

Technical data sheet

NOVORUST 2050 DTM

Direct acrylic-polyurethane topcoat – semi-matt

Direct polyurethane topcoat, cured with aliphatic isocyanate. Contains anticorrosive pigments based on zinc, aluminium and phosphorus oxides

RELATED PRODUCTS

Pigment pastes	Universal pigmented pastes
HARD 10 STANDARD	Hardener for polyurethane products standard
HARD 10 FAST	Hardener for polyurethane products fast
THIN 50	Universal thinner standard, fast and slow

USE:

- Means of transport
- Machines and equipment
- Outer surfaces of tanks
 - Steel structures

PROPERTIES

- VOC-standards compliant
 - High yield
- Excellent anticorrosive properties
- Excellent hiding power and flowability
- Excellent resistance to atmospheric conditions
 - Good chemical resistance
 - Good mechanical resistance
- Possibility of the application up to 200 µm wet in a single layer

SUBSTRATES				
Steel	Clean steel surfaces until reaching Sa 2 ^{1/2} (wet blasting) or St3 (manual cleaning or using a power tool) in accordance with the PN-ISO 12944-4 standard; the surface after the treatment must be free from oil, grease, dust, loose old paint coating, mill scale, rust and foreign contaminants; the surface should exhibit the gloss of the metal substrate.			
Galvanised steel, Aluminium	In order to produce a coarse substrate, use light abrasive blasting with round non-metallic abrasive grains or sand with P240 to P320 and then degrease.			
Old paint coatings	Matt and degrease.			
Polyester laminates, PVC, ABS	Matt and degrease.			
Concrete	The concrete shall be dry (max. moisture content 3%) with the surface clean, free of cracks, crazing and all types of dirt and debris (dust, sand grit, oil, fat, or poorly adhering paint coats).			
Wood, composite wooden panels	Matt, dust off.			
MIXING RATIO				
	NOVORUST 2050 DTM	Volume ratio	Weight ratio	
		HARD 10	5	100
		THIN 50	1	14
			5 - 20%	3 - 12
Apply the thinner in the amount calculated for the topcoat.				
VISCOSITY				
	DIN 6/20 °C	25 ÷ 33 s		
CONTENT OF VOLATILE ORGANIC COMPOUNDS				
VOC II/B/d limit *		420 g/l		
Actual VOC (5+1+10%)		415 g/l		
Actual VOC (5+1+20%)		450 g/l		
* For the ready to apply mixture compliant with Directive UE 2004/42/CE				
APPLICATION CONDITIONS				
The coated surface should be dry. The temperature of the coat, coated surface and environment should be between +10°C and +35°C at a maximum relative humidity of 80%. The coated surface temperature should exceed the dew point by a minimum of 3°C.				
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						
 CAUTION: Instructions of the equipment manufacturer must be followed.	Pneumatic spraying	Nozzle	Pressure	Distance		
		1.8 ÷ 2.2 mm	2 ÷ 4 bar	15 ÷ 20 cm		
	Airless spraying	0.33 ÷ 0.38 mm (0.013" ÷ 0.015")	100 ÷ 180 bar Air jacket 2 bar	10 ÷ 15 cm		
	Number of layers	1 – 2				
	CAUTION: The minimum direct topcoat thickness is 100 µm on steel substrates.					
	Single dry layer thickness.	80-100 µm				
	Yield of the ready to apply mixture for a dry layer thickness in the provided range	5.4 m ² /l 0.19 l/ m ² at 100 µm				
	Mixture life at 20°C	6 hours for HARD 10 STANDARD 2 hours for HARD 10 FAST				
	Flash off between layers	10 ÷ 15 min.				
GLOSS						
At 60° approx. 50						
NOTE: The gloss depends on the application method, the thickness of applied coats and the colour.						
TECHNICAL DATA						
Product	Solids content by weight	Solids content by volume	Density	Fineness of grind		
NOVORUST 2050 DTM	≈ 72 ÷ 77 %	≈ 59 ÷ 64 %	≈ 1.42 ÷ 1.47 g/cm ³	< 12.5µm		
HARD 10	56 %	55 %	1.03 g/cm ³	—		
NOVORUST 2050 DTM + HARD 10 5+1	≈ 69 ÷ 74 %	≈ 58 ÷ 63 %	≈ 1.35 ÷ 1.40 g/cm ³	< 12.5µm		
CURING TIMES						
	HARD 10 STANDARD			HARD 10 FAST		
	10°C	20°C	60°C	10°C	20°C	60°C
Dust free	-	60 min.	15 min.	3 hours	45 min.	-
Tack free	-	8 hours	40 min.	18 hours	5 hours	-
Operating hardness	-	24 hours	60 min.	28 hours	18 hours	-
CAUTION: The drying times apply to the temperatures of the individual elements.						

EQUIPMENT CLEANING	
THIN 50 universal thinner or NC solvent.	
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 +35°C.	
SHELF LIFE *	
NOVORUST 2050 DTM	24 months/20 °C
Pigment pastes	24 months/20 °C
HARD 10 STANDARD	18 months/20 °C
HARD 10 FAST	12 months/20 °C
THIN 50	24 months/20 °C
* In original sealed packaging	
SAFETY	
See Safety Data Sheet.	
OTHER INFORMATIONS	
<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 do 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>	