Technical Data Sheet

AQUAPUR 100-90

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

RELATED PRODUCTS

Pigment pastes	Universal waterborne pigment pastes
AQUAHARD 10-01	Polyurethane hardener
AQUATHIN 50-01	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

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21.03.2023

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 100-90	5	100
AQUAHARD 10-01	1	20
AQUATHIN 50-01	5 – 15 %*	5 – 15 g*

* Depending on the color

Add the hardener while power stirring for approx. 2 min.

Apply the thinner in the amount calculated for the topcoat.

VISCOSITY

DIN 4/20°C at 5+1+(5÷15) %	25 - 35 s

CONTENT OF VOLATILE ORGANIC COMPOUNDS

Actual VOC content*	190 g/l (5+1+5%) 160 g/l (5+1+15%)

* VOC of the ready-to-apply mixture according to Directive 2004/42/CE for industrial plants.

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.

TEMPERATURE RESISTANCE

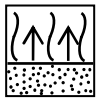
The operating temperature of the applied primer is between -60ºC and +80ºC.
Transient temperatures up to +120°C maximum are permitted.

APPLICATION

	Nozzle	Pressure	Distance
Pneumatic spraying	1.3 ÷ 1.4 mm	2 ÷ 2.5 bar	15 ÷ 20 cm
Airless spraying in air jacket	0.23 ÷ 0.28 mm (0.009” ÷ 0.011 ”)	100 ÷ 120 bar Air jacket 2 bar	10 ÷ 15 cm

CAUTION: Follow the equipment 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^2/l 0.2 l/m^2 at 60 µm
	Mixture life at 20°C (until the viscosity is doubled)	1 ÷ 3 hours
	Flash-off time between layers	20 ÷ 30 min

TECHNICAL DATA

Product	Solids content by weight	Solids content by volume	Density
AQUAPUR 100-90	≈ 35 %	≈ 34%	1.0 ÷ 1.1 g/cm^3
AQUAHARD 10-01	≈ 80 %	≈ 73 %	1.1 g/cm^3
AQUAPUR 100-90 + AQUAHARD 10-01: 5+1	≈ 39 %	≈ 37 %	1.0 ÷ 1.1 g/cm^3

GLOSS

Approx. 90 at 60°

CURING TIMES

	AQUAHARD 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.

EQUIPMENT CLEANING

Wash all tools and equipment parts immediately after the application. Use a suitable waterborne paint thinner. Next, rinse clean with AQUATHIN 50-01.

STORAGE CONDITIONS

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.

SHELF LIFE

AQUAPUR 100-90	12 months/20°C
Pigment pastes	24 months/20°C
AquaHard 10-01	12 months/20°C
AQUATHIN 50-01	24 months/20°C

* In original closed packaging.
SAFETY
See the Safety Data Sheet.
OTHER INFORMATION
Registration number: 000024104. 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.