LUXATHANE® SPX

High Performance Recoatable Satin Polyurethane Finish — PC 404

FEATURES
- VERY GOOD UV RESISTANCE AND GLOSS RETENTION
- VERY GOOD DRYING AND RECOAT PROPERTIES
- SMOOTH SATIN FINISH
- LONG TERM RECOATABILITY

USES LUXATHANE® SPX is a high performance satin, two-component acrylic polyurethane that is recoatable with minimum surface preparation. It is designed for use in areas where a high gloss is not required and a satin finish is desired. LUXATHANE® SPX is formulated for use in commercial and industrial environments where extended service periods are required. The smooth, durable, satin finish is ideal for steelwork and facades of commercial projects, such as retail complexes and high rise offices and apartments. This versatile product is equally suitable for new construction and maintenance over properly primed steel, galvanised steel, aluminium, concrete, hardwood timber and MDF.

LUXATHANE® SPX can be used directly over all Dulux® epoxy primers, universal primers, high-build epoxy intermediate coats and to aged, tightly adhering coatings subject to necessary solvent resistance tests and appropriate surface preparation.

LUXATHANE® Accelerator is available for use with Standard Hardener to promote faster drying.

SPECIFICATIONS AS/NZS 3750.5

RESISTANCE GUIDE

WEATHERABILITY	Very good gloss and colour retention on exterior exposure	**SOLVENTS**	Unaffected by 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	Unaffected by splash and spillage of most salt solutions	**ALKALIS**	Good resistance to splash and spillage of most common alkalis
ACIDS	Suitable for splash and spillage exposure to most acids	**ABRASION**	Good when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Two pack acrylic polyurethane coating
FINISH	Satin, 60° gloss of approximately 20-30 GU
COLOUR	White, Black, and a full range of tinted colours
COMPONENTS	Two
VOLUME SOLIDS	52 ± 2% (depending on the colour)
VOC LEVEL	<430 g/L (White)
FLASH POINT	>23°C
POT LIFE	5 hours (4 litre kit, 25°C)
MIXING RATIO V/V	Part A : 4 Part B : 1
THINNER	965-63023 Dulux® Urethane Thinner
THINNER	965-H0289 Duthin® 511 X-Slow Thinner

PRODUCT CODE

729-63313	White
729-63001	Light Base
729-63003	Clear Base
729-63002	Deep Base
729-00070	Black
976-H0190	Standard Hardener
976-H0229	Part C Accelerator

APPLICATION CONDITIONS

	Min	Max
Air Temp.	10°C	40°C
Substrate Temp.	10°C	40°C
Relative Humidity		85%

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	95	145	95
Dry film per coat (µm)	50	70	50

SUITABLE SUBSTRATES	Suitably primed steel, aluminium, zinc coated steel, concrete, fibreglass or MDF
PRIMERS	Epoxy primers, etch primers and universal metal primers
APPLICATION METHODS	Conventional, HVLP, airless spray or air assisted spray

DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS*

					OVERCOAT*	
Temperature	**Humidity**	**Touch**	**Handle**	**Full Cure**	**Min**	**Max**
10° C	50%	75 Minutes	13 Hours	7 Days	13 Hours	Extended
15° C	50%	60 minutes	10 Hours	7 Days	10 Hours	Extended
25° C	50%	30 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 ASSUMING NO LOSSES

10.4 square metres per litre equals 50 µm dry film thickness

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

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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)	95	145	95
Dry film per coat (µm)	50	70	50

APPLICATION CONDITIONS

	Min	Max
Air Temperature	10°C	40°C
Substrate Surface Temperature	10°C	40°C
Relative Humidity		85%

SOLIDS BY VOLUME	52% White
VOC LEVEL	<440 g/L (White)
POT LIFE	5 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	6 Hours	7 Days	6 Hours	Extended
25° C	50%	25 Minutes	4 Hours	7 Days	4 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

10.4 square metres per litre 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 – NEW	High corrosivity (AS2312.1 Cat C5) System PUR5	Abrasive blast AS1627.4 Class 2.5	1st Coat 2nd Coat 3rd Coat	Zincanode® 402 Duremax® MBE Luxathane® SPX	75 µm 200 µm 50 µm
STEEL – NEW	Medium–high corrosivity (AS2312.1 Cat C4) System PUR4	Abrasive blast AS1627.4 Class 2.5	1st Coat 2nd Coat 3rd Coat	Zincanode® 402 Duremax® GPE Luxathane® SPX	75 µm 125 µm 50 µm
STEEL – NEW	Low-medium corrosivity (AS2312.1 Cat C2-4) Exceeds System PUR 2a	Abrasive blast AS1627.4 Class 2.5	1st Coat 2nd Coat 3rd Coat	Zincanode® 402 Luxathane® SPX Luxathane® SPX	75 µm 50 µm 50 µm
STEEL – NEW	Low corrosivity (AS2312.1 Cat C2) System PUR2	Abrasive blast AS1627.4 Class 2.5	1st Coat 2nd Coat	Durepon® EZP Luxathane® SPX	75 µm 50 µm
STEEL – NEW OR MAINTENANCE	Low corrosivity (AS2312.1 Cat C2) System PUR1	Abrasive blast AS1627.4 Class 2 or power tool clean AS1627.2 St 3	1st Coat 2nd Coat	Durebild® STE Luxathane® SPX	125 µm 50 µm
CONCRETE	Exterior/Interior	Remove release agents and other surface contaminants	1st Coat 2nd Coat 3rd Coat	Durebild® STE Luxathane® SPX Luxathane® SPX	125 µm 50 µm 50 µm
HARDWOOD & MDF	Interior	Sand and dust down before and after first coat to remove raised fibres	1st Coat 2nd Coat 3rd Coat	Luxepoxy® 4 White Primer Luxathane® SPX Luxathane® SPX	50 µm 50 µm 50 µm
ALUMINIUM	Exterior/Interior	Clean, degrease and abrade surface	1st Coat 2nd Coat 3rd Coat	Luxepoxy® 4 White Primer Luxathane® SPX Luxathane® SPX	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 using 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. Application can be improved by thinning with up to 100 ml/litre with Dulux® Urethane Thinner (965-63023) or Duthin® 511 X-Slow Thinner (965-H0298). Additional coats may be required to attain the specified thickness.

CONVENTIONAL SPRAY

Thin up to 150 ml/litre with Dulux® Urethane Thinner (965-63023) or Duthin® 511 X-Slow Thinner (965-H0298) 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

Graco® Merkur 48:1, Graco® King E60 spray pump or equivalent. Graco® XTR 7 spray gun w/ XHD RAC SwitchTips and housing or equivalent. Thinning is not normally required but up to 50 ml/litre or 5% of Dulux® Duthin® 511 X-Slow Thinner (965-H0298) (preferred thinner) or Dulux® Urethane Thinner (965-63023) may be added to aid application. Apply in multiple wet coats overlapping each pass 50%.

Tip Orifice	Atomising Pressure	Mat'l Hose ID	Pump Manifold Filter
0.009" – 0.013" (228 - 330 microns)	3,600 – 4,200 psi (248 – 290 bar)	3/8" (9.5 mm)	60 Mesh (250 microns)

NOTE: A 2 metre x ¼" (6.35mm) whip hose is allowed at the end of the material hose for greater ease of application. A dedicated material line for use with this product is recommended. Under the conditions evaluated the 0.011" spray tip provided for the best film build control.

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 express 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 you read and understand the safety precautions on the Material 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 us Duthin® 511 X-Slow Thinner (965-H0298) to improve 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) or Duthin® 511 X-Slow Thinner (965-H0298) immediately after use.

OVERCOATING

Degrease with Gamlen CA No. 1 according to the manufacturer's written instructions and all safety warnings. 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 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
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 4 and 16 litre packs
TRANSPORTATION WEIGHT	1.28 kg/litre (Average of components)
DANGEROUS GOODS	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263