

Resene Armourcote 821 waterborne epoxy primer

Resene Armourcote 821 combines the performance properties of a quality inhibitive epoxy primer with the convenience of brush or roller application. Suitable for priming both ferrous and non-ferrous metals that are to be finished with brushing two component solventborne and waterborne polyurethanes, such as Resene Uracryl 400/800 Series topcoats. Primer for new or maintenance work.

exterior/interior

Typical uses

- Aluminium
- Galvanised steel
- Repaints
- Structural steel
- Zincalume

Please ensure the current Data Sheet and Safety Data Sheet are consulted prior to specification or application of Resene products. View Data Sheets online at www.resene.com/datasheets. If in doubt contact Resene.

Physical properties

Vehicle type	Two component epoxy
Hardener	Liquid epoxy
Pigmentation	Zinc phosphate
Solvent	Water/glycol ether
Pot life	3 hours at 21°C
Mix ratio	4:1 (by volume)
Finish	Low gloss
Colour	Pale green
Dry time (minimum)	Touch dry: 2 hours at 25°C; 4 hours at 10°C
Recoat time (minimum)	4 hours at 25°C; 6 hours at 10°C Maximum: 2 weeks (Resene Uracryl 400/800 Series)
Volume solids	45%
Recommended DFT	50-75 microns per coat
Theoretical coverage	9 sq. metres per litre (50 microns DFT) 6 sq. metres per litre (75 microns DFT)
Usual no. of coats	1-2
Abrasion resistance	Very good
Chemical resistance	Excellent when suitably topcoated
Heat resistance	Up to 90°C (dry, continuous)
Solvent resistance	Excellent when suitably topcoated
Durability	Excellent when topcoated
Thinning and clean up	Water
VOC	108 grams per litre mixed (see Resene VOC Summary)

Performance

Performance and limitations

1. High performance epoxy primer for brush application.
2. Suitable for both new and maintenance work.
3. Brushing primer for use prior to application of Resene Uracryl 400/800 Series polyurethane brushing finishes.
4. Combination of Resene Armourcote 821 and a Resene Uracryl 400/800 Series finish allows the application of high performance coating systems in situations where restrictions of spray application apply.
5. Good low temperature cure characteristics.

Limitations

1. Not designed to give long-term protection in exterior situations without topcoating.
2. Drying and curing times are proportionally shorter at higher temperatures and longer at lower temperatures.
3. Do not apply below 10°C or above 85% relative humidity. Ensure adequate air movement during drying.
4. Consult manufacturer for topcoat recommendations if an alternative to a Resene Uracryl Series finish is desired.

Armourcote 821 brushing epoxy primer

Surface preparation

Coating performance is, in general, proportional to the degree of surface preparation.

New aluminium, galvanised steel cladding, Zinalume

Remove oil and grease with Resene Roof and Metal Wash (see [Data Sheet D88](#)) or Resene Emulsifiable Solvent Cleaner (see [Data Sheet D804](#)). Surface must be clean, dry and free from all contaminants including salt deposits.

New steel

Degrease according to SSPC SP1 solvent cleaning. Round off rough welds and sharp edges and remove weld spatter and flux. Abrasive blast clean in accordance with AS1627-Part 4 Class 2.5 (SSPC SP10/SIS 05 59 00 Sa 2.5). For total immersion service, blast clean in accordance with AS1627-Part 4 Class 3 (SSPC SP5/SIS 05 59 00 Sa3). Blast to achieve a 25-50 micron anchor profile. If profile is greater, additional film thickness is required for equivalent protection. Remove abrasive residue and dust from surface. For maximum exterior corrosion protection, apply Resene Zincilate 11 (see [Data Sheet RA21](#)) or Resene ArmourZinc 120 (see [Data Sheet RA22](#)) zinc rich primer as the first layer of protection.

Hot dipped galvanised steel

Surface must be clean dry and free from all contaminants including salt. Remove oil and grease with Resene Roof and Metal Wash (see [Data Sheet D88](#)) or Resene Emulsifiable Solvent Cleaner (see [Data Sheet D804](#)). Remove the chromate quenched layer by whip blasting to slightly roughen the surface using a fine nonmetallic abrasive in accordance with AS/NZS 4680 and AS 1627. If this is not possible then as a minimum mechanically sand using 100 grit sandpaper to produce a dull finish. Care must be taken to ensure minimal removal of the zinc layer in either process.

Repaints

Ensure all surfaces to be painted are dry and free from oil, grease, dust, mould, lichen, corrosion products and loose or flaking paint. Areas where flaking paint has been removed must be feathered back to a sound edge. In some cases existing sound paint will need to be lightly sanded to provide a mechanical key for the new coating system. Ensure that the existing paint system is compatible with the primer and topcoat system. A test area of the coating system applied to a prepared area is recommended. Leave the applied paint system to cure for at least 48 hours after application of the final coat before adhesion testing. Spot prime all bare areas with Resene Armourcote 821 and topcoat in accordance with recommended recoat times for primer and finish coats.

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.

Contact manufacturer for specific recommendations if in doubt regarding preparation or recoating in maintenance situations.

Application

Mixing

Stir contents of each container separately using an explosion-proof mixer. Add total contents of hardener to total contents of base. Power mix for 5 minutes and allow to stand 5 minutes before applying.

Thinning

Thin only to improve workability with water. Adjust application rate if thinning to ensure specified dry film thickness is achieved.

Application

Brush, roller (Resene No.1 sleeve). When brushing or rolling, work in a continuous direction and immediately lay off with a brush if bubbles persist.

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. View Data Sheets online at www.resene.com/datasheets. If the surface you propose to coat is not referred to by this Data Sheet, please contact Resene for clarification.

In Australia
PO Box 924, Beenleigh, Qld 4207
Call 1800 738 383, visit www.resene.com.au
or email advice@resene.com.au

Resene
the paint the professionals use

In New Zealand
PO Box 38242, Wellington Mail Centre, Lower Hutt 5045
Call 0800 RESENE (737 363), visit www.resene.co.nz
or email advice@resene.co.nz

Printed on environmentally responsible paper, which complies with the requirements of environmental management systems EMAS and ISO14001. Please recycle.