SUPERMAT

Transparent two-part solvent-based clear coat with natural effect for colored concretes, microcements, cement-based skimming coats and spatulate resins

CE | CONCRETE PROTECTION | EN 1504-2 (C)
PRINCIPLES MC-IR

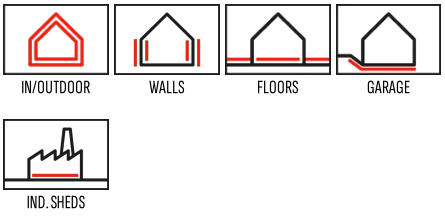
CON FOR MITY | HACCP | UNI 11021
COATING FOR ENVIRONMENTS WITH THE PRESENCE OF FOOD

CE marking:
→ EN 1504-2 (C) • Principles: MC-IR

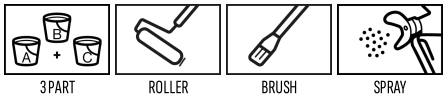
Certifications:
- UNI11021 • HACCP

TECHNICAL FEATURES

FIELD OF APPLICATION



APPLICATIONS



Description

SUPERMAT is a solvent-based, two-component polyurethane finish, to be prepared at the time of use, for making the final transparent, totally opaque, natural-effect (practically invisible) protection of colored concrete surfaces, in troweled resins, in microcement and in cementitious skim coats.
Applied according to the correct method, SUPERMAT acts as a film-forming impregnating agent that creates a barrier against dirt and humidity.

CE Marking

► EN 1504-2
SUPERMAT meets the principles defined by EN 1504-9 ("Products and systems for the protection and repair of concrete structures: definitions, requirements, quality control and conformity assessment. General principles for use and systems") and the requirements of EN 1504-2 ("Concrete surface protection systems") for the class:
→ *MC-IR*
• For Principle 2 (MC) - Moisture Control: 2.2 Coating (C).
• For Principle 8 (IR) - Increasing Resistivity.

Certifications

Colour

SUPERMAT is transparent and colourless and gives rise to an opaque film with a 60° gloss of less than 10.

Field of application

SUPERMAT is indicated as a finishing and protection coating on the following surfaces:
• mass-coloured and mould-cast concrete;
• aesthetic coatings in cementitious skim coat or epoxy-cementitious coatings, on floors and walls;

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• Concrete floors or cement screed.
Due to its characteristics, SUPERMAT can also be used for other types of concrete and polymer-cement surfaces.

Advantages

• SUPERMAT gives rise to a totally invisible protective film with a natural effect.
• SUPERMAT has a high surface consolidation power and considerably increases scratch resistance.
• SUPERMAT is applicable to spray and roller.

General preparation of the laying surface

The laying surfaces, if necessary, must have been smoothed to a fine grain to eliminate any defect that could affect the result.

Product preparation

• Mix Part A by shaking the container or using a low-speed mixer.
• Pour SUPERMAT Comp. B into Comp. A and mix thoroughly with a professional mechanical mixer at low speed until complete homogeneity.
• Add to the A+B compound the specific diluent: SOLVENT PER SUPERMAT for at the rate of 50 parts by weight out of 100 parts by weight of A+B.
• Homogenize the diluted mixture.
• Once the A+B mixture has been prepared and the thinner has been added, the product must be used within 120 minutes (at 23°C / 73°F).
After this time, do not dilute the mixture again to extend its useful life: it is necessary to prepare another fresh mixture.
Pay particular attention to this detail because the product has no visible pot-life (i.e. it does not thicken or gel during the chemical reaction that takes place in the mixture A + B).

Product application

To identify the correct consumption it is very important to carry out preventive tests in order to establish, depending on the type of coating and the type of procedure used, the correct quantity to be used.
As regards the modalities of application, please note the following.

► *Roller application:*

• Use a solvent-resistant short-pile roller or brush for application.
• Apply in one or two coats, waiting, between coats, for the product to be out of touch.

► *Spray application:*

• Apply using an airless sprayer or airbrush in two coats spaced about half an hour apart (ideal for small concrete products and walls).

► *Post-treatments to make the surface more resistant to dirt attack:*

• Treat with a coat of SEAL WAX applied with a wax spreader (see Technical Data Sheet) to obtain a strong anti-dirt effect while maintaining the matte surface with a natural effect.
• Alternatively, brush the surface treated with SUPERMAT already well matured with a single disc machine equipped with specific felt (for information on the type of felt, contact the Nord Resine Technical Service).

► *Protection of surfaces painted with water-based enamels or decorative acrylic paints:*

• Wait for the enamel or paint to dry perfectly.
• Apply a coat of COAT MAT as a fixative to prevent the subsequent finish with SUPERMAT from melting the acrylic enamel and cheating the colors.
• Wait at least 24 hours for COAT MAT to dry perfectly, then apply SUPERMAT directly as normal.

Consumption

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type of application	minimum consumption	maximum consumption	u.m.	notes
For an opacifying treatment in 1 coat	0,105	0,120	kg/m²	(1)
For a mattifying and waterproofing treatment in 2 coats	0,40	0,60	kg/m²	(1)

(1) Dilute with 50% by weight of SOLVENTE PER SUPERMAT on the weight of A+B.

Tool cleaning

• Fresh product: cleaning with ACETONE, SOLVENTE PER NORDPUR, polyurethane thinner or nitro thinner.
• Hardened product: mechanical removal, soaking for at least 1 hour in ACETONE or nitro thinner or use of paint strippers (FLUID STRIPPER or GEL STRIPPER).

Useful tips for laying

• SUPERMAT must always be diluted with SOLVENT FOR SUPERMAT according to the dosage indicated in the paragraph "Preparation of the product".
• In case of application in places that are not perfectly ventilated, provide adequate ventilation and protect the respiratory tract with a mask equipped with filters for organic vapours.
• Carefully read the Safety Data Sheets of all products included in the SUPERMAT system before use.

Technical Data

► PRODUCT IDENTIFICATION DATA		value
Density at 23°C (Component A), EN ISO 2811-1	kg/L	0,915 ± 0,003
Density at 23°C (component B), EN ISO 2811-1	kg/L	0,931 ± 0,003
Density at 23°C (mixture A+B), EN ISO 2811-1	kg/L	0,914 ± 0,003
Dry residue (125°C, 1 hour), A+B, ISO 3251	-	(19,0 ± 0,5)%

► APPLICATION DATA AND FINAL PERFORMANCE		value
Mixing ratio by weight (A:B:SOLVENT FOR SUPERMAT)	-	4,0 : 1,0 : 2,5
Pot-life (viscosimetric), double viscosity A+B+SOLVENT, EN ISO 9514	Min	120 ± 5
Application temperature	°C	+10 to +35
Surface drying time (+23°C, 50%RH), EN ISO 9117-3	Min	30 ± 5
Minimum commissioning time, without contact with water (at 23°C, 50% RH)	days	3
Minimum time for commissioning, before contact with water (at 23°C, 50% RH)	days	7
Surface gloss, gloss 60°, on smooth cementitious skim coat, EN ISO 2813	-	6 ± 1
Scratch resistance, EN 15186	N	1,3 ± 0,2
Coating hardness (pencil test, British class), ASTM D 3363	-	HB
Resistance to damp heat, EN 12721	-	4
Resistance to dry heat, EN 12722	-	5
Resistance to light exposure (grayscale assessment), EN 15187	-	Between 4.5 and 5

► TECHNICAL DATA IN ACCORDANCE WITH EN 1504-2 *		value
Water vapour permeability, SD equivalent air thickness, thickness 0.02 mm, porous backing, EN ISO 7783	m	0,62 ± 0,04 (classe I)
Capillary absorption and water permeability, EN 1062-3	kg/(m²·√h)	0,06 ± 0,01
Direct traction adhesion, EN 1542	Mpa	3,5 ± 0,5

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	u.m.	value

NOTES

* Roller application of 2 coats (A+B) + 50% SOLVENTE PER SUPERMAT.

Product storage

• 12 months in the original sealed packaging, in a dry, covered area, protected from direct sunlight and at a temperature between +5°C and +30°C.
• Protect the product against frost.
• Keep in a dry place.

Packaging

VARIANT	PACKAGE	ADR	PACKAGE / PALLET	COMPONENTS	*NOTES*
-	kit (A+B+SOLV) - 1,88 kg	P*	-	A = 1,00 kg (tin can) B = 0.25 kg (tin can) SOLVENT = 0,63 kg (tin can)	-
-	kit (A+B+SOLV) - 6.00 kg	P*	-	A = 3,20 kg (steel bucket) B = 0.80 kg (tin can) SOLVENT = 2,00 kg (tin can)	-
-	(A+B+SOLV) - 30.0 kg	SÌ	-	A = 16 kg (steel bucket) B = 4 kg (tin can) SOLVENT = 10 kg (tin can)	-

ADR legend:

NO = NON-DANGEROUS goods

P* = DANGEROUS goods packed in limited quantities (packed as per ADR Chapter 3.4)

Sì = DANGEROUS Goods

LEGAL NOTES

Any advice concerning the methods of use of our products reflects the current state of knowledge and does not imply any guarantee and/or responsibility as to the outcome of the application. Consequently, the customer must verify the product's suitability for the intended use and purposes by testing the product in advance. The Internet website www.nordresine.com contains the latest revision of this technical sheet: in case of any doubts, verify the date of revision (where missing, use the date of issue) by consulting the "PRODUCTS" section.

EDITION

Issue: 27.02.2017
Revision: 10.11.2024

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