



DATASHEET



**MULTIGUARD<sup>®</sup> A-ECOSHIELD**

Complete Leakage Protection

Two Component High Performance Waterproofing Coating

## PRODUCT DESCRIPTION:

**Multiguard A-Ecoshield** is based on advanced polymer chemistry with additional advantage of cement technology. Unique properties of **Multiguard A-Ecoshield** makes it unique product for new and old building construction. It is ideal product for surfacing, protecting, and waterproofing concrete, masonry and other construction material.

## USES:

**Multiguard A-Ecoshield** 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
- 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.

## TECHNICAL DATA:



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

Phone No.: 91-22-25669137, 256694890, e-mail: [info@multichemgroup.net](mailto:info@multichemgroup.net)

[www.multichemgroup.net](http://www.multichemgroup.net), [www.indiamart.com/multichemindustries](http://www.indiamart.com/multichemindustries)

**Multiguard A-Ecoshield** /2017/R0-2017

PROPERTIES	RESULTS
Appearance	Free flowing powder and white liquid
Open Time	60 minutes @ 25 °C
Packaging	Liquid: 5.0 Kg, Powder: 20kg
Complete Curing	28 days
Tensile Adhesion Strength	>0.93 N/ mm <sup>2</sup> (Minimum requirement 0.5 N/mm <sup>2</sup> as per EN14891)
Coverage	Damp Proofing: 1.0-1.2 Kg/m <sup>2</sup> , Waterproofing: 1.25-3.0 Kg/m <sup>2</sup>
pH of Slurry	9.5
Waterproofing Permeability Coefficient	6.00 X 10 <sup>-16</sup> m/sec, i.e. 2mm thick A=1000 mm of Concrete
Colour	Gray and White
Water Pressure	1.5 bar for 3 Kg/m <sup>2</sup>
Carbon Dioxide	Coefficient: 2,600,000, i.e. effective barrier to carbon dioxide = 50 m.
Elongation	35% without Fibrecon G55
Shelf Life	1 year from date of manufacturing

#### OTHER PROPERTIES:

##### Chloride ion diffusivity

**Multiguard A-Ecoshield** provides an effective barrier to waterborne salts such as chlorides and sulphates. Independent assessment has shown no steady state flux of chloride ions after 3 years.

##### Chemical resistance

**Multiguard A-Ecoshield** has outstanding wear and weather resistance and good resistance to most of chemicals such as gasoline, diesel oil, sodium hydroxide, calcium chloride, de-icing salts and mild acids.

##### Anti carbonation coating

**Multiguard A-Ecoshield** is highly effective barrier to atmospheric acidic gases such as Carbon Dioxide which cause carbonation in concrete structures. The accepted minimum value for R is 50m. **Multiguard A-Ecoshield** shows diffusion coefficient more than 300 m.

## APPLICATION DATA:

### PREPARATION:

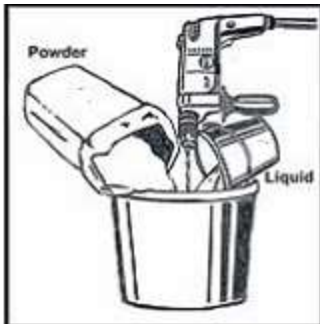
The areas to be treated must be free from all unsound material, i.e. dust, oil, grease, corrosion by-products and organic growth. Smooth surfaces should be roughened, all loose material and surface laitance removed and steel cleaned to bright metal preferably using wet grit or water blasting techniques or equivalent approved methods. The strength of the concrete sub-base should be a minimum of 20N/mm<sup>2</sup>.

### 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**.

### MIXING:

Pour approximately 2/3 of the contents of the bottle marked Part A (liquid) into a suitable mixing vessel. Slowly add one pack marked Part B (dry powder) and mix until homogeneous. Then add the remainder of the opened part A 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. Repeat with the second containers of Parts A and B provided.



### PLACING:

**Multiguard A-Ecoshield** can be applied using spray techniques; however, brush or trowel applications may be employed 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. Alternatively, for flooring applications, a 300-600 micron silica sand can be cast liberally onto the surface (approximately 2kg/m<sup>2</sup>), taking care to ensure that the sand does not penetrate the full depth of the coating. This provides effective curing, whilst also providing a hard wearing, non-slip finish. Curing must commence within 10-15 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 **Multiguard A-Ecoshield** packages which has been subjected to freezing temperatures.

**Multiguard A-Ecoshield** is not a decorative finish and may temporarily discolours 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 **Multiguard A-Ecoshield** 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, **Multiguard A-Ecoshield** provided here is not for 'Do-it-Yourself', (DIY).

**WARRANTY**

Multichem warrants **Multiguard A-Ecoshield** 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 **Multiguard A-Ecoshield**.

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 **Multiguard A-Ecoshield**.

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