



20 Hydrocoat Water Base Epoxy Coating (Clear)

DESCRIPTION

20 Hydrocoat is a clear two-part water-based epoxy primer sealer for concrete, masonry, fibrocement and other cementitious surfaces.

20 Hydrocoat may be mixed in equal parts by either weight or volume.

RECOMMENDED APPLICATIONS

As a primer sealer for concrete, masonry, bricks fibrocement and other cementitious surfaces.

As a decorative high gloss finish over ground or coloured concrete. If a satin finish is required: 20 Hydrocoat clear satin is recommended.

As a water-impermeable coating to protect against dampness and seepage.

As a binder and reinforcer for dusty and eroded concrete surfaces.

As an adhesive tiecoat between old and new cementitious compounds.

TECHNICAL DATA

Resin Base:

Appearance: Milky liquid

Chemical base: Epoxy resin

Solids: 64%

Viscosity: 5,000cps

Specific gravity: 1.08

Hardener:

Appearance: Amber liquid

Chemical base: Polyamine adduct

Solids 38%

Viscosity 5,000cps

Specific gravity: 1.05

Mixing ratio: Equal parts, weight or volume

Pot Life: 1-2 hours

Surface appearance: Glossy

Touch dry: 6 hours

Hard cure: overnight 20°C

Complete cure: 28 days, 20°C

Minimum curing temperature:

8°C

Permeance: $0.37 \times 10^{-8} \text{gPa.s.m}^2$

ASTM E96094: Sect

12 (Water Method)

Potability: Conforms to AS/NZS4020-1999

RECOMMENDED COVERAGE:

Dependent on surface porosity and expected service conditions. Recommended total coverage: $4\text{m}^2/80\text{u}$ dry film/L (if used undiluted).

PERFORMANCE DATA

- May be applied to dry or moist surfaces.
- Good adhesion to all common building substrates.
- Tolerant of poorly prepared surfaces.
- Resistant to oil, petrol, common soils, stains and detergent cleaners, once cured.
- Suitable for indoor and outdoor applications.
- Compatible with cementitious compounds.
- contact with strong acids, alkalis, or aggressive solvents;
- over untreated steel;
- application in areas which are actively leaking during use, or where active leakage is likely to occur within the first 72 hours of use;
- **Do not use at ambient/slab temperatures below 10°C**

APPLICATION

20 Hydrocoat clear is usually reasonably tolerant with regard to surface preparation. Nevertheless to maximise adhesion it is important that application is to sound, clean concrete. Laitence should be removed by acid etching or sweep blasting. Acid etched concrete should be neutralised with dilute ammonia and then thoroughly rinsed with water to remove all water soluble salts which impair adhesion of the coating. Old concrete should be thoroughly cleaned with detergent cleaners. Severe contamination with oil and grease should be removed by steam cleaning. If penetration of the pores has occurred, mechanical cutting back to clean concrete may be required. Add the hardener to the base and thoroughly stir by means of a hand-held mechanical mixer until all of the hardener is completely absorbed into the base. It is advisable to allow the mixed composition to mature 5-15 mins before application.

20 Hydrocoat will not perform as specified, if applied

HAZARD & FIRST AID

over paint, dust, or old adhesive.

Where it is intended to use part units; the resin and hardener base should be separately mixed before removing smaller quantities, and then mechanically mixed together for two minutes minimum. 20 Hydrocoat may be applied by brush, roller, air assisted or airless spray.

20 Hydrocoat clear may be applied as supplied, however, the addition of 10-20% water (to the first coat only) is recommended to assist in achieving even coating & penetration. For cement modifications still larger amounts of water may be added.

If using spray application; the product must be rolled after applying to ensure complete even coverage.

Application should be completed before expiry of working life which is indicated by a marked increase in viscosity.

Apply a minimum of two coats for a wear and soil resistant floor finish. (see notes on application rates).

Over coating may proceed when the touch-dry stage is reached (Tack free).

Cured at room temperature of 15-20°C, 20 Hydrocoat clear will be ready to accept foot traffic next day. For heavy traffic, as for instance fork lifts trucks, it is advisable to wait a 4-5 days.

IMPORTANT NOTES

Due to its water based formulation; the degree of penetration of 20 Hydrocoat will vary not only on the surface absorption, but also upon the applied coating thickness, and drying time of the first coat. It is imperative that an even application be achieved, in order to give an even coloured film. Variation in absorption will produce variability in final coating appearance.

If 20 Hydrocoat clear is exposed to moisture prior to tack free cure, it may become permanently "cloudy" once cured.

20 Hydrocoat clear has been formulated to show optimum curing and application characteristics in the temperature range from 15-25°C. At lower temperature that rate of cure will slow down considerably and the product will be thicker and more difficult to apply. At higher temperatures the working life of the mixed composition may become too short for manual application.

Cracks and Floor joints will not be sealed by 20 Hydrocoat. These will need to be filled with a suitable proprietary filler (epoxy, or 2 part modified urethane) prior to application.

As with all water-based coatings it is inadvisable to use any 20 Hydrocoat product under conditions of very low temperatures and high humidities.

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Refer to Material Safety Data Sheet.

continued

POST APPLIED TOP COVERINGS:

20 Hydrocoat clear is designed as a non-moisture permeable decorative coating. If it is intended to apply a top covering such as carpet or vinyl, it is recommended to use 20 Hydrocoat grey instead. If however it is required to lay over 20 Hydrocoat clear it must be recognised that water based adhesives will have considerably extended open times even with porous coverings such as carpet. If laying impermeable coverings such as vinyl sheet; either a layer of screed (3-5mm minimum thickness), contact adhesive, or reactive adhesive (e.g. Polymer 8000) will need to be used. When laying a screed over 20 Hydrocoat, check with the screed supplier, as to any preparation required to achieve acceptable adhesion.

CORRECT APPLICATION RATES:

If used solely as a decorative finish, total film build, and therefore coverage rate are not the most critical factor. For domestic traffic, a final coverage of 3.0-4.0m²/L (mixed) (or about 6.0-8.0m²/L/coat for a 2 coat application) will provide a satisfactory finish. For heavier traffic areas, or where the product is used to provide a moisture barrier system the coverage rate becomes much more critical. A total coverage of 2-3m²/L for heavy traffic areas, or 1.6-2.0m²/L for moisture barrier systems are required. Typically; the first coat will have a lower coverage rate than second or subsequent coats, due to absorption, and the roughness of the surface.

For example, if used as a decorative moisture barrier, the application rates might be:

1st coat 3.0m²/litre (approx 140u dry)

2nd coat 5.0m²/litre (approx 85u dry)

CLEAN UP

Clean up of brushes, roller sleeves and spraying equipment is by means of soapy water, before they dry.

PACKAGING

20 litre unit (10Lt base in 10Lt can, 10Lt hardener in 10Lt can).

GENERAL PRECAUTIONS

- Do not allow condensation to form on film of 20 Hydrocoat while drying/curing.
- Do not use outside, if rain is expected in the next 12-24 hours.
- Adequate ventilation is required to remove moisture vapour from film, and to allow odour (epoxy) to dissipate.
- Do not use mixed product beyond its pot life of approx two hours after mixing.
- If using solvent based adhesive, or other solvent based products over 20 Hydrocoat; allow at least 72 hours to cure prior.