

Resene Imperite 413

polyester-urethane
gloss

Resene Imperite 413 is a highly decorative and durable two pack gloss urethane topcoat for the decoration and protection of interior and exterior surfaces. Ideal for use where bright colours and outstanding colour and gloss retention are to be an architectural feature. Excellent resistance to a wide range of chemicals, solvents and salt solutions. Extremely durable topcoat, resists marring and scuffing.

exterior/interior

Typical uses

- Aluminium
- Concrete
- Decorative panels
- Doors
- Fascias
- Fibre cement
- Furniture
- GRP, repaints
- Partitions
- Steel joinery
- Timber
- Walls

Vehicle type	Urethane reactive polyester
Hardener	Aliphatic urethane
Pigmentation	Chemically resistant
Solvent	Aromatic/ketone
Pot life	8 hours at 20°C
Mix ratio	3:1 (by volume)
Finish	Gloss
Colour	White, selected BS2660, BS5252 and Resene Total Colour System
Dry time (minimum)	Touch dry: 2-3 hours at 20°C Hard dry: 24 hours at 20°C
Recoat time (minimum)	Within 24-36 hours
Primer required	Yes, dependent on substrate (consult manufacturer)
Theoretical coverage	12.2 sq. metres per litre at 38 microns DFT
Volume solids	46.5%
Recommended DFT	38 microns per coat
Usual no. of coats	2
Abrasion resistance	Excellent
Chemical resistance	Excellent acids and alkalis
Heat resistance	Dry service temperature range up to 150°C
Solvent resistance	Excellent
Durability	Excellent
Thinning and clean up	Resene Thinner No.13
Pack size	4 litre composite

Physical properties

Performance

1. Outstanding colour and gloss retention.
2. Excellent chemical, solvent and abrasion resistance.
3. Resists splash and spillage and continuous immersion in fresh and saltwater.

Limitations

1. For immersion service allow coating to cure for 7-14 days at 20°C before placing into service.
2. Recoating of fully cured Resene Imperite 413 without abrasion of the existing paint may result in unsatisfactory adhesion.
3. Spray application is required to achieve a quality finish.
4. Do not apply over thermoplastic coatings.
5. Not recommended for direct application to zinc rich primers, such as inorganic zinc silicates.

Imperite 413 polyester-urethane gloss

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 or 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](#)).

Fibreglass

Clean to remove all dirt, release/mould chemicals. Sand with fine abrasive paper to a dull flat finish.

Galvanising, aluminium

Remove oil and grease film with Resene Roof Wash and Paint Cleaner (see [Data Sheet D88](#)) and rinse thoroughly.

Particle board, timber

Sand to establish a smooth, clean surface. Stop all nailholes, cracks and other surface irregularities prior to priming.

Repaints

Surface must be clean, dry and free from oil, dirt or other contaminants. Apply test patch to confirm compatibility and adhesion. When applying Resene Imperite 413 over an existing unmodified urethane, sand thoroughly to dull flat finish. Dust off.

Consult manufacturer for primer/undercoat recommendations.

Steel

Degrease according to SSPC SP1 solvent cleaning. Remove all weld spatter, grind sharp edges and weld seams. For best results abrasive blast clean to SSPC SP10 (Sa 2.5) to achieve a 25-50 micron anchor profile.

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. Add the total contents of hardener container to total contents of the base container. Power mix until uniformly blended and allow mixed product to stand for 10-15 minutes prior to application.

Thinning

Thin only to improve workability with not more than 10% Resene Thinner No.13.

Application

- **Airless spray** - Standard equipment with a 28:1 pump ratio, a 560-770 kPa inbound pressure and a 13-15 thou fluid tip is recommended (tip size may vary according to equipment and environmental conditions). Ensure moisture traps are installed at air inlets to the spray pot to avoid moisture contamination of the coating. Apply the coating in wet passes overlapping each pass 50%. Control of wet film thickness during application is important to avoid film defects such as runs and sags.
- **Conventional spray** - Use a De Vilbiss JGA Gun with 'E' Fluid Tip and air cap 265.

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 that is of course further diluted when blended with the base. When sprayed this product may be harmful by inhalation. Wear suitable clothing, gloves and eye/face protection, including suitable breathing protection such as air supplied respirator or hood. Do not breathe vapour or spray mist.

*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.*