KREVO Grout NS

Shrinkage-compensated cementitious precision grout | Free-flowing, high-strength | 10-50 mm

PRODUCT DESCRIPTION

KREVO Grout NS is a one-component, cementitious, shrinkage-compensated, free-flowing precision grout manufactured from Portland cement, selected aggregates, fillers and special additives. The grey powder is mixed with clean water to achieve a dry-pack, plastic or highly flowable consistency for grouting and structural support in industrial and civil works.

ADVANTAGES

- Single-component dry material; requires only measured clean water.
- Designed for good flow and adjustable placement consistency.
- Shrinkage-compensated formulation with high early and ultimate strength.
- Non-corrosive and iron-free for precision grouting applications.
- Suitable for warm and tropical jobsite conditions when properly handled.

TYPICAL USES

Base plates and machine foundations • Bridge bearing pads • Precast column connections • Grouting of anchor bolts and recesses • Voids, gaps and cavities in concrete • General concrete grouting and localized repair.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Product type	Single-component, cementitious non-shrink precision grout
Chemical base	Portland cement, selected mineral fillers, aggregates and additives
Appearance / colour	Grey powder; cementitious grout after water addition
Maximum aggregate size	4 mm
Package size	40 kg bag
Typical yield	Approximately 20 L per 40 kg bag, depending on water addition
Storage conditions	Original unopened bags; dry and shaded, +5 °C to +35 °C
Shelf life	Minimum 6 months from manufacture under specified storage

TECHNICAL PERFORMANCE SPECIFICATION

PROPERTY / TEST METHOD	SPECIFIED VALUE
Compressive strength | 1 day	≥ 30 MPa
Compressive strength | 3 days	≥ 45 MPa
Compressive strength | 7 days	≥ 55 MPa
Compressive strength | 28 days	≥ 65 MPa
Compressive modulus of elasticity	35,000 N/mm^2
Length change / expansion | 28 days	+0.08%
Tensile adhesion | BS 1881	≥ 1.15 (source unit requires confirmation)
Thermal expansion coefficient	Approximately 11×10^{-6} /°C
Specified standard framework	ASTM C1107 Type C; CRD-C621-83-10.2

Application & System Data

KREVO Grout NS | Water dosage, consistency, flow, substrate requirements and placing controls

APPLICATION PROPERTIES

PARAMETER	SPECIFICATION	PARAMETER	SPECIFICATION
Air temperature	+5 °C to +35 °C	Substrate temperature	+5 °C to +35 °C
Layer thickness	10-50 mm / pour	Pot life at +23 °C	Approximately 30 min
Dry-pack W/P ratio	0.08	Plastic / flowable W/P	0.09
Highly flowable W/P	0.11	Fresh grout density	Approximately 2.4 kg/L
Theoretical yield	20 L / 40 kg	Maximum fresh mix target	Below +30 °C

Use 6L clean water and whole 40 kg bags. Water dosage determines grout flow: dry-pack, plastic or high-flow consistency. Excess water can reduce strength and lead to separation.

TYPICAL PRECISION GROUTING SEQUENCE

STAGE	MATERIAL / METHOD
1 | Assessment	Confirm foundation/baseplate condition, required thickness, void geometry and reinforcement.
2 | Preparation	Remove laitance and contamination; roughen sound concrete, clean steel and pre-saturate.
3 | Formwork	Fix rigid leak-tight forms; provide grout feed/head and air-vent paths.
4 | Mixing	Blend a complete 40 kg bag with measured 6L water for flow consistency.
5 | Placement	Pour continuously from a suitable side and maintain adequate hydrostatic head.

CONCRETE SURFACE PREPARATION

Prepare a sound, mechanically roughened surface free of dust, laitance, oil, grease and loose particles. Remove weak or contaminated concrete. Thoroughly saturate absorbent substrates with clean water before placement; remove standing water immediately before grouting.

STEEL, ANCHORS & BASE PLATES

Clean steel, anchor bolts and base plates of rust, mill scale, oil, grease and contamination. Check alignment, fixing and support of shims before mixing. Where reinforcement is exposed or enhanced adhesion is required, a compatible corrosion-inhibiting treatment or bonding agent may be specified separately.

INSTALLATION CONDITION	SPECIFIED CONTROL
Concrete substrate	Sound, clean and roughened; saturated surface-dry with no standing water.
Machinery / base plates	Secure alignment, leak-tight forms and sufficient continuous grout head.
Exposed grout surface	Minimise free edges; protect fresh material and cure after final set.

Use rigid, securely supported, grout-tight formwork. Provide adequate head pressure and air-escape openings. Keep baseplates and substrates shaded in hot conditions; use cool mixing water when necessary to keep fresh grout below +30 °C.

FORMWORK & GROUT FLOW CONTROL

Place from one side where practical, maintaining a continuous flow and head to avoid entrapped air. Minimise exposed grout edges; plan batches so mixed material is fully placed within the working life. Grout should not be retempered with extra water after mixing.

Installation & Product Support

KREVO Grout NS | Mixing, pouring, curing, site limitations and global contacts

MIXING PROCEDURE

- Select target consistency and measure water for a complete 40 kg bag: W/P 0.08 dry-pack, 0.09 plastic/flowable, 0.11 highly flowable.
- Add measured clean water into a suitable mixer and gradually introduce the entire bag of dry grout.
- Mechanically mix for 2-3 minutes until lump-free using a forced-action mixer or slow-speed stainless-steel paddle (maximum 500 rpm).
- Do not mix longer than 3 minutes or add excess water. Do not use part bags, aluminium paddles or conventional tumble mixers.

PLACEMENT & CURING

- Allow freshly mixed grout to stand for approximately 3 minutes before pouring, to release entrapped air.
- Pour in a controlled, continuous operation into prepared cavities or beneath plates, with sufficient head pressure and air-release paths.
- Apply at approximately 10-50 mm per pour. For deeper voids, review an alternative grout or an engineered aggregate-extension trial.
- Protect fresh exposed grout and cure with a compatible curing compound, wet hessian or polyethylene sheeting after final set.

LIMITATIONS & SERVICE NOTES

- Air and substrate temperature: +5 °C to +35 °C. Condition bags below +30 °C in hot weather.
- Shade foundations and base plates; use chilled water as necessary to keep mixed grout below +30 °C.
- Ensure sound, watertight formwork and stable anchor/base-plate alignment prior to placement.
- Do not add extra water or unapproved ingredients. Additional coarse aggregate requires project-specific trial confirmation.
- Clean mixers and tools immediately with water. Hardened grout requires mechanical removal.

HEALTH, SAFETY & ENVIRONMENT

Industrial use by trained applicators. Review the current KREVO Safety Data Sheet before mixing. Cementitious powder may irritate skin, eyes and airways; use gloves, protective eyewear, dust control and suitable respiratory protection. Prevent slurry or washwater entering drains and dispose of waste according to applicable regulations.

QUALITY & PRODUCT INFORMATION

Performance depends on water dosage, base material quality, substrate preparation, temperature, placement and curing. Structural compatibility, specified standard classifications and actual KREVO batch conformity must be verified through current product records and site trials before project acceptance.

KREVO | GLOBAL CONTACTS

ENGLAND	UNITED STATES	CHINA
10 Shipley Avenue, Fenham Newcastle upon Tyne England NE4 9RA +44 7436 650806 info@krevo.uk krevo.uk	9209 S. Aeva Avenue Evergreen Park, IL 60805 +1 (773) 996-0846 info@krevo.us krevo.us	Office 235, 4th Floor No. 5 Inner China +86 139 5536 3625 krevo.cn