



Introduction

Aardcure EP HS is heavy duty, 100% solids, two pack, hard epoxy coating with high chemical resistance. This versatile product is suitable for a wide range of applications in the protection of concrete and steel in a variety of industrial and commercial environments providing protection from chemical attack, forklift, vehicular and commercial traffic. Slip resistant finishes can be achieved with the addition of a suitable slip reducing medium.

Benefits

- Good colour stability
- High gloss
- Wear resistance
- Slip resistant with addition of aggregate
- Solventless
- Odourless
- High chemical resistance
- 100% solids

Typical applications

- Schools
- Warehouses
- Retail Outlets
- Component manufacturers
- Commercial kitchens & bars
- Police stations
- Hospitals & nursing homes
- Motor workshops & aircraft hangars
- Pharmaceutical plants
- Food manufacturing plants
- Carparks

Surface Preparation

The substrate must be sound, clean and dry to ensure optimum adhesion between floor coating and substrate. The concrete shall be no less than 25MPa and have a surface tensile strength of 1.5MPa.

Repair imperfections such as holes and cracks where necessary. New concrete must be cured for 28 days prior to application.

Remove surface laitance, contaminants, existing coatings and curing compounds via light grit-blasting or grinding to ensure suitable surface profile. The surface must be free of dust and other debris.

Priming is generally not required over a ground surface. Application to very porous concrete an additional 3rd coat of Aardcure EP HS may be required.

Mixing

Stir the base and hardener components prior to mixing. If the addition of a separate colour pack is required, add colour pack to the base and continue to mix until fully dispersed. Add hardener component and mix for a further 3 minutes using a slow speed (400rpm) mechanical mixer,

ensuring to scrape and mix the unmixed materials so no variations exist. Note pot life of mixed material.

Use Xylene for cleaning of tools and equipment before the mixed compound has hardened.

Application Requirements

Aardcure EP HS can be applied by roller, squeegee or airless spray within 1 hour of mixing:

Roller/Squeegee

This method is compatible with Aardcure EP HS, allowing application of even coats of mixed material to the prepared surface.

Review the application area so that a fixed volume of mixed material can be applied over a fixed area to determine the correct application rate.

For Smooth Finish

- Apply First Coat of Aardcure EP HS at a coverage of 4 to 6 sqm per litre.
- Apply Second Coat of Aardcure EP HS at a coverage of 5 to 6 sqm per litre.

For broadcast Non-Slip Finish

- Apply First Coat of Aardcure EP HS at a coverage of 4 to 6 sqm per litre.
- Broadcast grit aggregate while the first coat is wet and let it cure overnight. Grit aggregate size depends on the grading requirement.
- Clean off and remove loose aggregate.
- Apply Second Coat of Aardcure EP HS at a coverage of 3 to 4 sqm per litre.

Note: See below table below for guidance in range of slip resistance by medium. Slip Resistance according to Standards Australia handbook HB198:2014.

Pendulum Classification		BNP Range		Recommended addition of aggregate to achieve slip resistance
AS 4586-2013	AS/NZS 4586-2001	Slider 96	TRL	
P5	V	> 54	>44	Broadcast 30/60 grit aggregate to rejection
P4	W	45-54	40-44	Addition of 60# alumina oxide at rate of 5% by volume in top coat
P3	X	35-44	35-39	Addition of 80# alumina oxide at rate of 5% by volume in top coat



Recommendations

To ensure a uniform colour, use components with identical batch numbers in the one application area.

NB: Care has been taken to ensure that colours are as close as possible to agreed reference samples. However, it should be noted that no guarantee can be given of exact colour matching.

Conditions that arise that are not considered normal and evaluation of suitability of the product for the application should be considered. They include but are not limited to:

- Surfaces being subjected to hydrostatic pressure will have a high chance of failure of bond to the substrate
- Substandard or porous concrete leading to excessive absorbency of the product
- Atmospheric conditions during curing including cold conditions (<10°C) or humid conditions (>80% humidity) will affect the initial cure of the product or lead to blushing of the surface
- End use service considerations such as hot water cleaning (>40°C)
- Severe or unusual exposure to chemicals outside of expected limitations of the product
- Cleaning procedures need to be assessed as spills of acid or incompatible cleaning agents will result in discolouration of the surface
- Exposure to sunlight may cause a superficial chalking and slight yellowing of the surface, this will have no effect on product performance

If guidance is required please contact a Mirafloor representative for advice

Safety Information

Keep away from children. Avoid contact with skin and avoid breathing vapour. Always wear adequate personal protection during use including gloves & goggles etc. Apply in adequate ventilation. If poisoning occurs, call Doctor immediately. 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. Refer to Material Safety Data Sheet for further safety information.

Packaging

14L pre packaged kits. For neutral product up to 1kg of pigment paste is to be added.

Typical properties and application data

Specific Gravity @ 25°C	1.1-1.3 kg/L
Solids content	100 %
Pot life (14L kit) @ 25°C	20 mins
Mix ratio by volume (Resin:Hardener)	2:1
Shelf life	24 months unopened containers
Initial cure	9 hours @ 25 degrees
Recoat time	12-24 hours @ 25 degrees
Cure time	24 hours – light traffic
Film thickness per coat	7 days – full cure
Slip resistance ANZ4586:2014	200–300 microns P3 to P5 dependent on anti-slip
Colour stability	Excellent indoors

Chemical Resistance

Aardcure EP HS provides very good chemical resistance. Resistant to a wide range of chemicals. Resistance to spillages (examples only).

- Toluene
- Sulphuric Acid 30%
- Acetic Acid 5%
- Skydrol Brake Fluid • Sodium Hydroxide 30%
- Sodium Chloride
- Ammonia 20%
- Kerosene
- Petrol, Oil
- Hydrochloric Acid Mirafloor
- Lactic Acid 5%

Refer to Material Safety Data Sheet for precautions and personal protection.

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