

# 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 OVER 5,000 COLOURS

**USES** LUXATHANE® R is a full gloss, two-component acrylic polyurethane that is recoatable with minimum surface preparation. It is designed for general 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.

### SPECIFICATIONS

#### RESISTANCE GUIDE

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

#### TYPICAL PROPERTIES AND APPLICATION DATA (STANDARD HARDENER)

<b>CLASSIFICATION</b>	Two Component Acrylic Polyurethane	<b>APPLICATION CONDITIONS</b>			
<b>FINISH</b>	High Gloss		Min	Max	
<b>COLOUR</b>	White, LF Golden Yellow, Black and a full range of tinted colours and MTO factory made colours.	<b>Air Temp.</b>	5°C	45°C	
<b>COMPONENTS</b>	Two	<b>Substrate Temp.</b>	5°C	45°C	
<b>VOLUME SOLIDS</b>	46% (White)	<b>Relative Humidity</b>		85%	
<b>VOC LEVEL</b>	<490 g/L (White, untinted)	<b>Concrete Moisture</b>		<10%	
<b>FLASH POINT</b>	16°C	<b>COATING THICKNESS (MICRONS)</b>			
<b>POT LIFE</b>	4 – 6 hours (4 litre kit, 25°C)	<b>Wet film per coat (µm)</b>	85	130	110
<b>MIXING RATIO V/V</b>	Part A : 4    Part B : 1	<b>Dry film per coat (µm)</b>	40	60	50
<b>THINNER – BRUSH</b>	965-42166    Duthin® 040	<b>SUITABLE SUBSTRATES</b>	Suitably primed steel, aluminium, zinc coated steel, concrete, fibreglass or MDF		
<b>THINNER – SPRAY</b>	965-63023    Dulux® Urethane Thinner	<b>PRIMERS</b>	Most Dulux® two pack and single pack primers		
<b>PRODUCT CODE</b>	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	<b>TOPCOATS</b>	Not applicable		
		<b>APPLICATION METHODS</b>	Conventional, HVLP, airless spray or air assisted spray		

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

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT*	
					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** 9.2 m<sup>2</sup>/L (white), 8.4-9.0 m<sup>2</sup>/L (colours) equals 50 µm dry film thickness with Standard Hardener assuming no losses  
NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

# LUXATHANE® R

## 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	45°C
Substrate Surface Temperature	5°C	45°C
Relative Humidity		85%

**SOLIDS BY VOLUME** 46% White, 42% - 45% Colours

**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 9.2 m<sup>2</sup>/L (white) 8.4-9.0 m<sup>2</sup>/L (colours) equals 50 µm dry film thickness

with Cold Cure Hardener  
assuming no losses

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	45°C
Substrate Surface Temperature	5°C	45°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 9.2 m<sup>2</sup>/L (white) 8.4-9.0 m<sup>2</sup>/L (colours) equals 50 µm dry film thickness

with Cold Cure Hardener  
assuming no losses

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	1 <sup>st</sup> Coat Zincode® 402	75 µm
			2 <sup>nd</sup> Coat Duremax® GPE	200 µm
			3 <sup>rd</sup> Coat Luxathane® R	50 µm
STEEL	Low-medium corrosivity (AS2312.1 Cat C2-3) Exceeds System PUR 2	Abrasive blast AS1627.4 Class 2.5	1 <sup>st</sup> Coat Durepon® EZP	75 µm
			2 <sup>nd</sup> Coat Luxathane® R	50 µm
			3 <sup>rd</sup> Coat Luxathane® R	50 µm
ALUMINIUM	Exterior/Interior	Clean, degrease and abrade surface	1 <sup>st</sup> Coat Luxepoxy® 4 White Primer	50 µm
			2 <sup>nd</sup> Coat Luxathane® R	50 µm
			3 <sup>rd</sup> Coat Luxathane® R	50 µm

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

# LUXATHANE® R

<b>SURFACE PREPARATION</b>	Specifiers should follow the surface preparation guidelines from the data sheet for the primer or first coat selected. The surface must be clean, sound and free from moisture, grease, oil, dirt, rust, loose paint, and other contaminants and abraded to provide a suitable key for the coating system. If application of the second coat has exceeded the recoat window of the first coat (refer to data sheet) then the entire surface <b>MUST</b> be abraded.												
<b>APPLICATION</b>	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.												
<b>BRUSH/ROLLER</b>	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.												
<b>CONVENTIONAL SPRAY</b>	Thin up to 150ml/litre with Dulux® Urethane Thinner (965-63023) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%. <table border="0" style="width: 100%;"> <tr> <td>Typical Set-up</td> <td>Graco AirPro:</td> <td>1.4mm (239542)</td> </tr> <tr> <td></td> <td>Pressure at Triton 308:</td> <td>70-100 kPa (10-15 p.s.i.)</td> </tr> <tr> <td></td> <td>Pressure at Gun:</td> <td>380-410 kPa (55-60 p.s.i.)</td> </tr> <tr> <td></td> <td>HVLP</td> <td>1.4 Fluid Tip Set</td> </tr> </table>	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
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											
<b>AIRLESS SPRAY</b>	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.												
<b>PRECAUTIONS</b>	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 <b>MUST</b> 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.												
<b>CLEAN UP</b>	Clean all equipment with Dulux® Urethane Thinner (965-63023) immediately after use.												
<b>OVERCOATING</b>	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.												
<b>SAFETY PRECAUTIONS</b>	<b>Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or <a href="http://www.duluxprotectivecoatings.com.au">www.duluxprotectivecoatings.com.au</a></b>												
<b>STORAGE</b>	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.												
<b>HANDLING</b>	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.												
<b>USING</b>	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.												
<b>FLAMMABILITY</b>	This product is flammable. All sources of ignition must be eliminated in, or near the working area. <b>DO NOT SMOKE.</b> Fight fire with foam, CO <sub>2</sub> or dry chemical powder. On burning will emit toxic fumes.												
<b>WELDING</b>	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.												

COMPANY INFORMATION		PACKAGING, TRANSPORT AND STORAGE	
Dulux Protective Coatings a division of		<b>PACKAGING</b>	Available in 4 litre and 20 litre packs
DuluxGroup (Australia) Pty Ltd 1956 Dandenong Road, Clayton 3168 A.B.N. 67 000 049 427	DuluxGroup (New Zealand) Pty Ltd 150 Hutt Park Road, Lower Hutt, NZ A.B.N. 55 133 404 118	<b>TRANSPORTATION WEIGHT</b>	1.28 kg/litre (Average of components)
		<b>DANGEROUS GOODS</b>	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263

Dulux, Duthin, Durebild, Durepon, Luxepoxy, Luxathane and Zincode are registered trade marks of DuluxGroup (Australia) Pty Ltd.

Any advice, recommendation, information, assistance or service provided by Dulux Australia in relation to goods manufactured by it or their use and application is given in good faith and is believed by Dulux to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by Dulux is provided without liability or responsibility PROVIDED THAT the foregoing shall not exclude, limit, restrict or modify the right entitlements and remedies conferred upon any person or the liabilities imposed upon Dulux by any condition or warranty implied by Commonwealth, State or Territory Act or ordinance void or prohibiting such exclusion limitation or modification. Products can be expected to perform as indicated in this sheet so long as applications and application procedures are as recommended. Specific advice should be sought from Dulux for application in highly corrosive areas and for large projects to ensure proper performance.