KREVO Grout EP

High-temperature, high-strength epoxy grout | Heavy static & dynamic loads | Up to 120 mm

PRODUCT DESCRIPTION

KREVO Grout EP is a solvent-free, epoxy resin-based, high-strength precision grout developed for machinery bases and structural supports subjected to demanding static and dynamic loads. Its dense cross-linked resin system is designed for elevated-temperature service and resistance to aggressive industrial environments. The resin, hardener and graded filler are combined to form a flowable grout; filler proportion may be adjusted to achieve the required handling consistency under an approved mix design.

ADVANTAGES

- High early compressive strength helps reduce equipment shutdown periods.
- Designed for heavy, repetitive and dynamic loading with strong adhesion to prepared surfaces.
- High flexural strength, dimensional stability and low-creep design for precision support.
- Specified operating-temperature range from −40 °C to +160 °C, subject to system qualification.
- Good resistance to selected inorganic acids, organic acids, oils and hydrocarbons.

TYPICAL USES

High-speed turbines and centrifuges • Crane and transporter rail supports • Reciprocating machinery • Drop forges • Heavy equipment foundations and base plates • Static and dynamically loaded industrial support systems.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Material type	Solvent-free epoxy resin / hardener / graded-filler grout
Formulation	High-density cross-linked epoxy; adjustable filler proportion
Appearance / colour	Dark brown
Recommended grout depth	Up to 120 mm, subject to approved placement and thermal design
Specified service temperature	−40 °C to +160 °C after full cure; qualification required
Nominal unit packaging	90.1 kg complete set: 1 resin pail + 1 hardener tin + 3 filler bags
Theoretical yield	Approximately 45 litres per complete 90.1 kg set
Storage / shelf life	18 months in dry, sealed storage at approximately +20 °C

TECHNICAL PERFORMANCE SPECIFICATION | 1:6 filler ratio

PROPERTY / TEST METHOD	SPECIFIED VALUE
Compressive strength | ASTM C579, 16 h at +40 °C	69 MPa
Compressive strength | ASTM C579, 24 h at +40 °C	90 MPa
Compressive strength | ASTM C579, 48 h at +40 °C	110 MPa
Compressive strength | ASTM C579, 72 / 96 h at +40 °C	110 MPa
Flexural strength | ASTM C580	> 45 MPa
Tensile strength | ASTM C307	> 10 MPa
Thermal expansion coefficient | ASTM C531	20×10^{-6} / °C
Impact resistance	Greater than concrete (qualitative criterion)

Strength and performance values are specified qualification criteria for the 1:6 filler-ratio system.

Application & System Data

KREVO Grout EP | Working time, grout-depth control, formwork and substrate preparation

POT LIFE AT DIFFERENT TEMPERATURES

PARAMETER	AT +20 °C	AT +30 °C	AT +40 °C
Pot life	150 minutes	90 minutes	50 minutes

Working time decreases as temperature rises. Plan staffing, batching and continuous pour sequences around the actual site temperature. Do not use material beyond its workable pot life.

TYPICAL GROUTING SYSTEM & SEQUENCE

STAGE	MATERIAL / METHOD
1 | Assessment	Check approved grout thickness, base-plate support, loads and site temperature.
2 | Concrete preparation	Remove laitance and weak material; clean concrete, voids and anchor pockets.
3 | Steel preparation	Ensure all steel contact surfaces are clean, dry and free from rust and oil.
4 | Formwork	Construct tight, non-leaking forms; maintain the required pouring head.
5 | Grouting	Mix resin and hardener, add fillers, then pour continuously from one side.

FOUNDATION & SUBSTRATE PREPARATION

All concrete must be structurally sound and free from oil, grease, laitance, dust and loosely bonded particles. Remove deteriorated concrete back to a sound base. Blow out debris from bolt pockets and fixing holes. Dry all contact surfaces as required by the approved epoxy-grout procedure.

FORMWORK & UNDERPLATE GROUTING

Keep exposed grout edges as narrow as practicable. The reference geometry limits the clearance between formwork and base-plate edge to 75 mm on the pouring side and 25 mm on the opposite side. Use rigid, leakproof formwork, sealed with foam strips or an approved mastic as necessary.

INSTALLATION CONTROL	SPECIFIED REQUIREMENT
Grout thickness	Design and place up to 120 mm in accordance with the approved method.
Pouring-side opening	Formwork-to-plate clearance normally not more than 75 mm.
Opposite-side opening	Formwork-to-plate clearance normally not more than 25 mm.
Contact surfaces	Sound concrete; steel clean, dry and free of oil and corrosion.
Flow and ventilation	Provide a continuous grout head and allow all displaced air to escape.

Before mixing, confirm that all resin, hardener, filler and labour are available to complete the pour without interruption. Test all forms for leakage; determine the pour direction and relief/vent locations to eliminate trapped air.

CHEMICAL RESISTANCE & SERVICE DESIGN

The specified chemical-resistance profile includes selected inorganic and organic acids, oils and hydrocarbons. Exposure suitability depends on concentration, temperature, dwell time and cleaning conditions. Equipment may be loaded or exposed to extreme service temperatures only after the grout has fully cured and its design performance has been established.

Installation & Product Support

KREVO Grout EP | Mixing, continuous placement, finishing, limitations and safety

MIXING PROCEDURE

- Combine the entire resin and hardener portions in a suitable vessel; mix using a low-speed drill and spiral paddle for approximately 2 minutes.
- Add the graded filler slowly while mixing with a forced-action mixer; continue mixing for approximately 3 minutes to achieve a uniform grout.
- Adjust filler proportion only according to the approved project mix design; specified performance data relate to a 1:6 filler ratio.
- Mix complete matched units and place within the stated pot life. Discard material that has stiffened or exceeded the working time.

GROUT PLACEMENT & FINISHING

- Pour immediately after mixing, from one side of the void so that the advancing grout front displaces air in a controlled direction.
- Maintain sufficient hydrostatic head and continuous flow; arrange fresh batches so the pour is not interrupted.
- Inspect grout at edges, corners and vents for continuity. Protect exposed grout from impact and premature loading until cured.
- Clean equipment promptly using an approved compatible cleaner. Hardened epoxy requires mechanical removal.

LIMITATIONS & SERVICE NOTES

- Do not apply below +5 °C. Site temperature affects pot life, early cure and final performance.
- Prevent moisture and contamination of concrete and steel contact surfaces before grouting.
- Unprotected material may change colour under direct sunlight; allow full cure before high- or low-temperature service.
- Use rigid, watertight forms. Avoid excessive exposed grout edges, interruptions and trapped air.
- Prevent contact with skin and eyes; do not discharge uncured resin or cleaning products into drains.

HEALTH, SAFETY & ENVIRONMENT

For trained industrial applicators only. Consult the current KREVO Safety Data Sheet for each component before work. Wear suitable chemical-resistant gloves, eye protection, protective clothing and site-required respiratory protection; provide ventilation. Prevent spills, direct skin contact, ignition sources near cleaners and release to soil or drains. Dispose of residual resin and containers in accordance with applicable regulations.

QUALITY & PRODUCT INFORMATION

Grout performance depends on the supplied resin, hardener and filler, mix proportions, substrate strength, grout geometry, temperature and installation practice. The numerical performance, chemical-resistance and service-temperature criteria require confirmation using KREVO qualification records and project-specific technical approval before they are represented as tested production-batch results.

KREVO | GLOBAL CONTACTS

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