

**AQUACLEAN EPOXY FINISH** Two Component Water-based Epoxy

*Updated Jun'23*

**AQUACLEAN EPOXY FINISH** is a two-component, water-based epoxy coating, with self-priming properties for both floors and walls. It comes with superior water vapor permeability, moisture tolerant, and low out-gassing properties. **AQUACLEAN EPOXY FINISH** is a hygienic coating, compliant with HACCP, making the coating suitable for food industries and clean rooms. It has excellent chemical resistance properties against various solvents, oils and chemicals.

**Product Features:**

- Water-based, low odour, hygienic
- Water vapour permeability
- Self-priming
- Less sensitive and tolerant with moisture during application.
- Extremely good adhesion on concrete.
- HACCP compliance

**Application Area:**

- Ideal to be used on concrete wall and floor for dust proofing protection.
- Recommended for area that requires easy maintenance and chemical resistance.
- Suitable for use in food industrial, assembly plant, pharmaceutical, warehouse, car parks, clean room environment and light industrial area.

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size	
Water Base	Interior	Low Gloss	Concrete Floor and Wall	Part A: 4 kg Part B: 1 kg	Part A: 16 kg Part B: 4 kg

**Technical Data**

Solid Content	: 78% ± 2
Density	: 1.35 kg/L
Viscosity	: 3500 ± 500 cps
Shelf-life	: 12 months (tightly sealed and properly stored at 5-30°C)
Mixing Ratio	: 4:1 (by weight)
Pot-life (28°C)	: 30 minutes
Consumption	: 0.18 kg/m <sup>2</sup> /coat

*This theoretical coverage rate has been calculated from the volume solids of the material and is related to the amount of coating applied onto a perfectly smooth surface without wastage. For a practical coverage rate, due allowance should be made for atmospheric conditions, surface roughness, geometry of the article being coated, the skill of applicator, method of application etc. when estimating quantities required for a particular job.*

Recommended Thickness	: 120 um DFT per coat
No of coats	: 2-3 coats
Recoat Time	: within 14 – 18 hours @28°C
Cleaning Solvent	: water

**Performance Data**

Adhesion Strength	: Concrete cohesive failure at > 1.5N/mm <sup>2</sup> (ASTM D4541)
Water Vapor Transmission	: 0.79 g/h.m <sup>2</sup> (ASTM E96/E96M-10)
Growth of Aquatic Microorganisms	: < 2.39 mg/(BS6920: Part 1)
Abrasion Resistant	: < 31 mg / 1000 revolutions /1kg load (ASTM D4060)

**Recommended Coating System**
**Concrete Floor**

 Finishing Coat : **AQUACLEAN EPOXY FINISH** : 2-3 Coats

**Concrete Wall**

 Finishing Coat : **AQUACLEAN EPOXY FINISH** : 2-3 Coats

**Application Method**

- |   |   |
|---|---|
| Substrate Requirement<br>(Concrete Floor) | <ul style="list-style-type: none"> <li>Concrete or screed substrate compressive strength should be of minimum 25 N/mm<sup>2</sup> and adhesive pull off strength of 1.5 N/mm<sup>2</sup>.</li> <li>The moisture content of concrete shall be &lt; 4% according to ASTM F2659, measured by Tramex meter. It shall be free from rising damp and must be waterproofed against negative ground water pressure.</li> </ul>   |
| Surface Preparation<br>(Concrete Floor)   | <ul style="list-style-type: none"> <li>Concrete substrate must be clean, free of laitance and contaminants.</li> <li>Prepare the concrete substrate surface by captive shot blasting, scarifying or mechanical grinding. Repair damaged area and patch up cracks and holes using a suitable repair material compatible with the coating system.</li> <li>In the event the moisture content is &gt; 4%, FLOORSHIELD SF EPOXY MORTAR may be applied as moisture barrier system, seal the porosity with FLOORSHIELD SF EPOXY OP TEXTURE WHITE.</li> <li>Allow to cure over-night before the application of subsequent coating system.</li> </ul> |
| Surface Preparation<br>(Concrete Wall)    | <ul style="list-style-type: none"> <li>Surfaces should be clean, dry and free from oil, grease and contaminants before painting.</li> <li>For previously painted surfaces, remove all unstable paint film, loose chalk, dust and foreign matter.</li> <li>Repair any surface defects, clean off and dry.</li> <li>Avoid painting on the substrate with high moisture content.</li> <li>Avoid painting when the environment's relative humidity exceeds 85%, or when the surface to be painted is less than 3°C above the dew point.</li> </ul>  |
| Application                               | <ul style="list-style-type: none"> <li>Stir Part A for 30 seconds by using a suitable electrical stirrer (with 750-watt high power mixer), then add all of Part B (Hardener), and mix both parts thoroughly for 1 minute.</li> <li>Slowly add 5-10% of clean water while mixing continues, for a further 1 minute 30 seconds until a fully homogeneous mixture is achieved.</li> <li>May be applied by brush, roller or spray. Spread with a squeegee and back roll with a roller.</li> </ul>   |

**Cleaning**

Clean up equipment with water immediately after use.

**Storage and Shelf Life**

The product must be stored in accordance with national regulations. Keep the containers in a dry, cool, well-ventilated space and away from sources of heat and ignition. Containers must be kept tightly closed. Handle with care. The shelf life of Part A and Part B are 12 months.

**Environmental Conditions During Application**

Do not apply when the environment relative humidity exceeds 85%, or when the surface to be painted is less than 3°C above the dew point. Do not apply at temperature below 10°C and temperature above 45°C.

**Safety Precautions**

- Keep container tightly closed and keep out of reach children or away from food and drink.
- Ensure good ventilation during application and drying.
- When applying paint, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from skin by using soap or water.
- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose off any paint waste in accordance with the appropriate Environment Quality Regulations.

**Note**

\* Theoretical Coverage is based on a mathematical formula

$$\left[ \frac{\text{Dry Film Thickness (um)} \times \text{Specific Gravity}}{\text{Volume Solid (\%)} \times 10} \right] = \text{kg/m}^2/\text{coat}$$

and does not consider LOSS FACTORS.

Variables like porosity of substrate, application method, dilution ratio, dry film thickness, opacity and so on will affect the loss factor and can vary from 30% - 50% or even more.

The above information is given to the best of our knowledge based on laboratory tests and practical experience.

However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself. We reserve the right to alter the given without prior notice.