

Water Borne Epoxy Moisture Barrier Coating

Guardian MG Primer is a 2 component, semi-gloss to gloss water based epoxy coating. When applied 2 coats at 300 micron dry film thickness it will provide a tenaciously bonded coating controlling the trans-mission of liquid moisture.

Complies to EN1504 Part 9 and EN1504 Part 2

Principle 5 : Increase in Physical Resistance (PR).

- Method 5.1 – Overlays or Coatings.

Principle 6 : Resistance to Chemicals (RC).

- Method 6.1 – Overlays or Coatings.

Principle 8 : Increasing Resistivity (IR).

- Method 8.3 – Overlays or Coatings.

USES & ADVANTAGES

In 2 coats use as a low water vapour transmission membrane over floors to prevent water under hydrostatic pressure passing through to the internal surface; to prevent water seepage or dampness to the interior walls & floors of basements, tunnels, lift wells, retaining walls & carparks, may be used as a waterproofing membrane to potable water tanks & reservoirs and over freshly laid (green) concrete prior to the application of carpet and tile adhesives or most paints. Use to protect elastomeric roof coatings from moisture movement. In a one coat application use as a barrier / seal coating over freshly laid concrete or wet surfaces to prevent moisture affecting the drying or curing of subsequent membranes/coatings.

Advantages include the following:-

- As a cured damp proof membrane that will withstand hydrostatic water pressure.
- Compatible with damp substrates.
- Compatible bonding with most subsequently applied coatings, bonding agents, and adhesives.
- Water based with no odour or volatile emissions.
- Easy clean up using water.
- Excellent adhesion to a variety of substrates including, concrete, brick, masonry, block, compressed fibre board, stone and timber.
- Readily sanded if required.
- Non toxic and non flammable.
- Good anti-flash & antirust for steel as a coating.

PROPERTIES

The values and properties below are achieved under laboratory conditions. Actual on-site values may show minor variations from those quoted.

Component:	2 Part	Part A-Base	Part B-Hardener
Mixed Density:	1.07± 0.02 kg/ltr		
Pot life:	2 hours	at 25°C	
	1 hour	at 35°C	
Time Between Coats:	2 hours	at 25°C/50% R.H.	
	Max 3 days at 25°C/50% R.H.		
Dry Film Thickness:	300 micron in 2-3 coats		
Full Cure:	7 days at 25°C/50% R.H.		
Mix ratio:	Base : Hardener		
by weight	1 : 2		
by volume	3 : 7		

Water Borne Epoxy Moisture Barrier Coating

Volume Solids:	approx. 55%	
Colour:	Grey when mixed (various colour available on request)	
Finish:	Semi gloss to gloss	
Bond Strength:	>3 MPa (Concrete failure)	ASTM D4541
Shore D Hardness:	>60	ASTM D2240

DESIGN CRITERIA

Guardian MG Primer is designed to be applied in two coats to achieve a uniform theoretical dry film thickness of 300 micron.

A minimum of 3 hours (temperature dependent) should elapse between the 2 coats and subsequent applications should not occur prior to a minimum cure of 3 days.

SUBSTRATE PREPARATION

It is essential that **Guardian MG Primer** be applied to a sound, clean substrate, free of previous coatings, grease, oil, dirt, adhesives, laitance and any other surface. A variety of methods can be used in the surface preparation, and is dependent on the state and type of contamination. This can range from high pressure water blasting to mechanical scarification. Any holes, non structural cracks etc. should be primed with **Guardian MG Primer** thinned with water and filled with a mortar prepared from 1 part cement, 2 parts clean washed sand and 1 part **Guardian MG Primer** mixed and allowed to cure for 3 hours at 25°C. Very dry and highly porous surfaces should be sprayed with a fine mist of water prior to the application of the first coat of **Guardian MG Primer**.

MIXING

Individually mix each component Base and Hardener to homogenous state prior to combining. Ensure the mixing paddle is changed before mixing the second part.

Add part B to part A container under slow speed (RPM 400) to avoid aeration. Mix for 1 minute, scrap down the side walls & bottom of the container with a spatula. Then again mix for 2 minutes until uniform colour is achieved.

Note: 10-15% water can be added to dilute the mix, if first coat needs to be a penetrating primer coat.

COATING

Spread the material with a suitable squeegee or stiff nylon broom, working the **Guardian MG Primer** into the surface to ensure total absorption into any pin holes and voids. Finish off using a medium to long nap roller. Spray application is also acceptable.

Care must be taken to ensure the required application rates are achieved to ensure the minimum dry film thickness per coat.

PRECAUTIONS

Do not apply at temperatures of 10°C and falling, above 35°C or above 85% R.H.

Care should be taken when sandwiching adhesives between the very low water vapour transmission rate **Guardian MG Primer** and floor coverings such as carpet, vinyl or timber to ensure the water vapour transmission of the covering is sufficient to allow the escape of any solvents.

Where wood floor coverings are to be installed a third coat of **Guardian MG Primer** is recommended in conjunction with compatible a cement based floor levelling.

COVERAGE RATES

300 micron is the minimum theoretical dry film thickness to be achieved to ensure all the advertised performance properties of **Guardian MG Primer** are met.

This is achieved by applying 2-3 coats at an average.

3.46 m²/kg/coat@150 micron DFT (or) 3.70m²/ litre/coat@150 micron DFT for floor.

Water Borne Epoxy Moisture Barrier Coating

CLEANING

Wash all equipment in water or water/detergent prior to setting of the product.

PACKAGING

Guardian MG Primer is supplied in 20 litres set.

STORAGE & SHELF LIFE

All products have a shelf life of 12 months if kept in a dry store in the original, unopened packs. Store in dry conditions between 10°C and 30°C, away from sources of heat and naked flames in the original, unopened packs.

If stored at high temperatures the shelf life may be reduced. **Guardian MG Primer** should be protected from frost.

HEALTH & SAFETY

Guardian MG Primer should not come in contact with the skin and eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provides additional skin protection.

If poisoning occurs, contact a Doctor. If swallowed, **do NOT** induce vomiting - give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

Product Material Safety Data Sheets for Guardian products are available to users on request. Read MSDS and data sheet carefully first before use.

Guardian MG Primer is non-flammable.

DISPOSAL

Spillages of component products should be absorbed on to earth, sand or other inert material and transferred to a suitable vessel. Disposal of such spillages or empty packaging should be in accordance with local waste disposal regulations. Cured product is safe to dispose of as landfill. For further information, refer to the Product MSDS.

TECHNICAL SERVICE

Guardian Coating Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

QUALITY ASSURANCE (OEM)

ISO 9001: 2015 verified by TUV Nord.

ISO 14001 : 2015 verified by Lloyd's Register International.

DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc.

Guardian does not take responsibility nor need to defend others testing that does not achieve the published data.

The user must test the products suitability for the intended application and purpose. Guardian reserves the right to change the properties of the product.

Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advice offered.

All statements and data presented herein are given in good faith and believed to be appropriate and reliable. It is given without express or implied warrant or guarantee. Potential users of Guardian's materials are urged to conduct confirmatory trials to satisfy themselves as to the suitability of the selected product for their particular end use prior to purchase.