



TEKNOCEM LA

High Strength Micro-Concrete

DESCRIPTION

TEKNOCEM LA is a low-alkali highly fluid micro-concrete which has been specially formulated with non-ASR reactive aggregates to produce a high-quality fluid repair concrete. The product is mixed with clean water to produce a non-shrink repair concrete which is volume stable and does not segregate or bleed. TEKNOCEM LA is highly fluid and self-compacting making it particularly suitable for the repair of concrete where a high density of steel reinforcement is present. TEKNOCEM LA is suitable for use in thicknesses from 20mm – 200mm where a free-flowing self-compacting concrete is required. The product is easily mixed and may be placed by hand or pumped. The use of specially formulated blast furnace slag cement ensures that the pre-bagged mix has an equivalent sodium oxide level of less than 3 Kg per M3 which reduces the risk of ASR (Alkali-Silica Reaction). The TEKNOCEM LA exhibits mid-range resistivity making it suitable for use in conjunction with cathodic protection systems.

USES

TEKNOCEM LA is a highly fluid micro concrete making it suitable for use in repairing large sections of concrete where compaction by vibration is not possible. It is particularly suitable for repairing sections of concrete where access is restricted. TEKNOCEM LA is also ideal for thick section grouting where high strength is also required. Typical Applications include the reinstatement of structural sections on bridge abatements, soffits, concrete columns and other large structural elements. Once hardened the TEKNOCEM LA exhibits excellent resistance to

carbon dioxide and chloride ions.

Property	Value
Tensile Strength	2.8MPa @ 28 Days
Working life	20 mins @ 20°C
Flexural Strength	6MPa @ 28 Days
Compressive Strength	18MPa @ 1 Day 30MPa @ 7 Days 44MPa @ 28 Days
Density	1710kg/m ³

PROCEDURE

Surface Preparation: Defective concrete should be removed by mechanical means and all loose friable material should be removed to produce a sound substrate which has been roughened to provide a good mechanical key. The surface should be free from contamination with oil and grease. Form work should be constructed around the repair area. A head should be constructed in the formwork if necessary, to ensure that the repair concrete flows effectively. It may be necessary to introduce tell-tale outlets to indagate the effectiveness of the concrete placement.

Substrate Priming: Substrates do not normally require the use of a substrate primer. The substrate should just be thoroughly saturated with clean water, taking care to ensure that any surface water is removed prior to the application of the repair concrete.

Mixing: TEKNOCEM LA should be mixed with 3 Litres of clean water per bag. The water should be added to a suitable mixing vessel and then the powder should be slowly added whilst mixing using a slow speed, forced action mixing paddle. The concrete should be mixed until a uniform consistency is achieved.



Application: TEKNOCEM LA should be placed as a continuous pour to ensure maximum integrity of the repair. TEKNOCEM LA should be poured from one side of the shutter only so as to ensure that no voids occur as a result of air entrapment. If a tremie pipe is used to place the concrete, then the pipe should be placed at the bottom of the section that is to be repaired and slowly lifted upwards as the placement continues.

Curing: TEKNOCEM LA should be cured using CUREAID 1000 which is applied immediately after the form work is removed. It may be necessary to cover the freshly placed concrete with polyethene to protect from strong winds or direct sunlight.

PACKAGING & COVERAGE

Pack Size: 25kg

Yield: 16.5ltrs per 25kg pack.

Coverage: A 25kg bag will cover 1.65m²
@ 10mm thickness.

STORAGE & SHELF LIFE

TEKNOCEM HB50 should be stored in unopened bags in dry conditions at temperatures above 8°C.

HEALTH & SAFETY

See separate material safety datasheet.



Premcrete Ltd | Reg no. 08079452 VAT no. 194306207

Structural Waterproofing | Gas Protection
| Concrete Repair Technical Grouts | Joint
Sealants | Protective Coatings | Admixtures

www.premcrete.com | 02380 276166 |
sales@premcrete.com | 44 Macadam Way,
West Portway, Andover, Hampshire, SP10
3XW

The information provided in this data sheet is intended for general guidance only and is given in good faith based on Premcrete Ltd current knowledge and experience. No warranty in respect of fitness for a purpose, or any other liability whatsoever can be inferred from the information contained within this datasheet. Users should determine the suitability of the materials for their particular application and should always refer to the most recent issue of the product data sheet for the product concerned. All materials are supplied in accordance with Premcrete Ltd Sales Terms & Conditions (available upon request and on Company Website).