

2 components ready to use solvent free epoxy primer for substrates with high moisture content

## DESCRIPTION

DUPRIME 200 is used as primer to improve the concrete surfaces for optimum adhesion of industrial flooring systems. It can also be used as a moisture barrier for concrete substrate with residual moisture content up to 6 CM%.

It can be used on green concrete (7 days old) provided the concrete is produced using stringent water : cement ratio of 0.48 and finished with a bull float finish.

## RECOMMENDED USE

- All types of concrete sealing.

## FEATURES AND BENIFITS

- **Environmentally preferred coating** – Green Label certified by Singapore Environmental Council (SEC).
- **Excellent adhesion** - to concrete, asphalt and most building materials and compatible to all other coating or topping systems.
- **High build** – ability to fill pores and bridge micro cracks.
- **Moisture tolerant** – suitable for substrate with moisture content up to 6 CM%.
- **Compatible to newly cured concrete** – can be applied to 7 day old concrete.
- **Low / no odour** – does not taint food.
- **Solvent Free** – non-flammable, no fire hazard.

## PERFORMNCE TEST DATA

Adhesive strength (DIN ISO 4624)	> 1.5 N/mm <sup>2</sup> (concrete failure)
Solids Content	99 %
Density (25°C)	1410 kg/m <sup>3</sup>
Viscosity (25°C)	1500–2500 mPas
Appearance	whitish
Shelf Life	12 months in closed original container
Storage	Dry at 10–30°C, avoid direct sunlight

## TECHNICAL DATA

Working Time (20°C)	approx. 20 minutes (+ 5 minutes pre-reaction time)
Application Temperature:	10 – 30°C (min. 3°C above dew point)
Permitted Rel. Air Humidity*	min.40% - max.90%
Material Consumption	approx. 300–500g/m <sup>2</sup> per layer
Overcoating (25°C)	within 24hours
Cure time to withstand: Foot traffic (25 °C) Heavy Traffic (25°C) Exposure to chemicals (25°C)	after 12 - 15 hours after 3 days after 7 days

## APPLICATION

### Substrate Preparation:

The substrate must be firm, clean, dry and have a pull-off strength of 1.5 N/mm<sup>2</sup> minimum.

Wet areas shall be dried with a blow torch. The moisture content in the substrate must not exceed 6 CM%. There should be no water in the pores.

New concrete must be allowed to cure for a minimum of 28 days. However, for bull float finish concrete with 0.48 : water : cement ratio, 7 days cure is adequate.

Repair imperfections (holes and cracks) with an epoxy patching compound such as DUPOXY SL where necessary.

Remove surface laitance, contaminants, coating, curing compound and all weak and loose materials.

Prepare substrate by Captive Shot Blasting or Diamond Grinding to provide the appropriate

### Statement of Responsibility (Disclaimer)

The technical information and application advise are based on present state of our best scientific and practical knowledge. As the information herein of a general nature, no assumption can be made as to a products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

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surface profile for optimum mechanical interlocking.

No grinding or shot-blasting is necessary for bull float finish concrete with 0.48 water: cement ratio.

#### **Procedure:**

Before starting the application, the material temperature must be close to the site conditions.

Empty contents of component B (Hardener) into component A (Base Resin). Mix with a suitable mixer at a speed of 500 rpm to avoid incorporating excessive air into the mix. Mix for 2 minutes.

Transfer the mixture into another clean container and mix for 1 minute. Allow a pre-reaction time of 5 minutes.

Spread the mixed product onto the surface with a squeegee and back roll with a roller at the consumption rate of 0.2 – 0.4 kg/m<sup>2</sup> depending on the porosity of the concrete surface.

For substrate with residual moisture content up to 4 CM% applied only once.

For substrate with residual moisture content above 4 and up to 6 CM%, apply twice. The first layer must be applied with spatula at minimum consumption rate of 0.5 kg/m<sup>2</sup>, followed by a second layer at minimum consumption rate of 0.3 kg/m<sup>2</sup>. The first layer must not be sprinkled over with quartz sand. The second layer can be rolled with a short pile roller 4 hours after the application of the first layer. Ensure that a film-forming, closed surface is produced.

To improve inter-layer adhesion, sprinkle 0.3-0.8 quartz sand lightly (approx. 800 g/m<sup>2</sup> while the primer is still wet. If a two coat application, sprinkle 0.3-0.8 quartz sand only on the second coat.

#### **OVERCOATING**

Over coating has to take place after 4 hours but within 24 hours after application of DUPRIME. If longer, the surface has to be lightly grinded before over-coating.

#### **STORAGE/ SHELF LIFE**

Duprime 200 must be stored where temperatures are between 5°C - 45°C. Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is 24 months when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

#### **PRECAUTION**

Care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapor until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Information relating to the safe handling of this product can be found in the Material Safety Data Sheet. Local regulations concerning the safe handling of epoxy resin based coating materials must be observed. Suitable protective clothing including suitable eye protection must be worn.

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