LUXATHANE® R

Recoatable Gloss Polyurethane Finish — PC 402

FEATURES
- VERY GOOD WEATHERING AND CHEMICAL RESISTANCE
- VERY GOOD ABRASION RESISTANCE AND TOUGHNESS
- EASY TO APPLY AND MAINTAIN
- TINTABLE – AVAILABLE IN A WIDE RANGE OF COLOURS

USES

LUXATHANE® R is a full gloss, two-component acrylic polyurethane that is recoatable with minimum surface preparation. It is designed for use in atmospheric chemical and marine service where gloss and colour retention, hardness and abrasion resistance, and wide-ranging chemical resistance are required. It may be used in new construction and maintenance services over properly primed steel, galvanised steel, concrete or hardwood timber.

LUXATHANE® R may be applied directly over all Dulux® epoxy primers and universal primers or over recommended high-build epoxy intermediate coats. It may be effectively used over aged tightly adhering epoxy and other coatings subject to necessary solvent resistance tests and appropriate surface preparation.

LUXATHANE® R Cold Cure Hardener is available for faster overcoat time in cooler conditions. LUXATHANE® Accelerator is also available for use with Standard Hardener to promote faster drying.

SPECIFICATIONS

RESISTANCE GUIDE

WEATHERABILITY	Very good gloss and colour retention on exterior exposure.	**SOLVENTS**	Excellent resistance to splash and spillage of common alcohols, aliphatic and aromatic hydrocarbons, esters and ketones.
HEAT RESISTANCE	Up to 120°C dry heat	**WATER**	Excellent resistance to fresh and salt water but not suitable for immersion.
SALTS	Excellent resistance to most salt solutions	**ALKALIS**	Good resistance to splash and spillage of most common alkalis.
ACIDS	Suitable for splash and spillage of mild acids	**ABRASION**	Very good when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA (STANDARD HARDENER)

CLASSIFICATION	Two Component Acrylic Polyurethane
FINISH	High Gloss
COLOUR	White, LF Golden Yellow, Black and a full range of tinted colours and MTO factory made colours.
COMPONENTS	Two
VOLUME SOLIDS	46% (White)
VOC LEVEL	<490 g/L (White, untinted)
FLASH POINT	16°C
POT LIFE	4 – 6 hours (4 litre kit, 25°C)
MIXING RATIO V/V	Part A : 4 Part B : 1
THINNER – BRUSH	965-42166 Duthin® 040
THINNER – SPRAY	965-63023 Dulux® Urethane Thinner

PRODUCT CODE

737-63313	White
737-39141	LF Golden Yellow
737-00070	Black
737-63001	Light Base
737-63002	Deep Base
737-63003	Clear Base
976-63091	Standard Hardener
976-88960	Cold Cure Hardener
976-H0229	Part C Accelerator

APPLICATION CONDITIONS

	Min	Max
Air Temp.	5°C	40°C
Substrate Temp.	5°C	40°C
Relative Humidity		85%

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	85	130	110
Dry film per coat (µm)	40	60	50

SUITABLE SUBSTRATES	Suitably primed steel, aluminium, zinc coated steel, concrete, fibreglass or MDF
PRIMERS	Most Dulux® two pack and single pack primers
TOPCOATS	Not applicable
APPLICATION METHODS	Conventional, HVLP, airless spray or air assisted spray

DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS* (STANDARD HARDENER)

					OVERCOAT	
Temperature	**Humidity**	**Touch**	**Handle**	**Full Cure**	**Min**	**Max**
10° C	50%	90 Minutes	24 Hours	7 Days	24 Hours	Extended
15° C	50%	60 Minutes	12 Hours	7 Days	12 Hours	Extended
25° C	50%	30 Minutes	9 Hours	7 Days	9 Hours	Extended

* These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying.

SPREADING RATE
with Standard Hardener
assuming no losses

9.2 m²/L (white) equals 50 µm dry film thickness
NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

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COLD CURE HARDENER

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	85	130	110
Dry film per coat (µm)	40	60	50

APPLICATION CONDITIONS

	Min	Max
Air Temperature	5°C	40°C
Substrate Surface Temperature	5°C	40°C
Relative Humidity		85%

SOLIDS BY VOLUME	46% White
VOC LEVEL	<490 g/L (White)
POT LIFE	90 Minutes (4 litre kit, 25°C)

DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS* (COLD CURE HARDENER)

					OVERCOAT	
Temperature	Humidity	Touch	Handle	Full Cure	Min	Max
10° C	50%	75 Minutes	14 Hours	7 Days	14 Hours	Extended
15° C	50%	50 Minutes	7 Hours	7 Days	7 Hours	Extended
25° C	50%	25 Minutes	5 Hours	7 Days	5 Hours	Extended

*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying

SPREADING RATE **with Cold Cure Hardener** assuming no losses

9.2 m²/L (white) equals 50 µm dry film thickness

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

STANDARD HARDENER WITH ACCELERATOR (PART C)

MIXING RATIO	Part C: 1 dose per 4 litre mixed kit

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	85	130	110
Dry film per coat (µm)	40	60	50

APPLICATION CONDITIONS

	Min	Max
Air Temperature	5°C	40°C
Substrate Surface Temperature	5°C	40°C
Relative Humidity		85%

SOLIDS BY VOLUME	45% White
VOC LEVEL	<500 g/L (White)
POT LIFE	4 – 6 hours (4 litre kit, 25°C)

DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS* (ACCELERATOR)

					OVERCOAT*	
Temperature	Humidity	Touch	Handle	Full Cure	Min	Max
15° C	50%	50 Minutes	9 Hours	7 Days	9 Hours	Extended
25° C	50%	25 Minutes	8 Hours	7 Days	8 Hours	Extended

*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying

SPREADING RATE **with Cold Cure Hardener** assuming no losses

9.2 m²/L (white) 8.4-9.0 m²/L (colours) equals 50 µm dry film thickness

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

TYPICAL SYSTEMS

This is a guide only and not to be used as a specification. Your specific project needs must be discussed with a Dulux Protective Coatings Consultant.

SURFACE	ENVIRONMENT	PREPARATION GUIDE	SYSTEM		DFT (µm)
STEEL	Very high corrosivity (AS2312.1 Cat C5) System PUR5	Abrasive blast AS1627.4 Class 2.5	1st Coat 2nd Coat 3rd Coat	Zincanode® 402 Duremax® GPE Luxathane® R	75 µm 200 µm 50 µm
STEEL	Low-medium corrosivity (AS2312.1 Cat C2-3) Exceeds System PUR 2	Abrasive blast AS1627.4 Class 2.5	1st Coat 2nd Coat 3rd Coat	Durepon® EZP Luxathane® R Luxathane® R	75 µm 50 µm 50 µm
ALUMINIUM	Exterior/Interior	Clean, degrease and abrade surface	1st Coat 2nd Coat 3rd Coat	Luxepoxy® 4 White Primer Luxathane® R Luxathane® R	50 µm 50 µm 50 µm

NOTE: If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT and full opacity.

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SURFACE PREPARATION	Specifiers should follow the surface preparation guidelines from the data sheet for the primer or 1st Coat selected. The primed surface must be free from grease, oil, dirt, rust and other contaminants. If the primer has exceeded its maximum overcoat interval (see the data sheet of the primer) then the surface MUST be abraded to maximize the adhesion of this topcoat.
APPLICATION	Mix each can thoroughly using a power mixer until the contents are uniform. Ensure bases have been tinted to the correct colour before use. DULUX® ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF INCORRECT COLOUR. Mix the contents of both packs together thoroughly with a power mixer and let stand for 10 minutes. Box all containers before use to ensure colour consistency. Remix thoroughly before application.
BRUSH/ROLLER	Suitable for small areas only. Where larger areas are involved, application is improved by the addition of up to 100 ml/litre with DUTHIN® 040 (965-42166). When brushing and rolling additional coats may be required to attain the specified thickness.
CONVENTIONAL SPRAY	Thin up to 150ml/litre with Dulux® Urethane Thinner (965-63023) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%.
	Typical Set-up — Graco AirPro: 1.4mm (239542); Pressure at Triton 308: 70-100 kPa (10-15 p.s.i.); Pressure at Gun: 380-410 kPa (55-60 p.s.i.); HVLP 1.4 Fluid Tip Set
AIRLESS SPRAY	Standard airless spray equipment such as a Graco Xtreme 30:1 with a fluid tip of 15 thou (0.38mm) and an air supply capable of delivering 550-690 kPa (80-100 p.s.i.) at the pump. Thinning is not normally required but up to 100 ml/litre of Dulux® Urethane Thinner (965-63023) may be added to aid application.
PRECAUTIONS	This is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may require variation from the recommendations on this Product Data Sheet, contact your nearest Dulux® Consultant for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the written consent of Dulux® Australia. Freshly mixed material must not be added to material that has been mixed for some time. The rate of cure is dependent upon temperature. Do not apply at temperatures below 5°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Ensure that you read and understand the safety precautions on the Safety Data Sheets for the two components before using. The recommended thinner MUST be used as some solvents react with the isocyanate hardener seriously degrading the life of the coating. Under no circumstances should water or non-recommended thinner be allowed to contaminate the product. In hot weather use Duthin® 040 (965-42166) for improved flow and to reduce dry spray. Use of Part C Luxathane® Accelerator may result in different gloss level and appearance when compared with result without Part C Luxathane® Accelerator. The Accelerator will substantially speed up handle and dry times when used within the allowable temperature ranges quoted above. However, if lower than recommended application and substrate temperatures occur during curing, solvent entrapment and low gloss may occur due to the effects of condensation/dew.
CLEAN UP	Clean all equipment with Dulux® Urethane Thinner (965-63023) immediately after use.
OVERCOATING	**New**: Ensure the previous coat is clean, dirt and oil free before applying topcoat. If the recoat window of the previous coating has been exceeded, refer to datasheet, then the entire surface must be abraded. **Aged or pre-existing coating**: Degrease with Gamlen CA 1 according to the data sheet. Test adhesion of existing coating by standard cross hatch adhesion test. If the coating fails, remove it. High-pressure water wash at 8.3 to 10.3 MPa (1,200-1,500 p.s.i.) to remove chalk and dust. Abrade surface to provide a good key for the new coating.
SAFETY PRECAUTIONS	**Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au**
STORAGE	Store as required for a flammable liquid Class 3 in a bunded area under cover. Store in a dry, well-ventilated area away from sources of heat or ignition. Keep containers closed at all times.
HANDLING	As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 must be worn while handling. Always wash hands before smoking, eating, drinking or using the toilet. Gas is evolved when isocyanate in the hardener reacts with water. If a closed container shows signs of internal pressure, cover it completely with a cloth and remove the lid slowly to prevent splashing or violent expulsion of the lid.
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. When spraying, wear a positive-pressure, air-supplied respirator. Users must always comply with the provisions of the respective State Spray Painting Regulations at all times.
FLAMMABILITY	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO_2 or dry chemical powder. On burning will emit toxic fumes.
WELDING	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

COMPANY INFORMATION

Dulux Protective Coatings a division of

DuluxGroup (Australia) Pty Ltd
1956 Dandenong Road, Clayton 3168
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DuluxGroup (New Zealand) Pty Ltd
150 Hutt Park Road, Lower Hutt, NZ
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 4 litre and 20 litre packs
TRANSPORTATION WEIGHT	1.41 kg/litre (Average of components)
DANGEROUS GOODS	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263