

Resene Uracryl 404

urethane acrylic
low sheen finish

Resene Uracryl 404 is a unique high performance two component finish coat with excellent resistance to abrasion, moisture, petroleum solvents and mineral and vegetable oil. The most unusual feature of Resene Uracryl 404 is that, unlike most other classes of high performance coatings, it looks as good as it protects. The sophisticated combination of aliphatic urethanes and urethane reactive acrylic resins gives a system unsurpassed for durability and colour retention.

exterior/interior

Typical uses

As a long-life low sheen topcoat for use over a wide variety of materials where colour retention is required together with excellent durability and very good chemical resistance:

- Aluminium
- Anti-graffiti
- Concrete/plaster
- Fibre cement
- Galvanised steel
- G.R.C. panels
- Paperfaced plasterboard (Super ToughZone)
- Repaints
- Structural steel

Vehicle type	Urethane reactive acrylic
Hardener	Aliphatic urethane
Pigmentation	Light fast chemically resistant types
Solvent	Aromatic, ester
Pot life	3-4 hours at 18°C
Mix ratio	3 parts base: 1 part hardener (by volume)
Finish	Low sheen
Colour	Clear, white, selected BS2660, BS5252, Resene Total Colour System and The Range
Dry time (minimum)	1.5 hours tack free at 18°C
Recoat time (minimum)	Roller: 12 hours (minimum) at 18°C
Primer required	Yes, dependent on substrate
Theoretical coverage	10 sq. metres per litre (50 microns DFT)
Recommended DFT	50 microns per coat
Usual no. of coats	Pigmented systems 1-2, clear systems 3-4
Abrasion resistance	Excellent
Chemical resistance	Very good
Heat resistance	Very good
Solvent resistance	Very good
Toxicity	Hardener and mixed product contain small amounts of monomeric di-isocyanate
Durability	Excellent
Thinning and clean up	Resene Thinner No.8 (roller application) Resene Thinner No.7A (spray application)
Pack size	4 litre composite

Physical properties

Dry time (minimum)
Recoat time (minimum)
Primer required
Theoretical coverage
Recommended DFT
Usual no. of coats
Abrasion resistance
Chemical resistance
Heat resistance
Solvent resistance

Durability
Thinning and clean up

Pack size

Performance and limitations

Performance

1. Enables use of high performance urethanes when spray application is likely to be difficult or undesirable.
2. Fast drying.
3. Positive curing even at low temperatures.
4. Low sheen topcoat over epoxy coatings where a low gloss finish and colour retention is paramount.
5. Acrylic modification imparts ready self recoating with minimal preparation, such as inorganic zinc silicates.

Limitations

1. Not recommended as a tank lining.
2. In early stages of curing, film may be susceptible to mechanical damage.
3. Not recommended for direct application to zinc rich primers, such as inorganic zinc silicates.

Uracryl 404 urethane acrylic low sheen finish

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, Zinalume, 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 404 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

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.

Application

Roller (strong solvent resistant), 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.

Clear systems for concrete, fibre cement: Apply Resene Uracryl 403 Clear (see [Data Sheet RA56](#)) as the sealer coat followed by a minimum of two coats of Resene Uracryl Clear in the desired gloss level.

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 its M.A.C. of 0.02 p.p.m. As with any solventborne system, if adequate ventilation 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 protective 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.*