content.
- Good elasticity (indirect and direct impact resistance).

Type of binder

Moisture curing, aromatic polyisocyanate prepolymers.

Type of pigment

Iron oxides, magnesium silicates, modified phosphate anticorrosive pigment.

Colour

Oxide red.

Technical data

○ Density:	1,32 ± 0,05 g/cm ³
○ Solids content:	66 ± 2% (in volume) 77 ± 2% (in weight)
○ Viscosity:	85 ± 5 KU (20°C)
○ VOC:	300 g/L

- Indicative drying times (R.H. 75%) for 60 micron layer thickness:

	Dustdry	Tackfree	Repaintable
10°C	2.5 hours	6 hours	12 hours
20°C	1 hour	4 hours	8 hours
30°C	40 minutes	3 hours	6 hours

- **Theoretical yield:** 16,5 m²/L for 40 microns
The practical yield can largely be influenced by the roughness and porosity of the substrate, the applied layer thickness or the losses by airless application.
- **Thinner:** *Solvatane* or *Thinner 1*

Surface preparation

All surface contaminations that could hamper the removal of corrosion should first be removed with appropriate means. Surfaces that are polluted with grease or oil should be washed down with solvents, alkaline solutions or emulsifier. Salts or other water dilutable contaminations should be removed with water and brush, water under high pressure or jet.

In order to avoid problems of interlayer adherence, it is recommended to apply the following coat within 3 days. If this isn't possible, the previous coat should be cleaned with *Solvatane* before painting with thinner based polyurethane intermediate or top coats.

Remark :

If **Polysilco HS Universal** is recoated with other products than thinner based polyurethane paints like water based or White Spirit based enamels, **Polysilco HS Universal** should be always roughened up in order to obtain a good adherence between layers (whatever the waiting time of recoating).

Preparation of galvanisation :

- old galvanisation (outside exposition longer than 3 weeks) : salt present on the substrate should be removed with water and hard brush + degreasing.
- new galvanisation (gloss substrate) : the substrate should be etched with *Phos-Clean*, then cleaned with water or slightly brushed off.

Use

Polysilco HS Universal can be applied with brush, roller, pneumatic or airless gun.

	% Dilution	Thinner	Pressure (bar)	Nozzle
Brush	5%	<i>Thinner 1</i>	-	-
Roller	0-5%	<i>Thinner 1</i>	-	-
Pneumatic gun	10%	<i>Solvatane</i>	3 - 5 bar	1.2 – 1.5 mm
Airless gun	5%	<i>Solvatane</i>	100 – 300 bar	0.017" – 0.024"

At extreme temperatures, humidity circumstances or air stream, *Thinner 1* is recommended for airless gun application. The recommended layer thickness is 60 to 80 microns, depending on the system. The material can be cleaned with *Solvatane* or *Thinner 1*. In favourable conditions, a maximum layer thickness of 120 microns can be reached.

Application conditions

Polysilco HS Universal can be applied by temperatures between 0°C and 40°C and the relative humidity should be between 30% and 95% (no condensation). The temperature of the surface must be at least 3°C higher than dew point.

Storage stability

Minimum 2 years in the original, unopened packing, stored in a dry environment at temperatures between -20°C and +40°C.

Safety measure

For detailed information about safety measures, personal protection and transport data of this product, we refer to the safety data sheet.

The last update of our technical data sheets is always available at our website: www.libertpaints.com

Disclaimer

The information given in this technical data sheet is only a general product description, based on our experiences and tests and therefore does not represent a specific practical case. Consequently Libert Paints doesn't guarantee the functionality or result and takes no responsibility in this respect.

We advise our clients to test the applicability of the product to the nature and the state of the surfaces and to carry out the necessary representative tests in case of doubt. Please contact our R&D department as the occasion arises.

Attention: our clients should verify whether the present technical data sheet hasn't been replaced by a more recent version.