# **EpiMax333AR**

# High Build Acid Resistant Coating

# Description

**EpiMax 333AR High Build Acid Resistant Coating** is an exceptional two-pack solventless, novolac based coating system suitable for a variety of applications including acid-proofing of floors, walls, secondary containment structures and wastewater asset protection.

EpiMax 333AR provides high level chemical and mechanical protection for concrete, steel, and other prepared surfaces.

This system outperforms traditional epoxy coating systems due the fact that it is specially formulated with a unique polymeric novolac resin

to fortify the coating matrix and promote cure to a very highly cross linked chemical structure. The other unique feature of this system is that it offers low viscosity and, therefore, easy application with good surface wetting. As a result, adhesion characteristics are excellent to all adequately prepared concrete and steel surfaces.

The system can be applied by roller or airless spray, but the application and ultimate performance of the system can be further modified by the inclusion of performance quartz aggregates and non-woven, continuous strand, glass surfacing veil.

The standard system cures quickly and this characteristic allows very fast return to service in a wide range of demanding industrial, mining and wastewater applications.

EpiMax 333AR has set the standard for more than a decade in high build film performance coatings in harsh environments on many critical projects. It is specified and installed to maximise project confidence in those demanding conditions where high durability levels are required from a field applied coating system.

EpiMax 333AR High Build Grade is available to achieve 200 - 250 microns dft (dry film thickness) on vertical surfaces.

EpiMax 333AR Tropical Grade is available for application in high temperature conditions.

Note that the system can display some tendency to darken in external applications.

# Advantages

- High build fast application
- Excellent adhesion
- High abrasion resistance

# Typical applications

- Wastewater facilities
- Healthcare facilities
- Chemical containment
- Paper manufacturing
- Battery recycling

# Typical properties

- Shelf life: 2 years
- Standard colours: N35 Light Grey, N44 Bridge Grey
- Work time, 16 L pack: 30 minutes at 25°C
- Light foot traffic: 12 24 hours at 25°C
- Light wheeled traffic: 24 hours at 25°C

- Self priming
- Excellent chemical resistance
- High build version for verticals
- Resources processing and storage
- Meat processing
- Chemical production
- Water treatment facilities
- Animal care centres

- Unique novolac chemistry
- Excellent mechanical performance
- Meets AS4020 Potable Water Standard
- Food & beverage production
- Dairy production
- Battery recharge areas
- Port & marine terminal operations
- Effluent pits
- Volume solids content: 100%
- Mix ratio: 1 Hardener: 3 Compound by volume
- Recoating window: 8-16 hours at 25°C
- Cure time: 7 days at 25°C
- Coverage/16L pack-theoretical 95m<sup>2</sup>/coat @ 170 micron dtf



#### **Chemical resistance**

EpiMax 333AR is resistant to a wide range of chemicals. Specific data is available on request.

Typical resistance to spillages includes: (examples only)

- Ammonia solutions
- Sulphuric acid solutions
- Lactic acid solutions
- Skydrol
- Sodium hydroxide
- Inorganic salt solutions
- Hydrocarbon solvents
- Kerosene
- Diesel fuel
- Hydrochloric acid solutions
- Bleach solutions (may discolour)
- Vegetable oils

Surface staining may result from exposure to some aggressive chemicals. Seek EpiMax advice for specific applications.

#### Estimating data

16 Itr EpiMax 333AR High Build Epoxy Coating = 40m<sup>2</sup> (2 x 200 micron dft)

#### General foundation preparation

Concrete should be at least 28 days old. Ensure the sub-floor is clean, dry and free of additives, curing agents, oils, etc. Prepare the surface by professional diamond grinding to expose firmly adhered aggregate. Surface profile should exceed CSP 3. Allow surfaces to dry if wet. Always confirmation preparation adequacy

# **Application**

#### Acid resistant flooring

Surface profile should exceed CSP 3. Allow surfaces to dry if wet.

Review the sub-floor area in advance so that a fixed volume of mixed material can be applied over a fixed area to ensure correct application rate. Select a slow speed (400rpm) mechanical mixer and ensure thorough mixing. Add EpiMax 333AR Hardener to EpiMax 333AR Compound.

Mix until uniform.

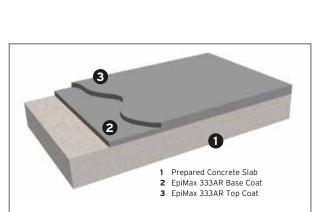
EpiMax 333AR can be applied by roller or airless spray in two coats (minimum) to achieve a total 300 micron dft (minimum).

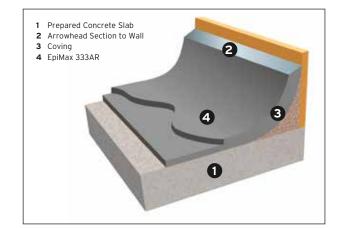
Allow the coating to cure for 7 days prior to subjecting to chemical exposure.

EpiMax 333AR can be applied to meet the requirements of HB198 Pedestrian Flooring Selection System Guidance (R10-R13).

Any coving at the wall to floor intersection, should also be professionally protected with EpiMax 333AR.

Where required, professional coving can be installed using a trowellable mix of 1 volume of mixed EpiMax 225 and up to 4 volumes of EpiMax EA4. Please note that coving work is rather specialised and may require some site modification to suit the specific site conditions. Allow to cure and then protect with EpiMax 333AR.







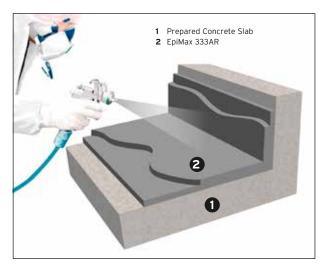
#### Secondary containment protection

Surface profile should exceed CSP 3. Allow surfaces to dry if wet. Consider the application of EpiMax 333AR in coats of contrasting colours.

Review the area to be protected in advance so that a fixed volume of mixed material can be applied over a fixed area to ensure correct application rate. Select a slow speed (400rpm) mechanical mixer and ensure thorough mixing. Add EpiMax 333AR Hardener to EpiMax 333AR Compound.

#### Mix until uniform.

EpiMax 333AR can be applied by roller or airless spray in two coats (minimum) to achieve a total 300 micron dft (minimum). Typical flow rate for 19 tip is 1.1 L / min and for 31 tip is 2.8 L / min at 3500 psi (240 Bar).



Allow the coating to cure for 7 days prior to subjecting to chemical exposure.

EpiMax 333AR can be applied to meet the requirements of HB198 Pedestrian Flooring Selection System Guidance (R10-R13).

#### Wastewater access chamber protection

Please contact EpiMax for specific project specification.

Ensure concrete structure is contaminant free, chemically sound, alkaline & stable. Surface profile should exceed CSP 3. Allow surfaces to dry if wet.

Immediately protect prepared surfaces with a prime coat of EpiMax 225 and repair eroded or damaged voids with EpiMax 575.

Application should be in three coats of contrasting colours.

Review the area to be protected in advance so that a fixed volume of mixed material can be applied over a fixed area to ensure correct application rate. Select a slow speed (400rpm) mechanical mixer and ensure thorough mixing. Add EpiMax 333AR High Build Hardener to EpiMax 333AR High Build Compound.

Mix until uniform.

EpiMax 333AR High Build should be applied by roller or airless spray in three coats achieve a minimum total 600 micron dft. Typical flow rate for 19 tip is 1.1 L / min and for 31 tip is 2.8 L / min at 3500 psi (240 Bar).



#### Packaging

EpiMax 333AR is available in 16 litre packs in N35 and N44 (includes Hardener, Compound). It is pre-packed in correct proportions for use.

#### Safety precautions

Read **Material Safety Data Sheet** before commencing and application. Keep away from children. Contents are flammable. Avoid contact with skin and avoid breathing vapour. Always provide adequate personal protection (gloves & goggles etc) during use. Always provide adequate ventilation, especially in confined spaces. If poisoning occurs, call Doctor or Poisons Information Centre. Phone 13 11 26. If swallowed, DO NOT induce vomiting. Give plenty of water or milk. If skin contact occurs, quickly remove contaminated clothing and wash affected areas thoroughly with soap and water.

TDG Code: Hardener - UN 1760, Compound - Not Classified



#### EpiMax Systems Pty Limited

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