



EP 21 G

Moisture Intensive Free Flow High
Strength Epoxy Resin Grout

Pack Size
21Kg

TDS
Technical Data Sheet



Product Description

EP 21 G is a high-performance, moisture-insensitive, free-flowing epoxy resin grout designed for heavy-duty applications. It offers excellent adhesion to both cement and metal substrates and is particularly suitable for grouting bridge bearing plates, machine bases, fixing bolts and anchors, and vertically placed dowel bars, even under dynamic loading conditions.

Uses

EP 21 G is recommended for use in grouting applications where high early strength and durability are critical. It is ideal for use in heavy-duty industrial environments, infrastructure projects, and areas exposed to dynamic loads.

Characteristics / Advantages

EP 21 G provides several beneficial properties, including high early strength, shrinkage-free curing, and excellent adhesion to various substrates. It is easy to apply, even in challenging conditions, and its free-flowing nature ensures that it fills voids and gaps effectively.

Product Information

Chemical Base	Epoxy resin
Packaging	21 kg (A+B+C)
Colour	Cement grey, flowable mortar
Shelf Life	12 months from the date of production
Storage Conditions	Store in original, unopened, and undamaged packaging in dry conditions at temperatures between +5°C and +40°C. Protect from direct sunlight.
Density	Mixed Density: 1.9 kg/l at 27°C

Technical Data

Compressive Strength (According to FIP 5.12 and IS 9162-1979):	1 day: 45 N/mm ² 7 days: >60 N/mm ² (Product cured and tested at the specified temperature; Test specimen size: 50 x 50 x 50 mm)
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Tensile Adhesion Strength	>10 N/mm ² (Bond Strength to concrete in 14 days) (According to ASTM C882)
Mixing Ratio:	Part A : Part B : Part C = 2 : 1 : 8 (by weight)
Layer Thickness:	50 mm (maximum)
Product Temperature:	EP 21 G Grout must be applied at temperatures between +10°C and +40°C. Condition the material by storing it at this temperature for 48 hours before use.
Ambient Air Temperature:	+10°C min. / +40°C max.
Dew Point:	The substrate temperature during application must be at least 3°C above the dew point to avoid condensation.
Substrate Temperature	: +10°C min. / +40°C max.
Pot Life:	~20 minutes at +30°C for 100g mass (According to FIP 5.1)

The pot life begins when the resin and hardener are mixed. It is shorter at high temperatures and longer at low temperatures. To extend workability at high temperatures, the mixed adhesive may be divided into portions or chilled before mixing (only when application temperatures are above +20°C).

Application Method / Tools

The consistency of EP 21 G requires the use of permanent or temporary forms to contain the material around base plates, for example. All formwork must be sealed to prevent leakage. Apply polyethylene film or wax to the forms to prevent adhesion of the grout. Prepare the formwork to maintain more than 100 mm liquid head to facilitate placement. Pour the mixed grout into the prepared forms from one or two sides only, to eliminate air entrapment. Maintain the liquid head to ensure intimate contact with the base plate. Place sufficient epoxy grout in the forms to rise slightly above the underside (3 mm) of the base plate. The minimum void depth beneath the baseplate shall be 12 mm. Where the void beneath the base plate is greater than 150 mm, place the epoxy grout in successive 50 mm lifts or less, once the preceding lift has cooled. Once hardened, check the adhesion by tapping with a hammer.

Limitations

EP 21 G should only be applied at temperatures above +10°C. Substrates should be dry and not affected by rising damp. The product may be applied to substrates of lower strength, but long-term performance may be impaired. Once the mixed material has exceeded its pot life, it should be discarded.

Cleaning

EP 21 G can be removed from tools and equipment by using appropriate solvents immediately after use. Hardened material will need to be removed mechanically.

Physical Properties

Pot Life:	~20 minutes at +30°C for 100g mass
Mixed Material Density	: 1.9 kg/l at 27°C
Compressive Strength (BS 6319-Part-2):	8 Hours: >40 N/mm ² 1 Day: >55 N/mm ² 7 Days: >75 N/mm ²
Packaging EP 21 G is available in 21 kg packs.	Part A: 2 kg Part B: 1 kg Part C: 8 kg

Yield

The approximate yield per 21 kg pack is 11 litres. Allowances should be made for wastage and variations in substrate conditions.

Storage and Shelf Life

EP 21 G has a shelf life of 12 months when stored in a dry environment at temperatures between +5°C and +40°C in its original unopened containers. Protect the product from frost, direct sunlight, and heat sources.

Precautions

Avoid contact with eyes, skin, and clothing. In case of contact, rinse immediately with plenty of water and seek medical advice. Prolonged contact with the skin should be avoided, especially for users with allergic reactions to epoxy materials. Always wear gloves and eye/face protection. Observe good personal hygiene practices, especially washing hands after use. Seek medical attention in case of accidents.

Disposal/Spillage

Spillage should be absorbed with sand or other inert materials and transferred to a suitable disposal container. Dispose of in Product Data Sheet

accordance with local waste disposal regulations.

Conditions of Sale

Sold subject to the company's conditions of sale, which are available upon request.

Note

The information provided in this datasheet is based on extensive experience and given in good faith. However, site conditions and application methods are beyond our control, so no warranty or liability is inferred regarding the final performance of the product.

Pack Size

21Kg



Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

Legal Disclaimer

The information and recommendations regarding the application and end-use of Carbolink products are provided in good faith based on our current knowledge and experience. Due to variations in materials, substrates, and actual site conditions, no warranty of merchantability or fitness for a specific purpose can be inferred. The user must determine the product's suitability for the intended application. Carbolink reserves the right to change the properties of its products. All proprietary rights of third parties must be observed. Orders are subject to our current terms of sale and delivery. Always refer to the most recent local Product Data Sheet, available upon request.