



NORDPUR SW MAT XF

Two-component water-based opaque polyurethane top coat, UV resistant and non-yellowing, for interior and exterior application



Marcatura CE:

- EN 13813 - Designation: SR-B2.0-AR0.5-IR4

TECHNICAL SPECIFICATIONS



FIELD OF APPLICATION



APPLICATIONS



Description

NORDPUR SW MAT XF is:

- a water-based bi-component coloured polyurethane enamel;
- rapid-drying;
- with matt and non-yellowing finish.

When applied to various types of building surfaces, NORDPUR SW MAT XF creates a coating resistant to atmospheric agents and abrasion 4–5 hours after application (at +23°C and 50% R.H.).

Thanks to its chemical nature (aliphatic polyurethane), NORDPUR SW MAT XF does not suffer any significant colour alteration or changes in opacity even after exposure to sunlight.

The special characteristics of NORDPUR SW MAT XF ensure that the overlays does not appear (a visually unpleasant effect that typically occurs with matt enamels and paints when the product is applied wet near a part of the laying surface that is already drying).

NORDPUR SW MAT XF last coat can be mixed with with a special additive with dirt repellent effect (COMPONENT C EXTRA W to be added to the AB mixture directly)

Field of application

NORDPUR SW MAT XF is ideal for finishing when applied to:

- traditional plasters;
- concrete;
- plasterboard walls;
- walls made of cement or silicate hydrophobicised panels;
- epoxy resin coatings, epoxy-cement or polyurethane resin coatings (on floors or walls);
- floors made of industrial concrete or cement screeds;
- metal structures (including galvanised steel).

Advantages

- NORDPUR SW MAT XF is an extremely fast-drying product that becomes completely walk-over 4–5 hours after application (at +23°C and 50% R.H.);
- NORDPUR SW MAT XF is a universal product applicable to walls or floors, indoors or outdoors;
- NORDPUR SW MAT XF possesses high resistance to weathering and does not yellow;
- NORDPUR SW MAT XF creates a highly uniform matt coating (with Gloss below 5°) without any special measures required during application;
- NORDPUR SW MAT XF is not subject to the emergence of casting joints when the product is applied fresh alongside parts of the application surface that are drying;
- thanks to the specific additive COMPONENT C EXTRA W (to be added when preparing the mix), NORDPUR SW MAT XF is exceptionally resistant to dirt and easily sanitized.

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General preparation of the laying support

► As a top coat for resin coatings.

- Make sure that the application surface is perfectly clean, free of greasy/oily substances and dry.
- Smooth the surface with a 180 abrasive mesh.
- Remove the dust from the surface and wash with water.
- Wait for the surface to dry completely.
- Proceed with the application of NORDPUR SW MAT XF.

► Metal surfaces

- Sandblast the surface (in case of rusted steel) with grade SA 2½ sandblasting.
- Apply NORPHEN FONDO MA as a base coat (see Technical Sheet) and as a protective agent against oxidation.
- Wait for the base coat to cure.
- Apply NORDPUR SW MAT XF using a roller or by spraying.

► New concrete surfaces

- The support must be carefully examined to ensure that it is a suitable and structurally sound base.
- Check the wettability of the laying support, before starting the application.
- In case of poor wettability ascribable to the use of water-repellent substances (oil or heavy hydrocarbons) used to polish the concrete, perform a wash with DESMOG A (alkaline detergent, see Technical Sheet).
- After the wash, rinse thoroughly with water.
- Verify the wettability again and, if it is still insufficient, perform a new wash with DESMOG A.

► Old concrete surfaces

- Thoroughly clean the floor with STRIPPER (a neutral dewaxing agent, see Technical Sheet) by mechanically brushing the surface.
- Rinse thoroughly several times to remove all the residues.
- In case of concrete stained or impregnated with oil, old adhesives or paints, efflorescence, rust, mould and other foreign matter, perform diamond grinding with a precision grinder to prevent the surface from getting too coarse. A tool suited to this task is the Bosch Expert for Concrete Extra-Clean diamond grinding wheel).
- If necessary, patch the surface with MALTAFIX and repair any depressions with W3 IMPERMEABILIZZANTE (see Technical Sheet).
- Consolidate the surface with SW SOLID diluted depending on the desired impregnation level (see Technical Sheet).
- After 12–24 hours apply NORDPUR SW MAT XF.

► Porous or micro-porous supports

- On porous or micro-porous supports, it is preferable to apply SW SOLID diluted as a base coat (1 part by weight of A+B with 3–5 parts by weight of water).

Preparing the product

- Open the container of comp. A and homogenise the contents with a low-speed professional mixer to eliminate any solid deposits.
 - Add NORDPUR SW MAT XF comp. B into comp. A.
 - Mix thoroughly with a low-speed professional mixer
 - Dilute the mixture with a maximum of 9% by weight of water on the total weight of A + B.
- Bear in mind that increasing the dilution causes the product's potential coverage to decrease.

NOTE: the addition of the additive COMPONENT C EXTRA W to improve resistance to dirt and cleanability, must be done on the last coat (never in the intermediate ones).
The ideal dosage of COMPONENT C EXTRA W is 6% by weight of AB mixture

Application of the product

- Apply the product with a short-bristle roller or by spraying in a single coat, or two coats, waiting 1 hour in between.
- NORDPUR SW MAT XF can be applied directly to W3, 24 hours after the last coat is applied.

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Consumption

type of application	minimum consumption	maximum consumption	UoM	dilution
Per coat of product (that is, A+B) applied with a roller	0,08	0,11	kg/m ²	With maximum 9% of water on the total weight of A+B.

* 4.8 - 6.6 g / m² of COMPONENT C EXTRA W must also be added to the consumption of product A + B for the top coat only.

Cleaning of tools

- Wet product: clean with water (including a power wash).
- Hardened product: remove mechanically, use special paint strippers (GEL STRIPPER or FLUID STRIPPER) or a thermal gun.

Useful application tips

- Do not exceed the indicated consumption per coat: any excess can cause difficulties and lack of homogeneity in the cross-linking and decrease the final mechanical resistance.
- Use the COMPONENT C EXTRA W anti-dirt additive only and exclusively with the last coat. The addition of the additive to the intermediate coats reduces the adhesion of the successive coats causing them to detach.
- Protect the treated support against rain during the first 12–24 hours after application.
- Comp. B is sensitive to atmospheric humidity. Keep the container of comp. B properly closed when not used.
- Read the Safety Data Sheet carefully before using the product.

Technical data

► PRODUCT IDENTIFICATION DATA	UoM	value
Density at 23°C (Component A), EN ISO 2811-1	kg/L	1,194 ± 0,005
Density at 23°C (Component B), EN ISO 2811-1	kg/L	1,112 ± 0,003
Density at 23°C (A+B mix, +9% water), EN ISO 2811-1	kg/L	1,12 ± 0,01
Kinematic viscosity (ISO cup 6, 23°C), comp. A, EN ISO 2431	s	19 ± 2
pH (potentiometric method) at 23°C, comp. A, ISO 4316	-	7,63 ± 0,05

► APPLICATION DATA AND FINAL PERFORMANCES	UoM	Value
Mix ratio by weight (A:B)	-	8 : 1
Pot-life (viscometric), A+B viscosity doubling, EN ISO 9514	min	40 ± 5
Minimum film-forming temperature (MFFT), ISO 2115	°C	5
Surface drying time (+23°C, 50% R.H.), EN ISO 9117-3	hours	1,0 ± 0,1
Walk-over time (at +23°C, 50% R.H.)	hours	4 – 5
Complete curing time, 1 coat A + B + 9% water, 1 coat A + B + 6% COMPONENT C EXTRA W + 9% water (at 23 ° C, 50% RH)	days	7
Surface gloss, gloss 60°, on fibre cement, EN ISO 2813	-	< 5°
Impermeability to water, UNI 8202-21	kPa	> 500
Tensile peel strength (from concrete), 7 days +23°C/50% R.H., ASTM D4541	MPa	4,7 ± 0,2
Permeability to water vapour, μ, film thickness 23 μm, EN ISO 7783	-	4700 ± 500
Resistance to UV and condensate cycles, cycle A (8 hours UVA-340 + 4 hours condensate 50°C), for a total of 168 hours, measurement of yellowing, ΔE, ASTM D 4329	-	1,3 ± 0,2
Resistance to UV and condensate cycles, cycle A (8 hours UVA-340 + 4 hours condensate 50°C), for a total of 168 hours, measurement of opacification, ΔGloss, ASTM D4329	-	+4 ± 1
Wear resistance – Taber Method, CS17 grinding wheel, 1,000 revolutions, 1 kg load, EN ISO 5470-1	mg	94 ± 8

► CHEMICAL RESISTANCE EN ISO 2812-1 (method 2): 1 = disintegration of the product, 5 = no alteration. NOTA: for the complete scale, refer to Appendix A	UoM	value
hydrochloric acid 30% in water	-	4

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► CHEMICAL RESISTANCE EN ISO 2812-1 (method 2): 1 = disintegration of the product, 5 = no alteration. NOTA: for the complete scale, refer to Appendix A	UoM	value
sulphuric acid 10% in water	-	4
phosphoric acid 20% in water	-	3
acetic acid 30% in water	-	1
ammonia 15% in water	-	5
soda (sodium hydroxide) 30% in water	-	2
hydrogen peroxide 3.5% (12 volumes)	-	4
mixture of acetic acid (1%) and hydrogen peroxide (0.5%) in water	-	5
denatured ethyl alcohol	-	4
technical acetone	-	4

Storage of the product

- 12 months in the closed original packaging, in a dry and covered place away from direct sunlight, at a temperature between +5°C and +30°C.
- Protect the product against frost.

Packages

VARIANT	PACKAGE	ADR	PACKAGES FOR PALLETS	COMPONENTS
RAL 7040	kit (A+B) - 4,5 kg	P*	-	A = 4,0 kg B = 0,5 kg
RAL 7040	kit (A+B) da 9,0 kg	P*	-	A = 8,0 kg (fustino) B = 1,0 kg (latta)
COLOURABLE (1)	kit (A+B) da 3,78 kg	P*	-	A = 3,28 kg (fustino) B = 0,5 kg (lattina)
COLOURABLE (2)	kit (A+B) da 7,56 kg	P*	-	A = 6,56 kg (fustino) B = 1,0 kg (latta)
TIER 1 COLOUR	kit (A+B) - 4,5 kg	P*	-	A = 4,0 kg (fustino) B = 0,5 kg (lattina)
TIER 1 COLOUR	kit (A+B) da 9,0 kg	P*	-	A = 8,0 kg (fustino) B = 1,0 kg (latta)
TIER 2 COLOUR	kit (A+B) - 4,5 kg	P*	-	A = 4,0 kg (fustino) B = 0,5 kg (lattina)
TIER 2 COLOUR	kit (A+B) da 9,0 kg	P*	-	A = 8,0 kg (fustino) B = 1,0 kg (latta)
TIER 3 COLOUR	kit (A+B) - 4,5 kg	P*	-	A = 4,0 kg (fustino) B = 0,5 kg (lattina)
TIER 3 COLOUR	kit (A+B) da 9,0 kg	P*	-	A = 8,0 kg (fustino) B = 1,0 kg (latta)
TIER 4 COLOUR	kit (A+B) - 4,5 kg	P*	-	A = 4,0 kg (fustino) B = 0,5 kg (lattina)
TIER 4 COLOUR	kit (A+B) da 9,0 kg	P*	-	A = 8,0 kg (fustino) B = 1,0 kg (latta)

legend

P* = merce PERICOLOSA imballata in quantità limitata (confezionata come da Cap. 3.4 ADR)

(1): Per la colorazione del comp. A da 3,28 kg aggiungere 0,72 kg di paste pigmentanti del SISTEMA TINTOMETRICO A BASE ACQUA.

(2): Per la colorazione del comp. A da 6,56 kg aggiungere 1,44 kg di paste pigmentanti del SISTEMA TINTOMETRICO A BASE ACQUA.

LEGAL NOTES

Advice on how to use our products corresponds to the current state of our knowledge and does not involve the assumption of any guarantee and / or responsibility for the final result of the work. They do not refore exempt the customer from the responsibility of verifying the suitability of the products for the use and the prefixed purposes through preventive tests. The website www.nordresine.com contains the latest revision of this datasheet.

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EDITION

Issue date: 16.06.2017

Revision: 28.08.2020