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LOCTITE[®] Fixmaster[®] Magna-Crete[®]

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PRODUCT DESCRIPTION

LOCTITE[®] Fixmaster[®] Magna-Crete[®] provides the following product characteristics:

Technology	Magnesium phosphate-based
Appearance	Gray liquid (mix to desired consistency)
Components	Two component - requires mixing
Cure	Room temperature cure after mixing
Application	Flooring & grout
Specific Benefit	<ul style="list-style-type: none"> • Easier to work with • Applicator friendly • Fast setting • Cure temp.: -26 °C to +46 °C

LOCTITE[®] Fixmaster[®] Magna-Crete[®] is a unique, two-component, rapid setting concrete repair and grouting system that outperforms conventional concrete repairs. A high performance, magnesium phosphate-based system, LOCTITE[®] Fixmaster[®] Magna-Crete[®] cures faster than concrete, and unlike concrete, it bonds to new and old concrete as well as most construction materials including wood and steel. Since LOCTITE[®] Fixmaster[®] Magna-Crete[®] does not use a water additive, this repair system can be applied at virtually any temperature without shrinkage and is freeze/thaw and deicing salt resistant. This product is typically used for the repair of concrete highway walls, pot holes, airport runways, anchoring machinery, commercial refrigeration floors, loading docks, grouting bedplates and soleplates, columns and bridge decks, parking structure joints, concrete pillars, floor repairs, ramps, rail grouting, anchoring bolts and handrails. This product is typically used in applications with an operating range of -26 °C to +1090 °C.

TYPICAL PROPERTIES

Coverage, 3.8 liter (1 gallon)	0.45 m ² @ 0.64 cm thick/4.54 kg (4.8 ft ² @ 0.25 in thick/10 lb)
Coverage, 19 liter (5 gallon)	2.0 m ² @ 0.64 cm thick/20.4 kg (21.6 ft ² @ 0.25 in thick/45 lb)

TYPICAL CURING PERFORMANCE

Set Time, minutes:	
Initial	3 to 11
Final	15 to 22

TYPICAL PERFORMANCE

Compressive Strength:	
After 2 hours	N/mm ² 17 to 21 (psi) (2,500 to 3,000)
After 3 days	N/mm ² 28 to 41 (psi) (4,000 to 6,000)
After 28 days	N/mm ² 48 to 55 (psi) (7,000 to 8,000)
After 1 year	N/mm ² 90 (psi) (13,000)

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Directions for use

- Preparation:** For best results, surface must be clean, dry and free from loose material. Remove all dirt, blacktop tar, and oil substances from the area to be covered, leaving a rough clean surface.
- Forms:** If forms are needed, use plastic or Formica.
- Mixing:** To mix material, add aggregate to activator and mix thoroughly. Add only enough activator to obtain the consistency desired for the application. Mix approximately 3.8 liters of activator to 20.4 kgs of aggregate (approximately 1:5 ratio). Material should be mixed immediately prior to placement and should be completed soon as possible.
- Deep Pours:** For repairs greater than 2.5 cm in depth, and after the neat material has been mixed, up to 13.6 kgs of pea gravel can be added for each 20.4 kgs of Magna-Crete[®] as a filler. For large applications, use HOT WEATHER MIX to manage the set time for additional working time.
- Water:** Work areas can be damp, however, standing water should be removed. Water should not be used to dilute the liquid or to adjust consistency of Magna-Crete[®].
- Cold Weather Application:** Set-up time will be longer in colder applications. For those applications where the application temperature is less than 7 °C use COLD WEATHER MIX (one 0.45 kg package per 20.4 kgs of Magna-Crete[®] increases the cure speed by approximately 10 minutes) to accelerate the set time of the mixed material. Addition of the Winter additive should be made after the Magna-Crete has been thoroughly mixed, and just prior to the application or pouring of the Magna-Crete.
- Warm Weather Application:** For applications where the application temperature is greater than 29 °C, use HOT WEATHER MIX (one 0.45 kg package per 20.4 kgs of Magna-Crete[®] decreases the cure speed by approximately 10 minutes) to manage the exothermic reaction and the working time of the mixed material. The Summer additive should be thoroughly mixed into the liquid portion of the Magna-Crete. The Magna-Crete can then be mixed, and applied/poured.
- Clean-up:** Keep an adequate supply of water on hand to wash mixer and tools as soon as set begins 9 to 15 minutes at 20 °C.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\mu\text{m} / 25.4 = \text{mil}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{N/mm}^2 \times 145 = \text{psi}$

$\text{MPa} \times 145 = \text{psi}$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

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Reference 1.3