

Technical Data Sheet

# AQUAPUR PU 100-90

Waterborne polyurethane topcoat – Gloss  
Two-component polyurethane topcoat  
hardened with aliphatic isocyanate

## RELATED PRODUCTS




<b>Pigment pastes</b>	Universal waterborne pigment pastes
<b>AQUAHARD PU 10-01</b>	Polyurethane hardener
<b>AQUATHIN PU 50-01</b>	Thinner
<b>AQUATHIN 50-02</b>	Slow thinner




## USE

- Transport vehicles
- Machines and equipment
- Outer surfaces of tanks
  - Steel structures

## PROPERTIES

- High gloss
- Good hiding power and flowability
  - Very good chemical resistance
  - Excellent resistance to weather
- Very good mechanical resistance

SUBSTRATES				
Acrylic, polyurethane, epoxy primers		Prepare according to the basecoat specification.		
Old coatings		Mat and degrease.		
Polyester laminates		Mat and degrease.		
MIXING RATIO				
		Volume ratio	Weight ratio	
	AQUAPUR PU 100-90	5	100	
	AQUAHARD PU 10-01	1	20	
	AQUATHIN PU 50-01	5 – 15 %*	5 – 15 g*	
	AQUATHIN PU 50-02	5 – 15 %*	5 – 15 g*	
<p>* Depending on the color</p> <p>Add the hardener while power stirring for approx. 2 min.</p> <p>Apply the thinner in the amount calculated for the topcoat.</p> <p>Use AQUATHIN PU 50-02 above 20°C or at humidity up to 50%.</p>				
VISCOSITY				
	DIN 4/20°C at 5+1+(5+15) %	25 - 35 s		
CONTENT OF VOLATILE ORGANIC COMPOUNDS				
VOC II/B/d limit*		420 g/l		
Actual VOC content*		190 g/l (5+1+5%)		
		160 g/l (5+1+15%)		
* For ready to use mixture acc. to EU Directive 2004/42/EC.				
APPLICATION CONDITIONS				
The coated surface must be dry. The coat, coated surface and ambient temperatures must be between +15°C and +25°C; the relative humidity must not exceed 80%. The coated surface temperature must exceed the dew point by at least 3°C. The application conditions determine the product layer drying time and the developed coating properties.				
TEMPERATURE RESISTANCE				
The operating temperature of the applied primer is between -60°C and +80°C. Transient temperatures up to +120°C maximum are permitted.				
APPLICATION				
		Nozzle	Pressure	Distance
	Pneumatic spraying	1.3 ÷ 1.4 mm	2 ÷ 2.5 bar	15 ÷ 20 cm
<b>CAUTION:</b> Follow the equipment	Airless spraying in air jacket	0.23 ÷ 0.28 mm (0.009" ÷ 0.011 ")	100 ÷ 120 bar Air jacket 2 bar	10 ÷ 15 cm

manufacturer's guidelines				
	Number of layers	1 ÷ 2		
	Single dry layer thickness	20 ÷ 30 µm		
	The yield of the ready to use mixture for the given range of dry layer thickness:	5 m <sup>2</sup> /l 0.2 l/m <sup>2</sup> at 60 µm		
	Mixture life at 20°C (until the viscosity is doubled)	1 ÷ 3 hours		
	Flash-off time between layers	20 ÷ 30 min		
<b>TECHNICAL DATA</b>				
Product	Solids content by weight	Solids content by volume	Density	
AQUAPUR PU 100-90	≈ 35 %	≈ 34%	1.0 ÷ 1.1 g/cm <sup>3</sup>	
AQUAHARD PU 10-01	≈ 80 %	≈ 73 %	1.1 g/cm <sup>3</sup>	
AQUAPUR PU 100-90 + AQUAHARD PU 10-01: 5+1	≈ 39 %	≈ 37 %	1.0 ÷ 1.1 g/cm <sup>3</sup>	
<b>GLOSS</b>				
Approx. 90 at 60°				
<b>CURING TIMES</b>				
	AQUAHARD PU 10-01 hardener			
	20°C	60°C		
Dust-free	< 60 min	5 min.		
Operating hardness	16 h	1 h		
Ending hardness	7 days	1 h +1 day/20°C		
CAUTION: The curing times apply to the temperatures of the individual elements. Condition at 60°C for ≥30 min before curing.				
<b>EQUIPMENT CLEANING</b>				
Wash all tools and equipment parts immediately after the application. Use a suitable waterborne paint thinner. Next, rinse clean with AQUATHIN PU 50-01.				
<b>STORAGE CONDITIONS</b>				
Store in a dry room, away from sources of flame and heat. Avoid direct exposure to sunlight. Recommended storage temperature: +5°C to +25°C. Protect from freezing.				
<b>SHELF LIFE</b>				

AQUAPUR PU 100-90	12 months/20°C
Pigment pastes	24 months/20°C
AquaHard PU 10-01	12 months/20°C
AQUATHIN PU 50-01	24 months/20°C
AQUATHIN PU 50-02	24 months/20°C
* In original closed packaging.	
<b>SAFETY</b>	
See the Safety Data Sheet.	
<b>OTHER INFORMATION</b>	
<p>Registration number: 000024104.</p> <p>The effectiveness of our systems results from laboratory research and many years of experience. The data contained herein meets the current knowledge about our products and their application potential. We ensure high quality, provided the user follows the instructions and the work is performed in accordance with good workmanship. It is necessary to perform a test application of the product due to its potentially different reaction with different materials. We may not be held liable for defects if the final result was affected by factors beyond our control.</p>	