

PLAST-EPO

Bi-component thixotropic epoxy filler for sealing cracks and joints and for repairs on building materials



TECHNICAL SPECIFICATIONS



FIELD OF APPLICATION



APPLICATIONS



Description

PLAST-EPO is a bi-component epoxy paste filler/adhesive revealing the following characteristics during application:

- thixotropic behaviour;
- solvent-free;
- smart mixing ratio;
- different colour of the two components to immediately check the homogeneity of the A+B mix;
- soft and workable consistency for easy application on the surface;

Once cured, PLAST-EPO reveals:

- strong adhesion on the most common surfaces and high resistance to pull-off;
- high compressive strength;

Thanks to its special formula, PLAST-EPO can be smoothed just 24 hours after application.

Colour

PLAST-EPO is available in the silk grey version (roughly RAL 7044).

Field of application

PLAST-EPO is suitable for:

- the creation of "stitching with fixed bars" to eliminate cracks and joints on screeds and concrete;
- the filling of small cracks on floors and walls;
- bonding of small-size building parts;
- various types of bonding applications on metal, walls, natural stone, iron and wood;
- the repair of wood, MDF or chipboard furniture and/or the reconstruction of missing parts;
- the sealing of gaps on tiled surfaces.

In combination with the TILEPUR BASE adhesion promoter (see Technical Sheet) PLAST-EPO, the product of choice for laying profiled rubber elements of the NORDSEAL TAPE range (see Technical Sheet).

Advantages

- PLAST-EPO is a compact and ergonomic package that facilitates mixing operations;
 - PLAST-EPO has a 1:1 mixing ratio, both by weight and by volume (easy to dose);
 - PLAST-EPO in the preparation of A+B, the colour uniformity reflects the homogeneity of the mix.
- Thanks to these product characteristics, small quantities of the A+B mix can be easily made by simply mixing the two components by hand.
- PLAST-EPO is thixotropic, therefore it does not drip vertically for application thicknesses up to 1 cm;
 - PLAST-EPO features excellent adhesion on metal supports;
 - PLAST-EPO is a very strong adhesive;
 - Thanks to its special chemical composition, PLAST-EPO does not shrink during cross-linking;
 - PLAST-EPO can be easily smoothed with sandpaper or abrasive mesh;

General preparation of the laying support

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- The surfaces to be bonded or sealed must be clean and dry.
 - Verify that the support is sound and suitable for the intended use.
 - Rust or oxides must be removed from the metal surfaces through brushing and/or sanding.
- It is also possible to perform grade Sa2½ sandblasting (as per the ISO 8501-1 or SIS055900 standard).
- Clean the bonding surfaces from fragile coatings or paints through chemical stripping, using GEL STRIPPER or FLUID STRIPPER (see Technical Sheet) and/or brushing, sanding or grinding.

Preparing the product

- Open the cans of the two components.
- Pour Comp. B into Comp. A;
- Mix the two components together until obtaining a uniform grey mixture.
- If streaks appear, the contents should be mixed better.
- If the package is used partially, pick in a service container an equal amount of the two components (1:1 cross-linking ratio both by volume and by weight) and mix them until obtaining a homogeneous mixture.

Application of the product

- ▶ To perform "stitching"
 - Prepare sections of the corrugated rebars 30–50 cm long with 8–10 mm diameter.
 - Use a diamond grinding wheel to make cuts perpendicularly to the crack: they must be 2–3 cm deep, with suitable width and length in relation to the size of the bar and roughly 50 cm apart.
 - Carefully suck up the dust from the grooves.
 - Pour PLAST-EPO into the grooves until they are roughly half-filled.
 - Insert the rebars and cover them with PLAST-EPO.
 - Adjust the level of PLAST-EPO using a small trowel.

- ▶ As a filler
 - Apply with a smooth filling trowel.
 - Remove the product burrs as much as possible.
 - Wait at least 24 hours before sanding the surface.

- ▶ As an adhesive
 - Apply a layer of PLAST-EPO on both bonding surfaces (double spread).
 - Verify that the adhesive has wet the surface well and has penetrated into the rough features.
 - Perform bonding.
 - Keep it in position for at least 2 hours (at +23°C and with 50% R.H.).

Temperatures exceeding +23°C speed up the adhesive's curing process.

- ▶ In combination with NORDSEAL TAPE
 - Prepare the housing for the NORDSEAL TAPE joint cover (see Technical Sheet).
 - Thoroughly remove any dust from the housing.
 - Clean the NORDSEAL TAPE surface with a clean cloth wetted with NORDPROM SV (see Technical Sheet).

With a single application, this treatment allows for:

- remove the dust from the joint cover;
- activate the joint cover surface making it compatible with PLAST-EPO.
- Wait a few minutes to allow the solvent contained in NORDPROM SV to evaporate.
- Fill the housing with PLAST-EPO.
- Position the NORDSEAL TAPE joint cover immediately over PLAST-EPO just applied.

Consumption

type of application	minimum consumption	maximum consumption	UoM	dilution
As a filler	1,46	1,54	kg/L	-
For filling and skim coating to a thickness of 1 mm	1,5	1,5	kg/m ²	-

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Cleaning of tools

- Wet product: clean with ACETONE, alcohol, epoxy thinner or nitro thinner.
- Hardened product: remove mechanically, use special paint strippers (GEL STRIPPER or FLUID STRIPPER) or a thermal gun.

Useful application tips

- When PLAST-EPO is mixed, take into account that the product's pot-life (see Technical Data table) decreases with the increase in the temperature and the quantity of product mixed.
 - Apply only on dry supports.
 - The product is dangerous, adopt suitable precautions and use the PPE specified in the Safety Sheet under point 8.
 - The product residues can be removed with ethyl alcohol or ACETONE before the product hardens.
- Verify the sensitivity of the surfaces to solvents before proceeding.
- Once hardened, the product can be removed only with mechanical means.
 - Wait for the product to harden before sanding the surface.
 - Read the Safety 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	1,48 ± 0,05
Density at 23°C (Component B), EN ISO 2811-1	kg/L	1,50 ± 0,05
Density at 23°C (A+B mix), EN ISO 2811-1	kg/L	1,50 ± 0,04
Brookfield apparent dynamic viscosity (23°C / 50% R.H. ASTM#7 spindle, 10 rpm), EN ISO 2555	mPa*s	700'000 ± 10'000
Colour (Component A)	-	White
Colour (Component B)	-	Black
Colour of the mix	-	Grey (roughly RAL 7044)
Appearance (Component A)	-	Paste
Appearance (Component B)	-	Paste
Appearance (A+B mix)	-	Thixotropic paste
Dry residue (A+B, at 125°C, 3 hours), ISO 3251	-	(99,80 ± 0,02)%
► APPLICATION DATA AND FINAL PERFORMANCES	UoM	Value
Mix ratio by weight (A:B)	-	1 : 1
Mix ratio by volume (A:B)	-	1 : 1
Application temperature	°C	From +5 to +30
Pot-life (thermometric), 1 kg of A+B, from +5°C to +40°C, EN ISO 9514	min	140 ± 20
Pot-life (thermometric), 1 kg of A+B, from +10°C to +40°C, EN ISO 9514	min	80 ± 15
Pot-life (thermometric), 1 kg of A+B, from +23°C to +40°C, EN ISO 9514	min	25 ± 5
Pot-life (thermometric), 1 kg of A+B, from +27°C to +40°C, EN ISO 9514	min	10 ± 3
Linear thermal expansion coefficient, EN 1770	1/K	(85 ± 5)•10 ⁻⁶

Storage of the product

- 24 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.

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Packages

VARIANT	PACKAGE	ADR	PACKAGES PER PALLET	COMPONENTS
-	kit (2A+2B) da 2 kg	P*	-	A = 0,5 kg (barattolo) B = 0,5 kg (barattolo)
-	kit (A+B) da 4 kg	P*	-	A = 2 kg (fustino) B = 2 kg (barattolo)

Legenda ADR:

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

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.

EDITION

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