



DATASHEET



Cementitious High Performance Waterproofing Coating

PRODUCT DESCRIPTION:

LeakShield™ is a single component cementitious high performance waterproofing coating for concrete protection. LeakShield forms a dense, waterproof surface barrier. It consists of Portland cement, well-graded quartz sand and active polymer enhanced special chemical ingredients (with nano technology), making a hard yet flexible membrane.

USES:

LeakShield™ is used to waterproof and damp-proof concrete, cement rendering, brickwork and block work. It is also used to protect concrete against the effects of freeze-thaw cycles, de-icing salts, carbon dioxide and other acid gases, dilute acids and alkalis.

This includes: Rigid waterproofing of water tanks, sealing internal basement and cellar walls against dampness, water leakage, protection of concrete structures in marine environments, external tanking of substructure concrete such as foundations and basement walls in new buildings.

- Above or below grade, interior or exterior
- Horizontal, vertical, or overhead applications to concrete, cementitious overlays, masonry, brick, parging (render), CBU's (cement backer units), gypsum board (drywall), glass mat faced gypsum sheathing, steel, PVC, mastic asphalt (interior), roughened polystyrol, properly prepared existing cementitious terrazzo floors, ceramic, porcelain and quarry tiles.
- Exterior (positive side) waterproofing of new or old below grade foundations
- Balconies, parapets, planter boxes, plaza decks, stadiums, top soil covered roof structures
- Mechanical and equipment rooms, pool decks
- Fountains, swimming pools and other water features (under tiles or exposed as stand-alone)
- Underneath flexible thin-set tile mortars (i.e. shower pans, sanitary rooms, kitchens, pools, balconies, etc.)
- Potable water, wastewater, sea water and marine aquarium tanks and other reinforced concrete structures
- Sealing of cracks and construction joints with joint sealing tapes.



MULTICHEM GROUP | 1, Kirtida Bungalow, Nahur Stn. Road, Bhandup (E), Mumbai-400042,

Phone No.: 91-22-25669137, 25664890, e-mail: info@multichemgroup.net

www.multichemgroup.net, www.leakshield.in

LeakShield/2013/R2-2015

**TECHNICAL DATA:**

Properties	Results
Appearance	Free flowing powder
Open Time	60 minutes @ 25°C
Packaging	½ kg, 1kg, 5kg, 25 kg
Complete Curing	28 days
Tensile Adhesion Strength	>0.93 N/mm ² after 28 days (Min. requirement 0.5 N/mm ² as per EN14891)
Coverage	Damp proofing: 1.0-1.2 kg/m ² (8.33-10 ft ² /kg); Waterproofing: 1.25-3.0 kg/m ² (3.3-8.0 ft ² /Kg]
PH of Slurry	9.5
Colour	Gray, white, ivory, blue, green, brown, black
Waterproofing Permeability Coefficient	6.00 X 10 ⁻¹⁶ m/sec. i.e. 2mm thick A = 1000 mm of typical concrete
Waterproofing	7 bar for 3kg/m ²
Water Absorption by Karsten Tube	0.0 ml in 30 minutes 0.1 ml in 24 hours
Mixing Ratio (Powder: Water)	5: 2 by volume or 7 lit for 25 kg bag
Shelf Life	12 months if stored in room temperature

APPLICATION DATA:**PREPARATION:**

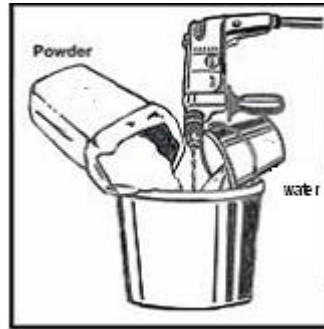
The areas to be treated must be free from all unsound material, i.e. dust, oil, grease, corrosion by-products and organic growth. Smooth surfaces should be roughened, all loose material and surface laitence removed and steel cleaned to bright metal preferably using wet grit or water blasting techniques or equivalent approved methods. The strength of the concrete sub-base should be a minimum of 20N/mm² and preferably 28 days old.

PRIMING:

The prepared substrate concrete should be thoroughly soaked (preferably 24 hours before) with clean water until uniformly saturated without any standing water, highly porous substrates may require sealing with **Multicrete CM** or slurry of **LeakShield**TM with water at 1:1 ratio (by volume).

MIXING:

Use **LeakShield**TM with water at 1:0.5 ratio by volume. Pour approximately 80% of the contents water required into a suitable mixing vessel. Slowly add one pack marked **LeakShield**TM (dry powder) and mix until homogeneous. Then add the remainder of water and remix for a minimum of 5 minutes. The modules must be mixed using a drill and paddle specially designed to entrap as little air as possible.



PLACING:

LeakShieldTM can be applied brush, putty trowel or spray techniques, although care must be taken to ensure that air is not entrapped onto the surface. Apply the first coat, approximately 1mm thick, onto the prepared substrate. To ensure total protection, a second coat should be applied in the same way, after waiting approximately 30 minutes depending on temperature (when the first coat is stable but not fully set).

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 must commence within 60 minutes after coating is dried completely.

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 **LeakShield**TM packages which have been subjected to freezing temperatures.

LeakShieldTM is not a decorative finish and may temporarily discolour until uniformly weathered. It may, however, be over coated with Multichem membranes to produce a coloured finish.



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

Please consult our technical department for further information. The product, **LeakShield™** provided here is for 'Do-it-Yourself', (DIY).

WARRANTY

Multichem warrants **LeakShield** to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of **LeakShield**.

Because the Multichem does not perform the actual installation, it cannot be held responsible for the results of the application. Multichem specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Multichem part. Multichem neither assumes nor authorizes any person to assume for Multichem any liability in connection with the sale and installation of **LeakShield**.

Because of constant improvement of manufacturing techniques and formulations, Company reserves rights to change this datasheet and its contents without prior notice.



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