

# technical data sheet

## MOISTURE SEAL Epoxy Water Vapour Barrier

### PRODUCT

Moisture seal is a two component water-based epoxy moisture and vapour barrier.

### DESCRIPTION

A two component, high performance, water-based epoxy waterproof vapour barrier membrane to prevent water seepage and permeation for floors, walls, water tanks, reservoirs and/or water retaining structures.

### RECOMMENDED USES

- As low vapour transmission barrier membrane prior to the application of Bostik Ultraset Timber Flooring Adhesive.
- As a low water vapor transmission barrier membrane coating in the building and construction industries and as a barrier coating over “green”, freshly laid concrete. As a waterproofing membrane to prevent water seepage or moisture penetration through to the interior of walls and floors.
- As a waterproof membrane, curing compound and barrier coating over freshly laid hardened (green) concrete either as an internal finish or prior to the application of conventional floor and wall coverings such as tile adhesives, carpets or conventional building paints.
- As a waterproofing vapour barrier in tanking applications and sealing over damp concrete surfaces either a an internal finish coating or prior to overcoating with other coatings.
- A highly tolerant membrane/barrier to prevent water seepage or permeation for floors, walls, water storage tanks or reservoirs and swimming pools.
- Safe to use in sensitive locations (e.g. around food or habitable areas).
- May be used as a waterproof primer prior to the application of Ultraseal, Boscoseal PU, one and two part polyurethane sealants or cementitious floor screeds.
- As an effective vapour barrier on concrete or masonry prior to the application of timber flooring or panels.

### FEATURES & BENEFITS

- Environmentally friendly
- Easy clean-up using water
- Cured membrane will withstand high levels of hydrostatic pressure up to 25 metre head of water or 250 KPa
- Can be applied to damp surfaces
- Can be safely applied to freshly laid garden (green) concrete
- Non-flammable, negligible odour and toxicity
- Has excellent adhesion to most substrates including brick, masonry, concrete block, concrete, compressed fibreboard, stone and timber.
- Convenient equal part mixing ration (by volume)
- Approved for use with potable (drinking) water-conforms to Australian Standard As4020 1992 and tested to ASTM E96 (Water Vapour Transmission)

### PERFORMANCE PROPERTIES

TEST	RESULT
Appearance (mixed)	Brushable/rollable/sprayable uniform paste with a matt appearance.
Colour	Grey (light)
Finish	Matt
Mixing Ratio	1:1 (component A:B) by volume or 3:2 by weight (A:B)
Pot life	45 - 60 minutes @ 25° C
Re-coat time	2 hours @ 25° C & 50% RH
Water vapour barrier permeance	0.12g/24 hrs/M <sup>2</sup> mmHg @ 32° C and 50% RH
Application of adhesive/coverings	24 hours @ 25°C and 50% RH
Full Cure	5 - 7 days at 25° C and 50% RH
Specific gravity (mixed)	Approx. 1.25 at 25° C and 50% RH
Dry film thickness	200 µm (microns)

### PACKAGING

Moisture Seal is available in 8 and 20 litre units

### COVERAGE

Applied by roller the first coat at 5m<sup>2</sup>/ litre (square metres per litre). Second coat at 5m<sup>2</sup>/litre (square metres per litre). Coverage dependent on surface porosity and substrate conditions. Moisture Seal is designed to be applied in two coats to achieve an approximate dry film thickness of theoretically 200µm (microns)

### APPLICATION INSTRUCTIONS

#### Surface Preparation:

- All surfaces to be treated must be structurally sound and all previous coatings, adhesives, efflorescence or laitance should be removed by chipping, abrasive blast cleaning, high pressure water washing, mechanical scrubbing or other suitable means.
- All surfaces must be cleaned free from dirt, grease, oil or other surface contaminants including curing compounds, sealants.
- Holes, non-structural cracks or other surface deformities should be primed with Moisture Seal thinned with water at a dilution rate of 10% with water, and filled with a mortar prepared from 1 part cement, 1 part fine sand (clean) and 1 part Moisture Seal and allowed to cure for 2-3 hours at 25°C (Note: Pot life is reduced when mixed with cement).
- Very porous or “boney” concrete may require 3 coats of Moisture Seal the first coat will act as a primer and penetrate into the pores of the concrete.

## MIXING

- Each component should be individually mixed to form homogeneous components prior to mixing.
- Thoroughly mix the two components in the ratio of 1:1 by volume A:B (or 1:1 parts by weight A:B), using a mechanical forced action mixer with a high shear stirrer until a homogeneous paste is obtained.
- Only mix as much as may be used within the pot life of the product and avoid excessive aeration during mixing.
- Discard any material which has exceeded the pot life or working time of the product.

## PLACING

- Spread the material using a roller brush, trowel or stiff nylon broom to achieve a smooth coverage and finish.
- Spray application is also acceptable provided uniform thickness coverage is obtained.
- Care must be taken to work the material into the surface to fill voids and avoid pinholing.
- A minimum of two coats is recommended and care should be taken to ensure to uniformly apply the material at the required coverage rates.
- Allow to cure for a minimum of 24 hours at 25°C/50%R.H. before applying adhesives, mortars, decorative coatings or other surface treatments.
- Extreme care is necessary to ensure the vapour barrier membrane coating (Moisture Seal) is not damaged in any way during subsequent treatments.
- For concrete substrates/floors which require levelling with a self-smoothing cementitious underlay prior to application of timber flooring or floor covering. Bostik recommends the Ultralevel range of cementitious floor levelling compounds.
- Moisture Seal should be used on the concrete substrate prior to application of Bostik's Ultralevel range of cementitious floor levelling compounds. Bostik recommend that a minimum of two (2) coats of Moisture Seal be applied and the second coat be used as a primer coat for the self-smoothing underlay. (Consult Bostik for further information)

## PRECAUTION

- Do not apply if the surface temperature is below 10°C or 85% relative humidity, as product will cure at very slow rate.
- In enclosed areas, such as water tanks or reservoirs ventilation should be provided during curing cycle to enable adequate evaporation of the water.
- When using solvent-based adhesives over the Moisture Seal ensure adequate floor or wall covering has sufficient vapour transmission to allow for solvent release and escape.
- Moisture Seal is **NOT** classified as a trafficable membrane and must be covered with conventional floor or wall coverings prior to traffic.
- Do not apply to steel or metal surfaces as corrosion will occur.
- Addition of cement will reduce the effective working time or pot life of Moisture Seal.
- Moisture Seal will tend to yellow when exposed to UV light.
- To ensure vapour transmission and permeability is obtained the correct coverage rate must be adhered to.
- Do not dilute with excessive water on first coat.
- Do not dilute second coat.
- Ensure minimum dry film thickness of 200µm (microns) is obtained.

- Discard any material which has exceeded the pot life or working time of the product.
- Not recommended by Tillings Timber for use in conjunction with Tilcote flooring systems (Refer to manufactures specifications).
- Do not apply over any substrates that have been previously treated or coated with curing compounds, P.V.A., Bondcrete, acrylics.

## PAINTABILITY

Compatible with most conventional, commercially available paints. industrial surface coatings such as epoxy, acrylic, polyurethane and polyester. To ensure compatibility of coating, it is recommended that P.A.T.S. Programme is followed.

## P.A.T.S (Pretested Adhesion To Substrate) Programme

Bostik offer a service in which a program has been established to eliminate potential field problems by pre-testing Bostik adhesives and coating with samples of building materials to which the adhesive will be applied. This service is available on projects where pre-application testing will aid in determining the proper surface preparation method to achieve optimum adhesion. Consult a Bostik representative for further information.

## HEALTH AND SAFETY

- On contact, Moisture Seal may cause irritation.
- Gloves and protective goggles must be worn during application and use.
- Avoid contact with skin, eyes and avoid breathing in vapour
- Wear protective gloves when mixing or using
- If poisoning occurs, contact a doctor or Poisons Information Centre.
- If swallowed, do not induce vomiting. Give a glass of water.
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly for a minimum of 15 minutes and see a doctor.
- For more detailed information refer to Material Safety Data Sheet.

## CLEAN-UP

Wash all equipment in water or water/detergent immediately on completion of application and mixing. Moisture Seal will cure under water, hence ensure dirty equipment is not left soaking in water.

## STORAGE

Store between 10°C and 30°C away from direct sunlight  
Shelf life is 12 months in original unopened container  
Partly used containers must be sealed tight when not in use.

## FIRE

Product is non-flammable and poses not fire risk.

## WARRANTY

Bostik offer a 10 year system performance warranty if used in conjunction with Ultraset Timber Flooring Adhesive and Ultralevel range of cementitious self levelling compounds. Refer to Technical Data Sheet for Ultraset, for application and installation details.

ITEM NO	STOCK SIZE	COLOUR
<b>MOISTURE SEAL</b>		
263362	8 litre kit (10.25 kgs)	Grey
263370	20 litre kit (25.6 kgs)	Grey
<b>ULTRASET</b>		
265152	15 litre pail	Brown Solvent Free
267740	15 litre pail	Yellow Solvent Free
260738	15 litre pail	Brown Standard
260711	15 litre pail	Yellow Standard
262463	600ml sausages	Brown Solvent Free
<b>ULTRALEVEL SL</b>		
267805	20kg Bag	Light grey
<b>HANDI-CLEAN TOWELS</b>		
257753	72 Towels per pack/6 packs per carton	

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The representations and recommendations regarding the products are based on tests which we believe to be reliable. However, no guarantee of their accuracy can be made because of the great range of field conditions and variations encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with a limited warranty only, and on the condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Bostik Findley Australia be liable to anyone except for replacement of the products or refund of the purchase price.

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