# Hydronil International



## **DATA SHEET**

# Multiguard In-depth Mortar

# SINGLE COMPONENT REPAIR MORTAR BASED ON CRYSTALLIZATION TECHNOLOGY

Product Code No.: H-0704

# **OVERVIEW**

Multiguard In-depth Mortar (MIM) is an integral crystalline cementitious patching and repairing mortar based on advanced Multichem In-depth Crystalline Technology (MICT). It consist of graded quartz sand, special cement and unique active ingredients. Special properties of MIM makes it unique product for repairing and sealing grooves and honey combed concrete substrate. It is ideal product for surfacing, protecting, waterproofing concrete, masonry and other construction material. Active ingredients in MIM work within the concrete substrate to react with un-hydrated cement particles and water to form crystals within the concrete mass. In doing so, it will make the concrete permanently waterproof.

# USES

Applied in conjunction with Multiguard Indepth TA or TB for:

- \* Installation of seal strips, reglets and coves at joints to assure water tightness.
- \* Patching of tie holes and faulty construction joints.
- \* Patching and filling of routed out cracks.
- \* Repairing of spalled and honeycombed areas
- \* Can be applied to the positive or negative water pressure sides of a structure
- \* Resists strong hydrostatic pressure
- \* Post sealing effect of shrinkage cracks up to 0.4mm
- \* Easy to use needs only to be mixed with water prior to application
- \* Not a vapor barrier, allows concrete to "breathe"
- \* Can be skim coated or feather edged
- \* Can be applied to moist concrete
- \* Fast Setting
- \* Non-Flammable
- \* Resists abrasion and mechanical wear
- \* Freeze/thaw resistant

# **TECHNICAL DATA**

# **Physical Data**

Aggregate State: Powder Color: Cement Grey

Bulk Density: 1.80 kg/l
Pot Life: 30 minutes
Setting Final: Approx. 4 hrs

Potable Water: Suitable and Confirms to standards

### Consumption & Yield of 25kg bag

### 25 kg bag = 11 lit of material after mixing with water

Compressive Strength Tensile Strength

3 days 15 Mpa 3.5 MPa

7 days 40 Mpa 5.0 MPa

28 days 45 Mpa 6.0 MPa

All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

## APPLICATION DATA

## **Surface Preparation:**

All surfaces to be patched, repaired or sealed with MIM must be sound. Remove all dirt, cement laitance, form release agents, curing compounds, paints, etc. by means of wet or dry sandblasting, a high pressure water jet or other suitable mechanical means. Surfaces must be well moistened to a dull dampness at the time of application. Cracks should be routed out to a U-shaped configuration, approx.1" (25mm) wide and aminimum of 3/2" (40mm) deep. Tie holes should be roughened prior to filling. Spalled and honeycombed areas must be thoroughly cleaned and chiseled back to sound concrete prior to repair.

## Mixing:

MIM should be mixed with clean water to a trowelable mortar consistency. Approximate mixing ratio (by volume) is  $4\frac{1}{2}$  parts powder to 1 part water. For glove pointing add small amount of water. Mix only as much material as can be used within 25 minutes.

## Application:

Cracks/Seal strips (reglets & coves):

After proper surface preparation and routing to appropriate configuration, prime areas to be patched or repaired with a slurry coat of MITA. Flush to surface with Multiguard Indepth Mortar in mortar consistency and while "green" (tacky), fill cavity.

## Spalled and honey combed areas:

Prepare surface and chisel back to sound concrete. Prime area to be repaired with a slurry coat of Multiguard In-depth

# Hydronil International



TA and while "green" (tacky), apply MIM in layers of ½" (13mm) until desired profile is obtained.

#### CLEANING:

All tools should be cleaned with water immediately after use.

### **CURING:**

Normal concreting procedures should be strictly adhered to. It is important that the surface of the coating is protected from strong sunlight and drying winds with Multichem CURING MEMBRANE, polythene sheeting, and damp hessian or similar. Curing <u>must</u> commence within 10-15 minutes of the completed application of the coating.

# STORAGE

Store in dry, frost-free conditions at moderate temperatures not greater than 25 c.

### **IMPORTANT POINTS:**

Apply only to clean, sound substrates. Concrete should be saturated but surface-dry and free of water backpressure. Care should be taken when curing in hot, sunny or windy conditions. Discard MIM packages which have been subjected to freezing temperatures.

When treating structures in a tidal zone, the MIM must be allowed to cure for a minimum of 8 hours before being immersed. Protect from abrasion or aggressive tidal flow if necessary.

### PACKAGING AND COVERAGE:

Pack Size: 25 kg pack

Coverage: 1.2 to 1.5kg/m<sup>2</sup>/1mm thick

# **SAFETY DATA:**

## **HEALTH AND SAFETY**

Refer to MSDS. For commercial use only, this product contains Portland cement and is highly alkaline.

- IRRITATING TO EYES, RESPIRATORY SYSTEMS AND SKIN.
- RISK OF SERIOUS DAMAGE TO EYES
- KEEP OUT OF REACH OF CHILDREN.
- IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF CLEAN WATER AND SEEK MEDICAL ADVICE.
- AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF CLEAN WATER.
- WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE / FACE PROTECTION.

### WARRANTY:

Hydronil warrants that the products manufactured by it shall be free from material defects and will conform to formulation standards and contain all components in their proper proportion. Should any of the products be proven defective, the liability to Hydronil shall be limited to replacement of the material proven to be defective. Hydronil shall in no case be liable otherwise or for incidental or consequential damages.

NO HYDRONIL MAKES WARRANTY MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. User shall determine the suitability of the product for his intended use and assume all risks and liability in connection NOTE: In-depth Hydronil crystalline waterproofing should be applied as a surface treatment as soon as the Multiguard In-depth Mortar (MIM) has set (approx.1-2hours). If this is not practical, leave surface rough for subsequent surface treatment to bond. Do not apply MIM at temperatures below 40°F (5°C) or to a frozen substrate. This product is not recommended for use in expansion or moving construction joints

Product of:



Hydronil International

B-1, Mahavir Gaurav Blg. M. D. Kini Marg, Bhandup Village, Bhandup (E), Mumbai-400042, Phone: 022-25669137, e-mail: info@hydronil.com, website: www.hydronil.com