KREVO Inject EP

Low-viscosity two-component epoxy injection resin | Structural crack sealing | Solvent-free

PRODUCT DESCRIPTION

KREVO Inject EP is a two-component, solvent-free, low-viscosity epoxy injection resin for filling and bonding static cracks and internal voids in sound concrete and masonry. It can be introduced by pressure injection or gravity filling to restore continuity across cracks and form a barrier to water and harmful ingress. It is suited to dry and saturated-surface-dry substrates without flowing or standing water.

ADVANTAGES

- Low-viscosity resin penetrates narrow cracks and internal voids.
- Strong adhesion to sound concrete, mortar, stone, steel and wood.
- Solvent-free formula with high hardened mechanical resistance.
- Suitable for dry and damp crack faces without free water.
- Hardens with minimal shrinkage to form a rigid structural bond.

TYPICAL USES

Structural crack injection in bridges and buildings • Columns, beams and foundations • Concrete walls, slabs and pavements • Water-retaining structures • Static cracks in masonry and stone • Gravity-filling of horizontal cracks and pressure-injection of vertical cracks.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Generic type	Two-component, solvent-free, low-viscosity epoxy injection resin
Chemical composition	Solvent-free modified epoxy resin with matched hardener
Mixing ratio A : B	2 : 1 by weight; 1.8 : 1 by volume
Appearance / colour	Clear yellow liquid after mixing Parts A + B
Mixed density	Approximately 1.1 kg/L
Substrate condition	Dry or saturated-surface-dry, with no free water
Packaging	5 kg two-component set; 6 × 1 kg pack option
Shelf life / storage	24 months in closed packs; condition at +15 °C to +30 °C

TYPICAL MECHANICAL & FLOW PROPERTIES | 7 d at +23 °C

PROPERTY / TEST METHOD	TYPICAL RESULT
Compressive strength | ASTM D695	52 MPa at 7 days (+23 °C)
Tensile strength | ISO 527	37 MPa at 7 days (+23 °C)
Flexural tensile strength | DIN 53452	61 MPa at 7 days (+23 °C)
Flexural modulus | DIN 53452	1,800 MPa at 7 days (+23 °C)
Tensile adhesion to concrete	> 4 MPa; concrete failure at 7 days
Viscosity at +10 °C	1,200 mPa·s
Viscosity at +20 °C	430 mPa·s
Viscosity at +30 °C	220 mPa·s
Thermal expansion | EN ISO 1770	8.9×10^{-5} per °C (−20 °C to +40 °C)

Application & System Data

KREVO Inject EP | Low-viscosity crack injection, material working life and substrate conditions

APPLICATION PROPERTIES

PARAMETER	SPECIFICATION	PARAMETER	SPECIFICATION
Substrate temperature	+5 to +30 °C	Max. crack width	5 mm
Pot life at +5 °C	~120 min	Pot life at +10 °C	~80 min
Pot life at +23 °C	~25 min	Pot life at +30 °C	~10 min
Consumption	~1.1 kg per litre	Mix ratio by weight	A:B = 2:1
Mix ratio by volume	A:B = 1.8:1	Port spacing (typ.)	~250 mm

The resin becomes less viscous as temperature increases, while pot life shortens rapidly. Plan injection equipment, batch size, port spacing and site temperature before mixing. Never continue injection after the material reaches the end of its working life.

TYPICAL CRACK INJECTION SEQUENCE

STAGE	MATERIAL / METHOD
1 | Assessment	Confirm static crack geometry, dryness and suitable injection route.
2 | Preparation	Remove deposits, dust and loose material from crack surfaces.
3 | Injection ports	Fix ports/packers and seal the exposed crack face.
4 | Injection	Mix A+B, inject from lowest port and advance progressively.
5 | Verification	Allow to cure, check filling and remove ports / face seals.

CRACK ASSESSMENT & PREPARATION

Confirm that the crack is static and suitable for structural injection. Check crack width, depth, accessibility and any water pressure. Remove dust, grease, paint, laitance and loose material from the crack line. Clean with dry compressed air where suitable. Surfaces must be sound; dry or saturated-surface-dry concrete is acceptable, but active flowing water is not.

INJECTION PORTS & CRACK SEALING

For vertical or inclined cracks, fix suitable injection nipples or packers along the crack at approximately 250 mm intervals, subject to crack geometry and substrate thickness. Seal the visible crack line using a compatible epoxy paste so injection resin does not escape. Where a crack passes through a slab, close the underside before gravity filling or injection.

INSTALLATION CONDITION	SPECIFIED CONTROL
Horizontal cracks	Gravity fill after crack cleaning and underside sealing as needed.
Vertical cracks	Start at lowest port; progress upward after resin appears at next.
Wet substrate	SSD is acceptable; no free water or active water flow.

Check port communication and ensure the temporary face seal has set before injection. Use injection pressure appropriate to crack geometry, substrate strength and access; avoid damage to weakened concrete. Provide an agreed means to confirm complete filling.

TEMPERATURE & WORKING LIFE

Apply to prepared substrates between +5 °C and +30 °C. Indicative pot lives are approximately 120 minutes at +5 °C, 80 minutes at +10 °C, 25 minutes at +23 °C and 10 minutes at +30 °C. Mix small batches in warm conditions and observe the working life strictly.

Installation & Product Support

KREVO Inject EP | Mixing, horizontal gravity filling, pressure injection, precautions and contacts

MIXING PROCEDURE

- Proportion Part A (resin) : Part B (hardener) at 2 : 1 by weight or 1.8 : 1 by volume.
- Pour the complete Part B into Part A in a clean suitable container.
- Mix with a slow-speed electric mixer (maximum 250 rpm) for at least 3 minutes.
- Blend to a uniform liquid, avoiding air entrainment; place within the stated pot life.

CRACK INJECTION & FINISHING

- Horizontal slab cracks: clean and seal the underside where needed; fill by controlled gravity pouring or suitable injection equipment.
- Vertical cracks: start at the lowest port and inject gradually until resin reaches the next port; then close the first and move upward.
- Maintain controlled pressure and keep the crack face sealed so that resin enters the fissure rather than escaping at the surface.
- After curing, remove injection nipples and temporary seals where specified; finish the surface and clean tools immediately after use.

LIMITATIONS & SERVICE NOTES

- Maximum reference crack width for injection: 5 mm; assess site cracks individually.
- Use only for static cracks; moving cracks require an engineered flexible repair system.
- Do not inject where free water flows or water pressure is uncontrolled.
- Pot life shortens as temperature rises; avoid mixing more material than can be placed.
- Material must be conditioned before use; confirm crack fill and final cure before loading.

HEALTH, SAFETY & ENVIRONMENT

For professional application by trained personnel. Read the current Safety Data Sheet before use. Wear chemical-resistant gloves, safety goggles and protective clothing. Avoid skin and eye contact, maintain ventilation and prevent uncured resin or cleaning liquid from entering drains or waterways. Dispose of material and packaging responsibly.

QUALITY & PRODUCT INFORMATION

Application and final bond depend on correct proportioning, temperature, crack cleanliness, site moisture, port spacing and injection pressure. Strength and viscosity figures are specification benchmarks; KREVO-specific qualification tests and batch documentation must support any manufacturer-certified performance or compliance claim.

KREVO | GLOBAL CONTACTS

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