

Resene

Uracryl 401

urethane acrylic
undercoat/buildcoat

Resene Uracryl 401 is a unique high performance two component urethane undercoat for use as an undercoat/buildcoat on a wide variety of suitably prepared and primed substrates to be finished with pigmented Resene Uracryl 400 Series topcoats

exterior/interior

Typical uses

As an undercoat/buildcoat for use with Resene Uracryl systems over a wide variety of materials and environments.

Marine, aluminium, anti-graffiti, bridges, canopies, chemical plants, concrete wall surfaces, dairy factories, fibre cement, food processing plants, furniture, G.R.C panels, meat works, previously painted surfaces, pulp and paper mills, refineries, roofing, steel doors, balustrades, structural steel, tank farms.

Physical properties

Vehicle type	Urethane reactive acrylic
Hardener	Aliphatic urethane
Pigmentation	Chemically inert
Solvent	Aromatic, ester
Pot life	3-4 hours at 18°C
Mix ratio	3:1 (by volume)
Finish	Eggshell
Colour	Whites and pastels
Dry time (minimum)	Touch dry: 1.5 hours at 18°C
Recoat time (minimum)	Brush/roller: 12 hours at 18°C
Primer required	Yes, dependent on substrate
Theoretical coverage	5.9 sq. metres per litre (100 microns DFT)
Recommended DFT	100 microns per coat
Usual no. of coats	1-2
Abrasion resistance	Excellent
Chemical resistance	Very good
Heat resistance	Very good
Solvent resistance	Excellent
Toxicity	Hardener and mixed product contain small amounts of monomeric di-isocyanate
Thinning and clean up	Resene Thinner No.8 (brush/roller application) Resene Thinner No.7A (spray application)

Performance and limitations

Performance

1. Enables use of high performance urethanes when spray application is difficult or undesirable.
2. Excellent adhesion to a variety of suitably prepared and primed substrates.
3. Self-priming on cementitious and fibre cement panels.
4. Positive curing even at low temperatures.
5. Excellent hold-out ensuing maximum gloss development of pigmented Resene Uracryl 400 Series finish coats

Limitations

1. In early stages of curing, film may be susceptible to mechanical damage.

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Surface preparation

Concrete

Leave new concrete to cure for a minimum of 28 days before painting. Surfaces shall be free of laitance, form release agents, curing agents, oil, grease and other penetrating contaminants. Concrete floors must be profiled by captive blasting, abrasive blasting, diamond grinding, or acid etching (see [Data Sheet D83](#)). Profiling should produce a profile similar to 180 grit sandpaper. If this is not achieved, repeat the profiling process. After profiling fill all small holes or voids by application of Resene Epox-O-Bond (see [Data Sheet D808](#)). Use of Resene Epox-O-Bond filler is only suitable when finishing with pigmented Resene Uracryl systems.

Fibre cement

Clean down to remove all dirt, dust and loose material. Ensure surface is free from oil, grease and mould. Seal with Resene Aquapoxy thinned 10%. Allow to cure for 24 hours then lightly sand surface to remove raised fibres.

Galvanised steel, Zincalume, aluminium and repaints

Remove oil or grease film with Resene Roof Wash and Paint Cleaner (see [Data Sheet D88](#)) and rinse thoroughly. Prime with Resene Vinyl Etch (see [Data Sheet RA31](#)). Old painted surfaces should be sound, clean and sanded to give a surface free from chalking, flaking paint, dirt, mould or grease. A test patch should be done to check that Resene Uracryl 401 does not lift the old paint. Spot prime any bare metal with recommended substrate primer.

Particle board, timber

Sand to establish a smooth clean surface. Stop all nailholes, joints and other surface irregularities. Apply cross-linking acrylic primer.

Steel

Degrease according to SSPC SP1 solvent cleaning. Remove all weld spatter, grind weld seams and sharp edges. Ensure complete removal of all weld flux by wire brushing followed by washing with copious quantities of freshwater. Dry abrasive blast to a minimum of SSPC SP10 (Sa 2.5). Blast to achieve a 25-50 micron anchor profile. Apply zinc rich or epoxy primer.

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

Application

Roller, brush, spray. Thin as required according to application method. When brushing or rolling work in a continuous direction and immediately lay-off with a brush if bubbles persist.

Mixing

Stir each container separately using an explosion-proof mixer. Add total contents of hardener container to total contents of base. Power mix until uniformly blended and allow mixed product to stand for 10-15 minutes prior to application.

Safety precautions

1. 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
2. The hardener is sensitive to moisture and should be kept tightly sealed when not in use.
3. The hardener contains a trace (less than 1%) of hexamethylene di-isocyanate, which is of course further diluted when blended with the base. When brushed or rolled, normal ventilation procedures used with solventborne systems will ensure that the level in the air never reaches a M.A.C. of 0.02 p.p.m. As with any solventborne system, if adequate ventilations is not available, a respirator should be worn. When sprayed, mixed product may be harmful by inhalation. Wear suitable protective clothing, gloves, eye and face protection, including suitable breathing protection such as an air-supplied respirator or hood.
4. Do not breathe vapour. Avoid contact with skin and eyes. If eyes become contaminated flush with water for a minimum of 15 minutes. SEEK MEDICAL AID IMMEDIATELY. Wear suitable clothing, gloves and eye and face protection.
5. FLAMMABLE – keep away from sparks and open flame.

*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.*