

# PRODUCT DATA SHEET

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# enviro**systems**

## Protective Coatings & Sealants

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# ENVIRO 500 EXT

## MODIFIED POLYURETHANE FOR EXTERNAL WATERPROOFING APPLICATIONS



### WATERPROOFING

### DESCRIPTION

Enviro 500 EXT is a water based single component, modified polyurethane waterproofing membrane for external protected applications. Enviro 500 EXT exhibits extremely high flexibility, excellent adhesion to substrates, promotes superior adhesion of subsequent tile adhesives and is cure controlled drying for ease of application in hot and windy outdoor conditions.

### CLASSIFICATION

AS/NZS 4858:2021 CLASS III APPROVED

AS4654.1.2:2012 NON EXPOSED CLASS III APPROVED

GREEN STAR COMPLIANT

Design and As Built v1.2, Section 13.1.1

### AREAS OF USE

**SURFACES:** Walls, floors, decks and roof areas that will be covered with a wearing surface such as tiles or water based decorative coatings.

**AREAS:** External wet areas, podiums, roof areas, decks, terraces, balconies.

### FEATURES & BENEFITS

- Water based - safe to use and easy clean up
- Low VOC content, non-hazardous
- Strong adhesion with excellent crack bridging capabilities and vertical hold
- Compatible with EnviroSystems tile adhesive: Enviro GTX

### PRODUCT INFORMATION

**Packaging** Available in 15L pails [Santorini Green].

**Shelf Life** Enviro 500 EXT can be stored in its original sealed containers for 12 months. Once opened and resealed for later use, the shelf life could vary depending on storage conditions. Always check product quality before using after prolonged periods of storage.

**Storage Conditions** Enviro 500 EXT should be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +4 °C and +30 °C.

### COVERAGE RATE

Type	Litres /m <sup>2</sup>	m <sup>2</sup> /pail	WFT per Coat	Number of Coats	Finished DFT (all coats)
All Applications	1.5	10	0.8 mm	2	1.0 mm

NOTE: WFT = Wet Film Thickness. DFT = Dry Film Thickness. WFT Gauges are available from EnviroSystems upon request. Coverage dependent on weather and substrate conditions.

### CURING TIME

Temperature (at 50%RH)	Min. Recoat - hrs.	Max. Recoat - hrs.	Full cure - days
10°C	>24	Open ended*	7 days
23°C	3-4	Open ended*	7 days
30°C	<3	Open ended*	7 days

\*After 28 days can be pressure washed prior to recoat. The above chart should be used as a guide only to determine the approximate rate of cure. Other factors can also influence the cure rate such as substrate temperature, enclosed environments and wind conditions.

### PHYSICAL PROPERTIES

Property	Test Method	Test Result
Volatile Organic Compounds	SCAQMD Method 304-91	12 (g/L)
Elongation	AS1145.3	1400%
Tensile Strength	AS1145.3	0.93 MPa
Water Vapor Transmission (WVT)	ASTME96	2.52 (g/m <sup>2</sup> /24h)
Bond Strength	ASTM C794	119.0 N
Water Absorption	AS3558.1	<2.8%
Bond Strength	ASTM C794	119.09 N
Heat Ageing	AS4858 Table A1	Pass
Cyclic Movement	CSIRO Joint Test	Pass
External Membrane (nonexposed)	AS4654.1:2012	Class III
Internal Wet Area Membrane	AS4858:2004	Class III
Temperature Resistance	AS4654.1 Clause 2.6	No cracking, crazing, or surface defects [35°C]



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NOTE: All products manufactured by EnviroSystems comply with the description and properties indicated in the technical data sheet that was current at the date of manufacture.

## DIRECTIONS FOR USE

### SUBSTRATE PREPARATION

Surfaces must be clean, dry and free from contamination such as dust, laitance, grease, coatings and curing compounds. Remove all sharp edges including screw, nail and concrete/mortar projections. Apply Enviro Flex Pro or Enviro Flex FC or Enviro Flex FL (and allow to cure) to all joints, cracks etc. prior to application of Enviro 500 EXT.

Enviro 500 EXT is suitable for use over the following substrates:

- New Concrete - Cured for min. 28 days and under 6% moisture (gravimetric method)
- Fibre Cement Sheets - Walls (min. 6mm)
- Renders and Screeds - Cured for min. 7 days under 6% moisture (gravimetric method)
- Compressed Fibre Cement (min. 15mm)
- Plasterboards – Wet area grade only (min. 10mm)

**NOTE:** Do not apply Enviro 500 EXT to any concrete that has received concrete curing compounds. Ensure substrate has been properly prepared in accordance with the relevant Australian standard. It is important to provide adequate drainage and falls with negligible ponding to ensure optimum performance of the membrane.

### PRIMING

**NOTE:** Substrate condition and other requirements will dictate primer selection. For dry substrates, apply 1 coat of Enviro Prime WB in accordance with the instructions on the product data sheet. For damp substrates, apply Enviro Shield in accordance with the instructions on the product data sheet.

### BOND BREAKING

Use suitable and approved sealants such as Enviro Flex Pro or Enviro Flex FC to form smooth 12mm angle fillets to all internal corners, penetrations and joints. Allow to cure prior to application of Enviro 500 EXT.

### MIXING

Enviro 500 EXT should be thoroughly mixed with a mechanical mixer at low speed (less than 400 RPM) prior to application.

### APPLICATION

Enviro 500 EXT can be applied using brush or roller. Apply two coats or more of Enviro 500 EXT to achieve a minimum Dry Film Thickness (DFT) of 1.0 mm on floors, decks and upturns on walls and penetrations. Care should be taken when walking over newly installed Enviro 500 EXT to ensure the membrane is not damaged. If damage occurs, consult EnviroSystems for recommended repair methods.

Coat down into drainage outlet openings. Preferably, apply at right angles to the direction of the previous coat. Allow each coat to dry before proceeding to the next coat. To control efflorescence staining on exposed areas, it is recommended that waterproofing is applied directly beneath tiles and above any screed.

When tiling over Enviro 500 EXT in any of the external areas listed above, it is recommended to use Enviro GTX tile adhesive and installed in accordance with the instructions on the product data sheet.

**NOTE:** Do not apply any materials during damp or rainy conditions or where there is likelihood of rain. Allow each coat to sufficiently dry before proceeding to the next coat. Thicker coats will take longer to dry. Please see Coverage Rate table for details. Minimum application requirements set forth by the NCC and relevant Australian Standards should be followed when applying EnviroSystems products.

In hot weather, avoid extremes and work in the morning or evening once substrate has cooled. Shade the work area, and keep product stored in cool conditions out of direct sunlight.

In cold weather, keep all products stored out of the cold, especially products not intended to be frozen. Warming materials to around 30°C can help but products may react to the substrate temperature rapidly when applied. Use heated tents around work areas. In high humidity and wet weather, do not apply when rain is imminent, check the forecasts. Use tents or protection to cover areas to be worked on. Use fans or driers and ventilation to remove moisture and lower humidity, do not directly blow onto product.

### RECOAT

Please see the Curing Time table on page 1 for the Enviro 500 EXT recoat windows. Direct tiling and screed applications can be carried out after a minimum period of 48 hours, again depending on conditions. If there is uncertainty about the conditions, allow to cure for a longer period. If the product is applied internally e.g. bathrooms, allow to cure for a period of at least 3 days before screed or tile applications.

To reduce recoat windows, it is most important to increase the flow of air (especially in smaller enclosed areas). Apply at a higher air temperature and avoid laying up very thick coats. Note that curing at floor level and in corners is generally slowest.

**NOTE:** Tiling applications should be undertaken using Enviro GTX tile adhesive in accordance with the instructions on the product data sheet.

### OVERCOATING

**Direct Tiling:** If adhering directly to Enviro 500 EXT, ensure the membrane is sufficiently dry. Allow a minimum of 24 hours before tiling (see above).

**Screed / Mortar Bed:** Allow a minimum of 24 hours before screed application. Care should be taken to prevent any damage to the membrane during screed/mortar bed placement. It is the responsibility of the installer to determine the design, strength, thickness etc. of screed/mortar bed. Allow the mortar bed to cure a minimum of 7 days before waterproofing.

**Exposed UV Areas:** For external use where a non-yellowing aesthetic finish is required, it is recommended that a suitable UV topcoat such as Enviro 250 NS be applied. For light pedestrian traffic (maintenance) these UV topcoats can be broadcast with aggregate for a textured slip reducing finish or for a topcoat that does not require broadcasting refer to Enviro 250NS. Enviro 250 NS must be applied no longer than 36 hours after applying Enviro 500 EXT.

### CLEANING

For easy removal of Enviro 500 EXT from tools and surfaces, clean immediately with water before it has time to dry. Once cured, attempt physical removal and/or prolonged soaking in detergent and water. Observe all OH&S and SDS information pertaining to safe usage and handling of solvents.

### LIMITATIONS

Product must not be applied in rain or if bad weather is imminent. Do not apply to damp or contaminated surfaces or directly over protective coatings. Product must not be used as an exposed or UV stable coating. Do not allow product to freeze.

### HEALTH & SAFETY ADVICE

Enviro 500 EXT is non-hazardous according to Safe Work Australia criteria, however, as a precaution, always provide good ventilation when applying. Wash off splashes of material with clean water, wear gloves and eye protection. If irritation is experienced seek medical advice. Refer to the Safety Data Sheet for full safety and handling procedures.

### KEEP OUT OF REACH OF CHILDREN

### WE ARE HERE TO HELP YOU

It is a good idea to keep a journal of your waterproofing job, whether big or small.

- Take pictures at all stages of your work, including preparation
- Record the quantity and description of products used with corresponding batch numbers
- Record dates and times of when you applied products, from start to finish
- Record all relevant SDS

Please do not hesitate to contact us for any questions you may have on **1300 WATERPROOF** (1300 928 377) or via email at:

**customerservice@envirosystems.com.au.**

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this publication is based on the present state of our best knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use of application and no warranty as to accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

**NOTE:** Field service where provided, does not constitute supervisory responsibility. Suggestions made by EnviroSystems either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not EnviroSystems are responsible for carrying out procedures appropriate to a specific application.

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