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RA404A

Resene Armourcote 515 HS

fast dry epoxy

Resene Armourcote 515 HS is a high performance epoxy intermediate/base coat which forms an excellent corrosion barrier. Fast dry characteristics are especially beneficial where early handling of coated items or same day application of multi-coat systems is required. Excellent low temperature cure properties allow use of the product over winter when application of conventional epoxy cure based systems is not possible. Suitable for use in most industrial and marine environments.

Formulated for spray application.

Physical properties

Vehicle type	Two component epoxy
Hardener	Modified amine
Pigmentation	Aromatic/ketone/alcohol
Mix ratio	4:1 (by volume)
Pot life	3 hours at 20°C; 6 hours at 10°C
Finish	Low gloss
Colour	Off-white, pastels and micaceous grey
Dry time (minimum)	Touch dry: 45 minutes at 20°C; 90 minutes at 10°C Dry to handle: 2½ hours at 20°C; 5 hours at 10°C Full physical properties: 12 hours (minimum) at 20°C; 24 hours (minimum) at 10°C. Drying is affected by low temperatures and high humidity
Recoat time (minimum)	2½ hours at 20ºC (by spray); 5 hours at 10ºC (by spray). Maximum: 7 days (self); 2 days (Resene Uracryl 400 Series, Resene Imperite I.F. 503, Resene Imperite 413). Sanding of Resene Armourcote 515 HS is required if recoating beyond these times
Primer required	Yes, dependent upon substrate and service conditions (compatible zinc rich primers include Resene Zincilates, Resene ArmourZincs, inhibitive epoxy primer Resene Armourcote 220 or 221)
Theoretical coverage	7 sq. metres per litre (100 microns DFT) 4.7 sq. metres per litre (150 microns DFT)
Volume solids	70% (calculated)
Recommended DFT	100-150 microns per coat
Usual no. of coats	1-2
Dry heat resistance	90ºC (continuous, some discolouration may occur after prolonged continuous heat exposure)
Solvent resistance	Excellent (splash and spillage, specific resistance dependent on chemical and topcoat)
Thinning and clean up	Thin with Resene Thinner No.12 (general use) or Resene Thinner No.11 (over zinc rich primers or for application temperatures in excess of 35ºC). Clean up with Resene Thinner No.12
Pack Size	4 and 20 litre composite
VOC	270 grams per litre (mixed, unthinned)

Typical uses

- Aluminium
- Concrete
- Galvanised steel
- Marine/industrial use
- Repaints
- Steel (primed)

Performance and limitations

Performance

1. Fast dry, high build.
2. Positive cure down to 0ºC.
3. Excellent adhesion to a wide range of substrates and Resene zinc rich or epoxy primers.
4. Early topcoating potential.
5. Suitable for immersion in fresh or salt water.
6. Basecoat for a wide range of Resene high performance topcoats.

Limitations

1. Do not apply over thermoplastic or chlorinated rubber based coatings.
2. Applied coating is susceptible to mechanical damage before cure to full physical properties has occurred.
3. Contact manufacturer for details concerning cure times prior to use in immersion applications.
4. Brush and roller application not recommended except for small areas or minor touch-up.

Please ensure the current Data Sheet and Safety Data Sheet are consulted prior to specification or application of product. If in doubt contact Resene.

Armourcote 515 HS fast dry epoxy

Surface preparation

Coating performance is, in general, proportional to the degree of surface preparation and primer selection. Prior to application of paint, all surfaces must be clean, dry, sound, and free from all contaminants, particularly salt deposits.

Concrete

If oil or grease deposits are present, degrease in accordance with SSPC-SP1 solvent cleaning. Leave new concrete to cure for a minimum of 28 days before painting. Surfaces to be painted shall be free of laitance, form release agents, curing membranes, oil, grease, and other penetrating contaminants. All surfaces to be painted must have a uniform texture resembling 180 grit sandpaper. Surface profiling can be achieved by captive shot blasting, diamond grinding, or acid etching. Curing membranes or residual form oils must be completely removed from the concrete prior to painting. This can only be achieved by abrasive blasting; captive shot blasting or diamond grinding (acid etching is not acceptable as this procedure does not remove these compounds). Fill holes, voids etc with Resene Epox-O-Bond Epoxy Filler (see Data Sheet D808) after concrete profiling.

New aluminium, galvanised steel, Zincalume

Remove oil and grease with Resene Roof Wash and Paint Cleaner (see Data Sheet D88). Slightly roughen surface by light sanding or alternatively lightly blast with a fine non-metallic abrasive.

Repaints

All surfaces must be clean, dry, and free from all loose paint, dirt, dust, grease, oil, mould, corrosion products and chalky residues. While Resene Armourcote 515 HS is compatible over most types of properly applied and tightly adhering thermoset coatings a test patch is always recommended to confirm compatibility. Contact manufacturer for advice on surface preparation methods that are appropriate for maintenance of an existing system.

Steel - new

Degrease with Resene Emulsifiable Solvent Cleaner (see Data Sheet D804) according to SSPC-SP1 solvent cleaning. Remove all weld spatter and flux, grind sharp edges and corners. For best results abrasive blast clean to SSPC-SP10 (Sa 2½) or better. Blast to achieve a 25-50 micron anchor profile. If profile is greater, additional film thickness is required for equivalent protection. Apply zinc rich or inhibitive primer (primer selection dependent upon corrosivity of environment - contact manufacturer for primer recommendations).

Residues and dust from old paint systems containing lead or chromate may be dangerous to the health of the operator and the environment. Ensure approved procedures are put in place to safeguard against this.

Application

Mixing

Stir each component separately using an explosion proof power mixer. Add total contents of the hardener container to the total contents of the base container while power mixing. Continue mixing until uniformly blended and allow mixed product to stand for 10-15 minutes before thinning or application.

Thinning

Thin judiciously with appropriate thinner to improve workability.

Application

- **Airless spray** - Industrial airless equipment e.g. Graco with a 15 to 21 thou tip (tip size selection will depend upon equipment).
- **Conventional spray** - Industrial equipment such as Graco. Separate air and fluid pressure regulators and a moisture and oil trap in the main air supply line are recommended. When applying by conventional spray, use adequate pressure and volume to ensure proper atomisation. Apply a wet coat in even parallel passes, overlapping each pass 50%. If required, cross spray at right angles to avoid holidays, bare areas and pinholes. Check wet film thicknesses during application to ensure that the desired target film thicknesses are being achieved (make allowances for thinning when checking wet film thickness). When applying Resene Armourcote 515 HS over Resene Zincilate primers (see Data Sheets RA20 and RA21) or porous surfaces, apply a mist coat of thinned product (use Resene Thinner No.11) to minimise bubbling before application of the build coat.

Safety precautions

Consult Safety Data Sheet for this product prior to use. Users should ensure that they are familiar with all aspects concerning safe application of this product. IF IN DOUBT, DO NOT USE THIS PRODUCT.

Please ensure the current Data Sheet is consulted prior to specification or application of Resene products.
If the surface you propose to coat is not referred to by this Data Sheet, please contact Resene for clarification.

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