

Technical Data Sheet
PUR DTM 220 NF
Direct Polyurethane Topcoat 2K

RELATED PRODUCTS

PUR HARD – DTM 220

Hardener for 2K
direct polyurethane topcoat

THIN 50

Universal thinner,
slow, standard, and fast

USE:

- Direct Polyurethane Topcoat 2K is intended for coating steel, cast iron for outdoor and indoor use. Requires no priming.

PROPERTIES

- Resistant to chemicals
- Primer and topcoat in one

SUBSTRATES				
Steel	The steel/cast iron substrate shall be dry and free of oils, grease, dust, loose old coatings, milling scale, loose rust, and foreign bodies. The surface shall exhibit a bare metallic gloss. Mat smooth and shining metallic surfaces with P120 sand paper to produce sufficient substrate roughness.			
Old coatings	Mat down and degrease. Test coat a small area of the old coating. If the dry coat finish is unsatisfactory, remove the old coating completely and pretreat the substrate as instructed above.			
Note: Dry sanding generates dust. Proper respiratory protection is recommended.				
MIXING RATIO				
	Coating method	Product	Volume ratio	Weight ratio
	Rollers or brushes	PUR DTM 220 NF	6	100
		PUR HARD – DTM 220	1	13
	Pneumatic spraying	PUR DTM 220 NF	6	100
PUR HARD – DTM 220 THIN 50 Universal thinner		1 0 ÷ 10 %	13 0 ÷ 8	
Airless spraying	PUR DTM 220 NF PUR HARD – DTM 220	6 1	100 13	
VISCOSITY				
	DIN 4/20°C Pneumatic spraying	45 ÷ 70 s		
COLOURS				
All colours available in the Novol Industrial mixing system.				
VOC CONTENT				
VOC II/A/j limit*		500 g/l		
Actual VOC		Depending on the colour, 470-490 g/l		
* For ready to use mixture acc. to EU Directive 2004/42/CE				
APPLICATION CONDITIONS				
<ul style="list-style-type: none"> - The substrate shall be dry. - Min. product temperature: +10°C. - The coat, coated surface, and ambient temperatures must be between +5°C and +30°C. - The relative humidity must not exceed 80%. - Do not coat at high humidity (e.g. when rain, snow, or fog is possible), on hot afternoons and/or in strong wind. The application conditions determine the product layer drying time and the developed coating properties. The substrate temperature shall be 3°C higher than the ambient dew point, or more.				

APPLICATION				
 CAUTION: Follow the equipment manufacturer's guidelines	Pneumatic spraying	Nozzle	Pressure	Distance
		1.8 ÷ 2.2 mm	2 ÷ 4 bar	15 ÷ 20 cm
	Airless spraying in air jacket	0.33 ÷ 0.38 mm (0.013" ÷ 0.015")	100 ÷ 180 bar Air jacket 2 bar	10 ÷ 15 cm
	Brush	Natural bristle brushes or natural and synthetic bristle brushes are recommended.		
	Roller	Velour and mohair rollers are recommended.		
<p>The spray application parameters depend on the individual performance and requirements of the tool, and must be tested prior to coating.</p> <p>Caution! Verify that all corners and edges have been properly coated. Depending on the roller type, the coating may result in air bubbles which burst and form craters during drying.</p>				
	Recommended number of layers	1 ÷ 2		
	Overall wet layer thickness:	150 - 250 µm		
	Overall dry layer thickness:	75 - 125 µm		
	The yield of the ready-to-use mixture for the specified range of dry film thickness:	10 m ² /l at 50 µm		
	Time to recoat	Recoat after 15 minutes.		
TECHNICAL DATA				
Solids content by weight in the mixture of PUR DTM 220 NF and PUR HARD – DTM 220; 6+1		60 ÷ 65%		
Solids content by volume in the mixture of PUR DTM 220 NF and PUR HARD – DTM 220; 6+1		47 ÷ 53%		
Density of the mixture of PUR DTM 220 NF and PUR HARD – DTM 220; 6+1		1.2 ÷ 1.3 g/cm ³		
Mixture life at 20°C		2 h		

Gloss	matt	
Adhesion, PN-EN ISO 2409	0 ÷ 1	
Flexibility, PN-EN ISO 1519	min. 8	
Impact strength, PN-EN ISO 6272-1	min. 50	
Corrosion resistance, salt spray test, PN-EN ISO 9227	Excellent anti-corrosion properties	
Water resistance, PN-EN ISO 2812-2	intermittent, not resistant to permanent submersion	
Resistant to chemicals	Intermittent (splashes and sprays)	
DRY LEVELS		
	PN-C 81519	Time
Dust-free	Level 1	45 minutes
Tack-free	Level 3	5 h
Ending hardness	Level 6	18 h
CAUTION: The drying time may vary with temperature and/or humidity.		
EQUIPMENT CLEANING		
THIN 50 universal thinner or NC solvent.		
STORAGE CONDITIONS		
Store in a dry and cool room, away from sources of fire and heat at 5-35°C. Avoid exposure to sunlight.		
SHELF LIFE		
PUR DTM 220 NF	18 months/20°C	
PUR HARD – DTM 220	18 months/20°C	
THIN 50 Universal thinner	24 months/20°C	
SAFETY		
See the Safety Data Sheet.		
OTHER INFORMATION		
<p>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 results were affected by factors beyond our control.</p>		