

Waterbased 2 part epoxy coating for concrete floors

Description

Low sheen coating consisting of two parts, Part A (white opaque resin) and Part B (hardener). Part A & B are mixed in equal parts by volume (not weight) to result in a viscous solution which is then tinted with Avista Waterbased Colour Tint.

Uses

An epoxy based coating for internal concrete floors and Avista Decorative Flake Flooring. Ideal as a coloured coating for garage floors, light traffic warehouse floors, office floors. Allergy free coating for house slabs.

Advantages

- Water dispersible (can be diluted up to 10% with water for first coat)
- Water wash-up
- Very low odour
- Can be tinted using Avista Waterbased Tints; Customised colours can be achieved.
- Excellent adhesion to concrete surface and damp but not wet concrete
- Can be overcoated with Avista Polyurethane Sealer or Avista Urethane Acrylic for a harder wearing surface.
- Can be sprayed for a decorative fleck finish or be used in the partial flake system.
- Sand can be added to create a slip reduced finish - see sand application.

Properties

Appearance (mixed):	White opaque viscous liquid
Mix ratio:	1:1 by volume
Pot life @ 25°C:	2 to 4 hours (approx)
Track free @ 25°C:	2 to 4 hours (approx)
Recoating time @ 25°C:	4 hours (approx)
Light trafficable @ 25°C:	24 hours (approx)
Full cure @ 25°C:	4 days (approx)
VOC Content:	21 gms per litre (when mixed with Avista Waterbased Colour Tint).
Adhesion to:	
Old concrete:	Excellent (concrete failure)
Green concrete:	Excellent (concrete failure)
Flexibility:	Good
Hydrostatic pressure:	Good (3 coats DFT 300 micron)

Chemical Resistance (fully cured):

2 weeks immersion @ 20°C

Water	Little or no effect
10% Caustic	Little or no effect
Petrol	Little or no effect
10% Acetic Acid	Little or no effect
10% Sulphuric Acid	Little or no effect
Antifreeze	Little or no effect
Crude Oil	Little or no effect
Vegetable Oil	Little or no effect

Application Instructions

Preparation

Ensure surface to be coated is free of all dirt, grease, oil, paint, curing agents and other contaminants.

If the floor is smooth, grinding is advised. This will maximise adhesion.

If curing agent has been applied, grinding is necessary.

Acid treatment is a secondary option. Acid etch with hydrochloric acid. Dilute approx 20 parts water to 1 part acid (depending on porosity) to remove any loosely bound cement and laitence. **NOTE:** smooth concrete will require a higher acid content. Maximum strength - 10 parts water to 1 part acid. Pressure clean immediately to clean and remove all remnants of acid (do not allow acid to dry on surface). Pressure clean at minimum 2000 psi (large open areas, example factories and warehouses, required for this preparation).

Mixing

Mix A and B in correct proportions (1:1 by volume) in a clean, dry 20 litre bucket. Mix thoroughly for a minimum 3 minutes with mechanical mixer at low speed until mix colour is uniform (white).

Transfer contents into separate clean bucket. Ensure no unmixed product remains in the first bucket. Mix again.

Add 1 x 400ml Avista Waterbased Colour Tint per 8 litre kit. Mix thoroughly until even colour is achieved.

Note: First coat can be diluted up to 10% with water.

Application

The mixed product is best applied using roller or hopper spray. Roller tray is required for roller application.

Ensure coats are applied evenly and not too thick; 6m² / litre / coat. First coat can be diluted up to 10% with water. Second coat to be applied undiluted.

Allow approximately 4 hours between coats, depending on conditions.

Third coat may be required in the lighter colours.

To obtain a lower slip factor it is advisable to use the appropriate slip reducing additive with the sealer for better grip under adverse conditions.

Avista Internal Flooring Waterbased Epoxy



Sand Application

Sand application by hopper gun only.

After Part A, Part B and tint is thoroughly mixed, add 1 kg (or 650ml) of sand for every litre of product.

Clean washed fine silica sand must be used.

Mix thoroughly and add mix to hopper gun. Spray both coats to surface at approximately 30-35 psi.

Partial flake system application

Remove Avista Decorative Flakes from the carton and place in a suitable clean, dry bucket.

The Flake is applied after the final coat of Avista Waterbased Epoxy. The epoxy coating must have adequate film build for flake to adhere to. Do not allow to dry prior to applying flake as this can result in a patchy appearance. Suggest completing this step in manageable sections, by rolling approximately 10m² and applying partial flake whilst area is still wet.

Immediately after applying Avista Waterbased Epoxy coating and while resin is tacky, walk over the surface wearing spiked shoes and sprinkle the dry flake over the surface so it is partially covered. The best method is to have very little flake in hand and throw it up high so it falls evenly..

Allow Avista Waterbased Epoxy to cure (approximately 4 to 6 hours depending on conditions prevailing). Once completely dry, scrape any excess flake from the surface with an aluminium scraper or trowel. This ensures no loose or sharp protruding flake is left on the surface.

Broom and discard excess flake.

Vacuum thoroughly.

Top Coats - using Avista Polyurethane

First coat

Approximate coverage - 3m² per litre

Decant the quantity of Avista Polyurethane required for immediate use only. The original container should be re-sealed immediately against moisture.

Apply Avista Polyurethane by 100% mohair roller. Ensure even application.

Application subsequent coats

One extra coat is needed to get coverage over the partial flake

Approximate coverage - 6 to 10m² per litre.

Second coat should be applied within 6 -18 hours of previous coat, dependent on conditions prevailing. If too much time is allowed for cure, adhesion can be difficult to obtain on subsequent coats.

If too much time has elapsed then the first coat will have to be abraded and solvent wiped to provide extra key before the second or third coats are applied.

A slip reducing additive may be added to the final coat, particularly if the area gets wet. Refer to Avista Slip Reducing Additive TDS. Gloss reduction will occur.

When surface is thoroughly dry, a very light mist of water over the Avista Polyurethane will accelerate cure. Recommended pump action sprayer or small spray bottle.

Fleck finish system application

Apply 2 roll coats of tinted Avista Waterbased Epoxy as described above. Once the coating is dry enough to walk on, mix the required amount of epoxy for the fleck. (coverage rate for fleck is approximately 20m² per mixed litre).

If applying a white fleck, no tint is needed as the product is already white when mixed. To add tint for a coloured fleck, start with 20ml of tint per litre. (more or less can be added to achieve required colour). Add mix to a hopper gun. Hold up high with the pressure approximately 15 PSI, half pull trigger and spray the required amount of fleck to surface moving back at all times (Spray less as you can always add more) For a second fleck you can wear spiked shoes to walk out and apply fleck. (Be careful not to drag feet or hose across the floor). Once fleck is dry, if a gloss or a more resistant finish is required, apply one to two coats of Avista Polyurethane Sealer or Avista 2 Pack Urethane allowing no less than 6 hrs and no more than 18 hrs between coats. If too much time has elapsed between top coats, a light pole sand will be required to create a key for the second coat of Sealer.

Curing Time

After sealing it is recommended that the sealed surface be protected from:

- Foot traffic for a minimum of 24 hours
- Vehicle traffic for a minimum of 4 days

The time depends on weather conditions and coating thickness, therefore, check suitability before allowing traffic.

Limitations

- Suitable for Internal use only.
- Application temperature 10°C - 35°C.
- Not suitable as a waterproofing membrane.
- Product may go chalky in direct sunlight if not overcoated with Avista Polyurethane Sealer or Avista Urethane Acrylic Sealer, refer to product data sheets.
- Not available in clear. Refer to other sealers in the Avista Sealer Range.

Avista Internal Flooring Waterbased Epoxy

Supply

AVS WATER BASED EPOXY PART A RESIN 4L:	FD478089-4L
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AVS WATER BASED EPOXY PART B HARDENER 4L:	FD478090-4L
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Coverage

As a primer 1 litre per 6 m² depending on surface porosity.

As a top coat 1 litre per 6 to 10 m² depending on surface porosity.

Shelf Life

12 months from manufacture if stored unopened in ideal conditions.

Storage

Store in a cool dry area, away from oxidising and reducing agents, amines, acids and alkalis.

Maintenance

Remove oil, grease and other contaminants immediately with a general purpose cleaner.

Cleaning

Clean up with water.

Safety

Ensure appropriate PPE is worn.

Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.



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