

Product Data Sheet

Primeseal MC

Water Based Epoxy Barrier Membrane, Primer & Sealer for Damp Surfaces, New Concrete

Description

Duram Primeseal MC ('Moisture Cure') is a water based, epoxy waterproof membrane.

Duram Primeseal MC is a high performance, versatile, two-part, water based, hydrostatic pressure resistant, waterproofing barrier membrane coating suitable for most types of porous and semi-porous surfaces including green (newly laid) hardened concrete and damp surfaces.

Primeseal MC cures to form a strong, waterproof, hydrostatic pressure resistant and water vapour pressure barrier and is formulated for application on to damp, newly laid concrete and most other construction surfaces.

Primeseal MC is suitable for potable (drinking water) applications and can withstand up to 25 metre head of water pressure.

Primeseal MC's versatility makes it also ideal as a primer for waterproofing membranes, paints, industrial coatings and as a bridging coating for normally incompatible coatings.

Primeseal MC's standard colour is light grey but is also available in off-white and black (minimum quantities apply).

Primeseal MC has very low VOCs and meets the 'Green Star' environmental criteria.

Uses

Duram PRIMESEAL MC is formulated for demanding waterproofing, sealing and priming applications including:

- Waterproofs and seals damp and green (newly laid) hardened concrete.
- Waterproofs negative (inside) surfaces.
- Waterproofs positive (outside) surfaces.
- Waterproofs above and below grade surfaces.
- Low water vapour pressure barrier. (Prevents or minimises bubbling of membranes due to vapour emissions from the substrate).
- Waterproofs basements, retaining walls, lift wells, cellars etc.
- Waterproofs tanks and water retaining structures, i.e. concrete or cementitious structures.
- Excellent primer for subsequent Duram membranes, paints and industrial coatings.
- Seals and primes timber floors prior to applying waterproofing membranes and other coatings.
- Seals concrete floors before laying timber floors.

Suitable Surfaces

Duram Primeseal MC is suitable for most construction surfaces including:

- Concrete, green (newly laid) hardened concrete, cement, cement render, brick, block work, masonry, Hebel, timber, FC sheeting, CFC sheeting, plasterboard and painted or coated surfaces.
- Damp surfaces - but freedom from standing, running, seeping water, saturated substrates and continual dampness is essential.

Additional Uses

- A general and universal primer on most types of substrates for membranes, paints and industrial coatings.
- A sealer coat over bitumen surfaces to allow the application of solvent and water based waterproofing membranes and other coatings.
- A sealer over damp surfaces to allow the application of urethane based waterproofing membranes.
- An intercoat bridging coating to allow the application of incompatible coatings.
- A primer and sealer of concrete, cement, cement render, timber, brick, block work, FC sheeting, CFC sheeting, plasterboard and bituminous surfaces.
- A primer over bituminous and torch-on membranes so that they can be top-coated or re-membraned.
- Top coat over Duram Cristoflex to provide an attractive colour and finish.

Specification

The information contained in this product data sheet is typical but does not constitute a full specification as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement but the applicator or contractor must use their skill, knowledge and experience to carry out additional works as may be necessary to meet the requirements of the project. Specification for specific projects should be sought from the Company in writing.

Limitations

Primeseal MC, being an epoxy, has low flexibility and is NOT designed to bridge live cracks or expansion joints. Primeseal MC can be effectively used for sealing inside (negative) wall surfaces, but this should method should only be employed if waterproofing the outside (positive) surfaces is not feasible or inaccessible.

Application Temperature Limitations:

- Between 10°C and 35°C.

Curing Limitations:

- Temperature must exceed 10°C and relative humidity must be less than 85%.
- If these conditions are not present then artificial ventilation and heating should be used.
- In confined , enclosed areas ventilation should be used to circulate air to enable the evaporation of water from the product.

Primeseal MC is not a permanently trafficable membrane, but suitable for service or trade foot traffic.

Where the product is to be used in hydrostatic water pressure applications, the surfaces on which it is applied must be and remain structurally sound and stable .

Benefits and Advantages

- Primeseal MC is user and environmentally friendly, solvent free and has negligible odour.
- Very low VOCs and meets the 'Green Star' environmental criteria.
- Can be applied to green (newly laid) hardened concrete.
- Can be applied to damp surfaces.
- Is a barrier against low water vapour pressure.
- Suitable for contact with potable (drinking) water. Conforms to AS4020-2000.
- Non-toxic and non-flammable.
- Can be applied in sensitive areas.
- Withstands up to 25 meter head of water.
- Easy to apply by brush, roller, squeegee and spray.
- Quick drying.
- Has excellent adhesion.
- Excellent water barrier.
- Can be used as a primary waterproof barrier on rigid surfaces.
- It will not re - emulsify.
- Seals over most existing coatings.
- Can be used to seal both the negative and the positive sides of the substrate.
- Compatible with all Duram waterproofing membranes and floor coatings.
- Acts as a bleed sealer over bituminous surfaces.
- Excellent primer over torch-on waterproofing products.

Precautions in Use

Primeseal MC is water based and contains very low VOC's and is considered safe to use. However, observe good hygiene and safety practices. The wearing of gloves and goggles against splashes is strongly recommended. Good ventilation is recommended and avoid contact with skin, eyes and mouth. If poisoning occurs contact Poison Information Centre. If swallowed DO NOT induce vomiting, give plenty of water to drink and seek medical advice. If in

eyes thoroughly flush with clean water, holding lid open to ensure any product maybe flushed away. If on skin wash with soap and water.

Priming and Surface Preparation

Good preparation is essential. Surfaces must be sound, stable, dry, clean and free of dust, loose, flaking, friable material and substances that may diminish adhesion.

To achieve a maximum bond existing coatings, membranes and adhesives should be removed so that the product can bond directly to the substrate.

Holes, gaps, blowholes, honeycombed surfaces and non-structural cracks should be suitably filled and made sound using a suitable non-shrink mortar. If the surfaces needs to be bagged, a bagging mix as follows should be applied to the surface.

Mixing:

Before combining, each component should be individually well stirred. Then mix equal portions of Part A and Part B thoroughly to a homogenous consistency before application. Avoid undue aeration. Only mix enough product that can easily be applied within 1 to 2 hours or pot life, which may be effected by prevailing climate conditions.

Bagging Primer Mix:

If a bagging mix is desired or required due to the condition of the substrate, it is important that the following mixing sequence is followed. Before combining, each component should be individually well stirred. Then mix equal portions of Part A and Part B thoroughly to a homogenous consistency. Add 30% water and thoroughly mix and then add sufficient 3:1 sand: cement mix to the Primeseal MC liquid to form a brushable or rollable consistency. Apply to surface, by brush or roller ensuring that the product is worked well in to the surface and that all holes, voids, indentations are properly covered. Allow to dry.

Application

Apply by brush, nylon broom, roller, squeegee or spray, in 2 or more coats, at the recommended application / coverage rate, to produce a uniform, solid coating. The wet film thickness per coat should approximate 330microns (0.33mm).

If applying Primeseal MC to dry concrete, cement, blockwork or Hebel it is recommended that the surface be lightly pre-dampened with a fine water spray before application.

The product should be worked well in to the substrate ensuring that all holes and voids are adequately covered. Avoid pinholes.

The first coat may be thinned up 20% to achieve good penetration depending upon the type, density and porosity of the surface. Generally, this should not be required and if possible should be avoided. However, if diluted, coverage must be adjusted (increased) to achieved net usage and curing times may increase.

If in doubt as to the adequacy of coverage, apply a further coat.

Allow each coat to dry before applying the next.

Coverage

The stated average coverage rate may vary depending upon type, condition, porosity, texture of the surface and application technique.

As an effective waterproofing membrane or barrier against low water vapour pressure:

- A minimum of 2 coats applied at 3m² per litre per coat.
- If this coverage is not achieved in two coats, an additional coat should be applied.
- The minimum dry film thickness should be 0.33mm.
- The waterproofing properties are enhanced when used in conjunction with suitable Duram waterproofing membranes.

Coverage per Kit Size for 2 Coats:

4 Lt. Kit - 6m²

10 Lt. Kit - 15m²

20 Lt. Kit - 30m²

As a general primer:

- 1 coat applied at 3m² to 4m² per litre per coat.

As a bitumen sealer to enable subsequent membranes or coating to be applied:

- 2 coats applied at 5m² per litre per coat.

As a sealer of a damp surface to allow the application of a polyurethane membrane:

- 2 coats applied at 4m² per litre per coat.

Colours

Standard colour is a light grey when parts A and B are mixed and cures to a semi-gloss finish but dulls off with ageing. It is available in 4,10 and 20 litre kits.

Primeseal MC is also available in black and other colours, by special order and minimum quantities may apply.

Drying and Curing

Drying and curing of the product is affected by type, dryness and porosity of the surface, temperature, humidity, ventilation, climate conditions and application technique and therefore drying and curing can only be given as a guide. It is essential that the membrane must not be damaged in any way including when applying subsequent coatings. Damp and cold surfaces will increase drying times.

At 25°C and 50% RH.

Touch dry Recoat Time: Pot Life (Approximately): Full Cure:

3 hours 4 hours 2 hours at 25°C & 1 Hours at 35°C 7 days

In an immersed application, the membrane should be allowed to achieve full cure prior to filling with water.

Subsequent Treatments

- Floor coating: Allow 3 days curing to prevent physical or mechanical damage.
- The membrane must be fully cured before applying decorative coatings, adhesives, mortars and levelling compounds.

Storage

Store in a cool, dry area away from direct sun light. Ensure unused product is sealed properly. Keep out of reach of children.

Clean Up

Wet spills must be promptly be cleaned up with water, but should be avoided as it is difficult to remove entirely from surfaces.

Tiling, Topping or Top Coating

Primeseal MC can be directly tiled or topped.

If using a solvent based adhesive to bond a covering over the surface, it is essential that the solvent vapours be allowed to fully escape before covering is applied or the covering allows for the full transmission of solvent vapours.

Safety & Precautions

Although this is a safe product to use product if recommended good safety and hygiene practices are followed. Refer to products Material Safety Data Sheet.

It is strongly recommended that protective clothing, gloves and eye protection are worn. Good ventilation is recommended and avoid contact with skin, eyes and mouth. If poisoning occurs contact Poison Information Centre. If swallowed DO NOT induce vomiting, give plenty of water to drink and seek medical advice. If in eyes thoroughly flush with clean water, holding lid open to ensure any product maybe flushed away. If on skin wash with soap and water.

For full safety data refer to the products Material Safety Data Sheet. Observe precautions as per label.

Tests and Technical Data

Service Temperature: 0°C to 55°C.

Application Temperature: 10°C to 35°C.

Volume Solids (approx.) 45%

Mixing Ratio: 1:1 by volume (Part A: part B)

Hydrostatic Pressure: Can withstand up to 25 metre head of water when applied at the recommended coverage rate with minimum dry film thickness of 300 microns.

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Conditions of Use and Disclaimer

The information contained in this Material Data Sheet is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided and the product is sold on the basis that the product is used for its intended

purpose and is used in a proper workmanlike manner in accordance with the instructions of the Product Data Sheet in suitable and safe working conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.

Material Safety Data Sheet

Primeseal MC

Water Based Epoxy Barrier Membrane, Primer & Sealer for Damp Surfaces, New Concrete

Classified as non hazardous material by the NOHSC.

Identification

Product Name: Primeseal MC
Other Names: Duram Primeseal MC
U.N. Number: N/A
Class: N/A
Hazchem: N/A
Code:
Poison: S5
Schedule:
Pack Sizes: 4 ltr, 10 ltr and 20ltr
Kits with Part A & B.

Physical Description

Appearance: Usually Grey liquid when mixed.
Boiling Point: +- 100°C - as for water.
Vapour: As for water.
Pressure:
Percent: >20% (mainly water)
Volatiles: water
Specific Gravity: 1.05 - 1.1
Flash Point: N/A (Water Based)
Flammability: N/A (Water Based)
Water Solubility: Soluble / Miscible (will re-emulsify when uncured)

Ingredients

Chemical	CAS No.	Proportion
Primeseal Part A		+ - 50%
Primeseal Part B		+ - 50%

Uses:

PRIMESEAL MC is a 2 part water based epoxy primer/sealer. Refer to PDS for its various uses.

Health Warning Information

Health Effects

Swallowed: Material is regarded as low oral toxicity and swallowing is unlikely. Irritating, possible nausea - will affect digestive tract if swallowed in volume with abdominal irritation, pain, and vomiting.

Eye: Irritation and discomforting and may cause mild temporary redness of the conjunctiva, temporary vision impairment and damage, prolonged contact may damage eye, possibly long term.

Skin: Mildly irritating. May affect skin with prolonged contact such as dermatitis. Avoid exposure to skin that is cut, damaged or irritated.

Inhaled: Irritating - may cause nausea with prolonged contact. Inhalation unlikely due to viscosity and non volatility of the product. Vapours (predominantly water) may be occur at higher than normal temperatures.

CHRONIC HEALTH EFFECTS

Prolonged contact or continuous long term working in confined and poorly ventilated areas may cause irritation response, sore, eyes / nose and possible headache and dermatitis.

Avoid contact with unprotected skin, inhalation of vapour or ingestion. Observe good occupational work practices.

First Aid

Swallowed: Do not induce vomiting. Give plenty of water to drink. Rinse out mouth. Seek medical assistance or contact the Poisons information Service (Australia 121126 and New Zealand 03 4747000).

Eye: Flush thoroughly with clean water, holding eye lid open to flush product from under the lid. Removal of contact lens after injury should be done by a skilled or medical person.

Skin: Remove contaminated clothing, and wash with soap and water.

Inhaled: Product is water based. Treat for drowning. Remove person to fresh air and perform artificial respiration if

required and seek urgent medical assistance. If fumes are inhaled, remove to fresh air, lay patient down, keep warm and rested. This is usually sufficient.

Advice to Doctor

Treat symptomatically.

Precautions in Use

Product is considered low risk.

Exposure Standards

Non assigned. Refer to individual constituents.

ENGINEERING CONTROLS

Use in well ventilated areas. General exhaust is adequate under normal operating conditions.

Exposure Limits

Refer above.

Ventilation

Product should be applied in areas with adequate ventilation.

Personal Protection

Gloves: Rubber or PVC. Do not use solvent to clean the skin.

Eyes: Safety goggles. The wearing of contact lenses poses an additional risk. Soft lenses may absorb irritants and all lenses concentrates them.

Feet: Wear safety footwear.

Safe Handling Information

Storage and Transport

Store in cool, dry area and place out of the reach of children. Product is not flammable. Avoid freezing.

Suitable containers: Plastic pails as recommended by manufacturer.

Check containers are labeled and not damaged.

Storage incompatibility: None known.

Transportation Restrictions: None.

Spills and Disposal

Prevent spills from entering the drains or sewers. Absorb product with sand or earth or absorbent material and dispose to land fill in accordance with local council regulations. Product will dry and become inert.

Major spills unlikely due to individual size of containers.

Fire / Explosion Hazard

N/A - product is water based and is not combustible and should not decompose explosively.

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