

# KISEPO 20

# High Strength Epoxy Binder and Injection Resin

#### **DESCRIPTION**

KISEPO 20 is a high modulus, low viscosity, epoxy resin designed for injection into non-moving cracks in concrete structures. It's medium to low viscosity will allow maximum penetration into gap widths of 0.25mm and above. KISEPO 20 exhibits extremely high strength when in cured state, thereby restoring structural integrity. It is moisture insensitive thereby allowing for repair works on damp cracks via simple injection.

# **RECOMMENDED USE**

- · Beams and Columns
- Bolt grouting
- · Concrete repair
- Hollow repair
- Injections of cracks in dry or damp concrete
- Joint reinstatement
- Pre-cast members

## **ADVANTAGES**

- · Aggregate extendable
- Excellent adhesion
- · Fast cure
- · High-strength
- · Increased working time
- Low viscosity
- Moisture insensitive
- Non-shirk capability
- Non-toxic when cured, can be used in potable water tank
- Restores structural integrity
- · Simple and user friendly

#### **PACKAGING**

KISEPO 20 is supplied in 6kg/set

Part A = 4.2 kg, Part B = 1.8 kg

### **APPLICATION GUIDELINES**

# a) Surface Preparation

As with any epoxy resin system, surface preparation is critical. Concrete surfaces or cracked sidewalls to which this product is to be applied should be cleaned by compressed air or water jet to ensure a superior bond.

If both sides of a substrate are accessible, they should both be sealed with KISEPO 10 high strength epoxy putty before injecting KISEPO 20 to ensure complete crack filling.



## b) Mixing

Mix using clean containers, pour KISEPO 20 into a container of mix ratio of 2 parts of Part A (by volume) to 1 part of Part B (by volume). Mix for 2-3 minutes constantly using low speed paddle mixer until the uniform colour is achieved. All mixture must be used within 30-45 minutes.

## c) Application

Inject the mixed KISEPO 20 resin using KST Injector or other types of KST Pump.

Start resin injection from the lowest part of the crack. Go on to the next injection port when KISEPO 20 is seen appearing from the upper port. Repeat the process until the crack is filled with resin.

Upon completion of repair to a crack line, allow mighty Injector to maintain its maximum pressure (2.5 bar to 4 bar) at its injection point.

During injection, have KISTAL PLUG ready to seal any possible leaks from around the ports or crack or other parts of the concrete.

Once the resin has set, preferably after 24 hours, remove the injectors and restore the surface by mechanical means.

## d) Cleaning

All tools and equipment should be cleaned immediately after use with suitable solvent.

#### **LIMITATION**

KISEPO 20 must be used within the recommended pot life.

#### **STORAGE**

KISEPO 20 should be stored in tightly sealed original packing at room temperature up to 12 months from date of manufacturing.



# **TECHNICAL PROPERTIES**

KISEPO 20		
Part (A)	Part (B)	Mixture
Clear	Amber	Amber
1.10 g/cm <sup>3</sup>	0.96 g/cm <sup>3</sup>	1.0 kg/litre
2 Part	1 Part	2:1
(by volume)	(by volume)	By volume
Minimum curing temperature		15∘C
7 days compressive strength		80N/mm <sub>2</sub>
7 days tensile strength		25N/mm <sub>2</sub>
14 days slant shear bond		15N/mm <sub>2</sub>
		50N/mm <sub>2</sub>
7 days elongation at breaks		2.0%
20°C	30°C	40°C
300 - 450	225 - 350	150 - 250
Pot life (100gm sample)		90 ~ 120 mins
Gel time (0.1mm film)		6 hours
Final cure		7 days
Maximum exotherm		64∘C
	Part (A) Clear 1.10 g/cm³ 2 Part (by volume)	Part (A) Part (B)  Clear Amber  1.10 g/cm³ 0.96 g/cm³  2 Part 1 Part (by volume) (by volume)  20°C 30°C

#### IMPORTANT NOTES

Any information and/ or specification contained herein is to the best of the company knowledge, true and accurate, it is always recommended that trial to be carried out to confirm suitability of use for all products, as no warranty is given or implied in connection with any recommendations and/or suggestions made by the company representatives, agents and/or distributors.

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