

NESCOAT[®] EPO GROUT Epoxy-Based Grout Mortar

DESCRIPTION

NESCOAT[®] **EPO GROUT** is a solvent-free epoxy resin-based grout mortar composed of three components: Component A (epoxy resin), Component B (hardener), and Component C (aggregate). It has a fluid consistency and can be applied in a single layer with a thickness of 10-50 mm.

APPLICATION AREAS

- Structural concrete and crack repairs in both indoor and outdoor environments.
- Bedding industrial machinery and equipment.
- Repairing airplane and helicopter runways.
- Installing rebar (vertical drilled holes).
- Anchoring and bonding metal profiles to concrete.
- Machine and crane foundations and rail installations.

ADVANTAGES

- Provides high early strength.
- Offers excellent adhesion to concrete and steel.
- Resistant to shrinkage and cracking.
- Waterproof and resistant to corrosive salts.
- Self-leveling due to its fluid consistency, ensuring ease of application.

SURFACE PREPARATION

The substrate must be clean, dry, and structurally sound to support the application. If the surface is concrete, it must be fully cured (28 days) and have a compressive strength of at least 25 N/mm² and a tensile strength of at least 1.5 N/mm². In restoration works, weak plaster layers should be removed mechanically. Cracks should be widened in a V-shape to reach stable areas. Rusty reinforcement bars must be cleaned and treated with an anti-corrosion primer.

The surface should be free from dirt, dust, and adhesion-impairing materials. Old and absorbent concrete surfaces should be primed with **NESCOAT® EPOPRIME** before application.

MORTAR PREPARATION

NESCOAT® EPO GROUT is packaged in pre-measured components:

- 1. Add Component B (hardener) to Component A (epoxy resin) and mix with a low-speed mixer for 1-2 minutes.
- 2. Gradually add Component C (aggregate) to the mixture and continue mixing until a homogeneous consistency is achieved (approximately 3 minutes).
- 3. If only part of the product is used, ensure the mixing ratios are maintained.
- 4. The prepared mixture should be used within 45 minutes.
- 5. Pot life decreases in hot weather and increases in cold weather.

APPLICATION

- If the mortar is to be poured into a mold, ensure the mold is sealed, the joints are isolated with an appropriate material, and the mold is fixed securely.
- The surfaces of the mold that will come into contact with the mortar should be lubricated with mold release oil.
- Pour the mortar continuously from one side of the mold to prevent air entrapment.
- If necessary, use a steel rod to release trapped air and facilitate the spread of the mortar.
- The mortar thickness should be at least 1 cm in a single layer. In wide areas, the thickness should not exceed 5 cm. For thicker applications, wait for the first layer to dry before applying the second and third layers.
- Clean tools with thinner after use, and wash hands thoroughly with plenty of water.

CONSUMPTION

- 2 kg/m² (for 1 mm application thickness).
- A sample application is recommended to determine the exact consumption.

WARNINGS AND RECOMMENDATIONS

- The ambient and surface temperature during application should be between +5 °C and +35 °C.
- Ensure the application surface is dry with a maximum moisture content of 4%, but not wet.
- Avoid application if freezing weather conditions are expected within 24 hours after application.
- Do not apply under direct sunlight in hot weather or in strong winds.
- Condition Components A and B between 20-25°C before application.
- Excess material on the surface should be cleaned before it hardens; otherwise, it can only be removed by mechanical means after curing.

STORAGE AND SHELF LIFE

- The product should be protected from rain, moisture, intense sunlight, and frost.
- The shelf life is 12 months from the date of manufacture under proper storage conditions.
- Once opened, containers should be tightly resealed when not in use.

PACKAGING

15 kg set (A+B+C):

- Component A: 2 kg
- Component B: 1 kg
- Component C: 12 kg

SAFETY RULES

- Appropriate protective equipment (clothing, gloves, goggles, mask) should be used during application.
- In case of contact with the skin, the affected area should be washed with plenty of water.
- For more detailed information, please refer to the Material Safety Data Sheet (MSDS).

QUALITY CERTIFICATES

- Complies with the ISO 9001:2015 quality management standard.
- Complies with the TS EN 1504-3/R4 building materials standard.
- CE marked, compliant with EU standards.



TECHNICAL SPECIFICATIONS

Feature	Value
Appearance	Component A: Light Yellow Liquid
	Component B: Transparent Liquid
	Component C: Beige Sand
Mixing Ratio	A/B/C = 2/1/12
Compressive Strength (24h)	≥ 60 N/mm²
Compressive Strength (7d)	≥ 90 N/mm²
Flexural Strength (7d)	≥ 30 N/mm ²
Bond Strength	≥ 4 N/mm²

*The values mentioned above are valid for +23°C and 50% relative humidity.

LEGAL DISCLAIMER

The information in this document has been prepared based on NESCAOT's laboratory tests and field experience. NESCAOT is not responsible for any adverse outcomes resulting from the use of the product outside of its intended purpose or failure to comply with the conditions stated above.