

NORPHEN FONDO MA

Two-part epoxy primer with zinc effect for iron anti-corrosion treatment



TECHNICAL FEATURES



WATERPROOF



FROST



SLOW CURING



WALKABLE

FIELD OF APPLICATION



IN/OUTDOOR

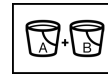


SIDEWALKS



ROOFS

APPLICATIONS



2 PART



ROLLER



BRUSH

Description

NORPHEN FONDO MA is a two-part solvent-based film-forming protective epoxy primer containing zinc phosphate. Once applied on steel or other metal products free from rust/oxides, it forms a film strongly bonded to the metal with high resistance to corrosion.

NORPHEN FONDO MA is ideal, on metal, as an anti-corrosion primer and adhesion promoter for subsequent protective or aesthetic treatments of any kind.

Colour

NORPHEN FONDO MA is available in the following colors:

- GRIGIO CHIARO (light grey)
- GRIGIO (grey)

Field of application

NORPHEN FONDO MA is used as:

- primer on non-oxidized ferrous metal products before finishing treatment;
- primer in anti-corrosion coating systems for iron;
- primer coat on aluminium products (anodized and natural), after treatment with NORDPROM SV (see Technical Data Sheet);
- primer coat on AISI 304 stainless steel products (preferably brushed or sandblasted).

NORPHEN FONDO MA is not a rust converter. Surfaces subject to corrosion must be treated appropriately by physical (removal of oxide) and chemical means (treatment with a rust converter, e.g. REDOX) before applying NORPHEN FONDO MA.

Advantages

- NORPHEN FONDO MA shows strong adhesion on carbon steel and mild iron (sandblasted or ground white metal).
- NORPHEN FONDO MA is easy to apply and does not require any special equipment for application.
- NORPHEN FONDO MA is compatible with subsequent epoxy, polyurethane, methacrylic, polyester coatings, etc.
- NORPHEN FONDO MA has a long pot-life so it can be worked with peace of mind and precision.
- Due to its epoxy nature, NORPHEN FONDO MA provides long-lasting protection against corrosion.

Specific preparation of the laying substrate

Before application, the surface must be perfectly cleaned with different treatments depending on the type of material from which it is made.

► Steel sheets

- Remove rust, oxide or calamine by brushing, sanding or, if possible, sandblasting to almost white metal (HS grade 21/2 according to SIS055900-1967).
- Wipe off the dust, then clean the surface with SOLVLINE EPOXY (epoxy thinner) or nitro thinner.

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• Apply NORPHEN FONDO MA as soon as possible to prevent the metal from re-oxidation. This is particularly important in the marine environment or where corrosive vapours are present.

► *Galvanized steel sheets (electrolytic or hot-dip)*

- Remove grease or oily substances (phospho-degreasing) by rubbing the surface with specific MA-P SOLVENT and a steel wool pad.

• Do not abrade with more vigorous means so as not to damage or completely remove the galvanizing (especially in the case of electro-galvanizing).

• Make sure that the surface is actually clean, if not, repeat the treatment.

• Proceed to apply NORPHEN FONDO MA.

► *Aluminium surfaces (natural or anodized)*

• Remove grease or oily substances by wiping the surface with a clean cloth soaked in NORDPROM CLEANER.

• Make sure that the surface is actually clean, if not, repeat the treatment.

• Apply a coat of 40 – 50 g/m² of NORDPROM SV (see Data Sheet).

• Leave to dry for about 20 min.

► *AISI 304 stainless steel surfaces*

• Roughen the steel by brushing, sanding or, if possible, sandblasting to almost white metal (HS grade 21/2 according to SIS055900-1967).

• Clean up by wiping the surface with a clean cloth soaked in NORDPROM CLEANER.

• Apply a coat of 40 – 50 g/m² of NORDPROM SV (see Data Sheet).

• Leave to dry for about 20 min.

• Proceed to apply NORPHEN FONDO MA.

Product preparation

• Pour NORPHEN FONDO MA (B) into the comp container. A and mix for with a professional mixer until a homogeneous mixture is obtained.

• If part of the package is used, proceed to dose the individual components using a precision scale in a serving container respecting the cross-linking ratio indicated on the label.

• The resulting A+B mixture is ready for use.

• If necessary, to reduce the viscosity of the product, it is possible to dilute the A+B mixture with SOLVLINE EPOXY *(maximum +10% by weight on A+B).

* NOTE: for applications on galvanized sheet metal, dilute with SOLVENTE MA-P instead of SOLVLINE EPOXY in the same proportions.

Product application

The application can be carried out by roller/brush or by airbrush or airless spraying.

► *Brush/roller application:*

- adjust (if necessary) the viscosity of the product with solvent (see §Preparing the product);
- apply in a single coat or 2 coats spaced at least 2 and no more than 3 hours apart at +23°C;
- during application, create a uniform layer of product and a homogeneous wetting of the substrate;

► *Airbrush spray application:*

• the product can be applied without dilution or, if necessary, diluted with solvent (max +10% by weight on A+B, see §Preparing the product);

• Spraying parameters:

→ nozzle diameter: 1.5 – 1.8 mm

→ air pressure: 3 – 4.5 bar

→ type of gun: it is better to use a gun with a falling magazine. Pressurization is optional.

• If a second coat is required, overapply the subsequent treatment within 3 hours following the operating procedures described above.

► *Spray application with air-less:*

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- the product can be applied without dilution or, if necessary, diluted with solvent (max +10% by weight on A+B, see §Preparing the product);
 - Spraying parameters:
→ pump pressure: 120 – 170 bar
 - If a second coat is required, overapply the subsequent treatment within 3 hours following the operating procedures described above.
- NOTE: despite having a pot-life of about 6 hours, once applied, NORPHEN FONDO MA comes out powder very quickly: 30 minutes at +23°C).
- For subsequent treatments, however, wait at least 24 hours.

Consumption

type of application	minimum consumption	maximum consumption	u.m.	notes
For 1 coat	0,10	0,14	kg/m²	(1), (2)

(1) fresh glaze thickness 75 ± 10 microns, dry glaze thickness 50 ± 7 microns.

(2) Yield: 7 – 10 m²/kg.

Tool cleaning

- Fresh product: cleaning with acetone, SOLVLIN CLEANER or nitro thinner.
- Hardened product: mechanical removal, soaking for at least 24 hours in ACETONE or nitro thinner or use of paint strippers (FLUID STRIPPER or GEL STRIPPER) or heat gun.

Useful tips for laying

- Mix components A and B in precise ratios: in case of partial use of the packages, weigh the components with a scale according to the ratio shown on the label.
- Reseal the containers of A and B immediately after use.
- Keep the serving container where you have prepared the A+B mixture closed as much as possible.
- The product is flammable.
- When applied in poorly aerated areas, it is advisable to adequately ventilate the environment and protect the airways wearing a dust mask equipped with a type A filter (brown strip, against organic vapour) or a type ABEK combined filter (brown-yellow-grey-green strip), according to EN 141.
- Do not spray in places where adequate air exchange has not been provided.
- Read the Safety Data Sheet carefully before use.

Technical Data

► PRODUCT IDENTIFICATION DATA		value
Density at 23°C (Component A), EN ISO 2811-1	kg/L	1,79 ± 0,05
Density at 23°C (component B), EN ISO 2811-1	kg/L	0,95 ± 0,03
Density at 23°C (mixture A+B), EN ISO 2811-1	kg/L	1,58 ± 0,05
Appearance (Component A)	-	Greyish viscous liquid with solvent odour
Appearance (Component B)	-	Transparent amber liquid with solvent odour

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► APPLICATION DATA AND FINAL PERFORMANCE

		value
Mixing ratio by weight (A:B)	-	6,5 : 1,0
Mixing ratio in volume (A:B)	-	3.4: 1.0
Application temperature	°C	from +5 to +35
Pot-life (viscosimetric), double viscosity A+B, EN ISO 9514	Hours	6 ± 1
Brookfield apparent dynamic viscosity (A+B; 23°C / 50%RH; spindle ASTM#4, 100 rpm), EN ISO 2555	mPa·s	420 ± 40
Time out of dust (to the touch)	Min	20 ± 3
Surface drying time (23°C, 50%RH), EN ISO 9117-3	Min	60 ± 5
Surface gloss, gloss 60°, EN ISO 2813	-	(10 ± 5)° (matt)

Product storage

- 24 months in the original packaging closed, in a dry, covered environment, protected from sunlight and at a temperature between +10°C and +34°C.
- Protect the product against frost.

Packaging

VARIANT	PACKAGE	ADR	PACKAGE / PALLET	COMPONENTS	NOTES
LIGHT GRAY	kit (A+B) - 3 kg	P*	-	A = 2.6 kg (steel bucket) B = 0.4 kg (tin can)	-

ADR legend:

NO = NON-DANGEROUS goods

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

SI = DANGEROUS Goods

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It is the user's responsibility to verify in advance, also through suitable tests, the suitability of the product for the intended use, compatibility with the substrate, appropriate environmental application conditions, and the execution of the installation according to workmanship standards, assuming all liability arising from the use of the product and the final result of the works.

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EDITION

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