

SURFACESHIELD™ FP - Gloss

Non-Sacrificial Water Borne Anti-Graffiti Clearcoat

PC 954

- FEATURES**
- SUITABLE FOR PAINTED SURFACES SUCH AS WEATHERSHIELD® AND ACRASHIELD®
 - SUITABLE FOR UNPAINTED CONCRETE, BRICKS, STONE AND MASONRY SURFACES.
 - WATER BASED, LOW VOC AND LOW ODOUR
 - OVERCOATABLE WITH LIGHT ABRASION
 - EXCELLENT GLOSS RETENTION

USES SURFACESHIELD™ FP (Fluorinated Polymer) is a two-component, non-sacrificial, water borne anti-graffiti clear coat. The coating appears opaque on application and dries clear to visually guide the applicator to ensure all areas are covered evenly.

Once SURFACESHIELD™ FP is fully cured, it can withstand repeated cleaning using graffiti removal agents and water. SURFACESHIELD™ FP can protect a wide variety of porous materials commonly used in construction, infrastructure, retail, municipality, and public spaces. SURFACESHIELD™ FP can also be used directly over Dulux® decorative topcoats such as WEATHERSHIELD® and ACRASHIELD®.

SPECIFICATIONS
RESISTANCE GUIDE

WEATHERABILITY	Excellent 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 fluoropolymer	APPLICATION CONDITIONS		
FINISH	Gloss (also available in Satin, see relevant datasheet)	Min	Max	
COLOUR	Clear	Air Temp.	10°C	40°C
COMPONENTS	Two	Substrate Temp.	10°C	40°C
VOLUME SOLIDS*	>31% (Gloss)	Relative Humidity	85%	
VOC LEVEL	<54 g/L	Concrete Moisture	<10%	
FLASH POINT	N/A	COATING THICKNESS (MICRONS)		
POT LIFE	1 hour (4 litre kit, 25°C)	Wet film per coat (µm)	Min	Max
MIXING RATIO V/V	Part A : 5 Part B : 1	Dry film per coat (µm)	100	145
THINNER (BRUSH)	Potable Water		30	45
GRAFFITI REMOVER	Selleys Muck-Off®	SUITABLE SUBSTRATES	Concrete, bricks, natural stone and other masonry surfaces. Painted surfaces and Colorbond® steel (de-gloss prior to application). For other surfaces, conduct a test sample to confirm suitability.	
PRODUCT CODE	992-H0228 Gloss Clearcoat 976-H0235 Standard Hardener	PRIMERS	Not required.	
		APPLICATION METHODS	Brush and roller recommended. DO NOT EXCEED MAXIMUM FILM THICKNESS. Refer to Spray information. Spray application must be in controlled areas in accordance with state based regulations.	

*Unthinned. Please note this product **MUST BE THINNED 5%** before use. See **APPLICATION** section.

DRYING CHARACTERISTICS AT 40 µm DRY FILM THICKNESS*

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min ¹	Max ²
25° C	50%	45 Mins	24 Hours	7 Days	24 Hours	3 Days

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

¹If the maximum overcoat interval is exceeded then the surface **MUST be abraded** to ensure maximum inter-coat adhesion.

SPREADING RATE

assuming no losses

7.7 square metres per litre equals 40 µm dry film thickness

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

SURFACESHIELD™ FP

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)
PREPAINTED	Exterior	Clean and degrease surface to remove contaminants. Abrade to remove gloss.	1 st Coat Surfaceshield™ FP 2 nd Coat Surfaceshield™ FP	40 µm 40 µm
POROUS (clay bricks, natural stone, concrete)	Exterior	Clean and degrease surface to remove contaminants, including bond breakers.	1 st Coat Surfaceshield™ FP 2 nd Coat Surfaceshield™ FP 3 rd Coat Surfaceshield™ FP	40 µm 40 µm 40 µm

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

SURFACE PREPARATION	<p>The surface must be free from grease, oil, dirt, rust and other contaminants. Dulux recommends that surfaces be degreased with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer's written instructions and all safety warnings.</p> <p>Previously painted surfaces: Degrease surface. Remove unsound coatings. Feather back edges to remove ridges. Abrade entire surface of tightly adhering remaining coating to remove gloss or chalkiness and provide a suitable key for the new coating system.</p> <p>Concrete: Concrete must be at least 28 days old before coating. Remove all laitance, form release agents, curing compounds, oil, grease and other surface contaminants.</p>			
APPLICATION	<p>NOTE: DO NOT ADD WATER TO PART B AT ANY STAGE.</p> <ol style="list-style-type: none"> Gently power mix each part (A and B) separately until the contents of each part is uniform. Add Part B to Part A and power mix together thoroughly. Take care not to aerate - ensure that mixing does not draw in air and generate foam. THIN 5% WITH POTABLE WATER. Add water only to the mixed product; NEVER ADD WATER TO PART B. Continue mixing through the gel phase until product appears SMOOTH and consistent. Let stand for 10 minutes. Remix thoroughly before application. 			
BRUSH/ROLLER	Apply even coats of the mixed material to the prepared surface. Beyond the minimum 5% thinning, the mixed product may be further thinned with up to 50 ml/litre with potable water if needed. When brushing and rolling additional coats may be required to attain the specified thickness.			
CONVENTIONAL SPRAY	Beyond the minimum 5% thinning, the mixed product may be further thinned with up to 50 ml/litre with potable water if needed. Typical Set-up			
	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.)	
AIRLESS SPRAY	Standard airless spray equipment such as a Graco Xtreme 30:1 with a fluid tip of 15-17 thou (0.38-0.43mm) and an air supply capable of delivering 550-690 kPa (80-100 p.s.i.) at the pump. Ensure you thin 5% with potable water.			
PRECAUTIONS	<p>This is an industrial product designed for use by experienced Protective Coating applicators. This product contains isocyanates and appropriate PPE is required. Spray application is only suitable in controlled environments in accordance with state-based regulations. 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 DuluxGroup (Australia) Pty Ltd. Do not use any product past its pot life. Product past its pot life may still appear fit for use but will develop substantially reduced gloss and may develop brittleness. 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 10°C, or where the surface temperature is below 10°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. You should only thin the mixed product with potable water. Do not add water to the PART B isocyanate component. Surfaceshield™ FP will not reach its full anti-graffiti properties until fully cured.</p>			
CLEAN UP	Clean all equipment with clean warm water immediately after use followed by DULUX® EPOXY THINNER (920-08925).			

SURFACESHIELD™ FP

CLEANING AND GRAFFITI REMOVAL	The extent of graffiti removal can vary depending on the type of graffiti and the surface roughness. Three coats of Surfaceshield™ FP is recommended to provide enough film build to cover porous materials. Complete removal of graffiti may not always be achieved and therefore cannot be guaranteed. If attempting to remove graffiti before the coating is fully cured (7 days) shadowing may occur and the coating may be damaged, affecting future removals. Selleys® Muck-off® is the recommended graffiti remover. Apply directly to the area of the substrate affected, once the graffiti starts to run immediately wipe off using a cloth or water pressure. Ensure that any water used in the graffiti removal process is contained. Selleys® Muck-off® must be removed within 60 seconds or it may cause damage to the Surfaceshield™ FP coating and/or to any coatings underneath, especially water based acrylics.
OVERCOATING	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 1,200-1,500 PSI to remove chalk and dust. Abrade surface to provide a good key for the new coating. Do not use this product directly over an epoxy or alkyd coating as these coatings will chalk and then delaminate the clearcoat.
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 and using. Always wash hands before smoking, eating, drinking or using the toilet.
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. When spraying, wear combined organic vapour/particulate respirator. Users must always comply with their 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		PACKAGING, TRANSPORT AND STORAGE	
Dulux Protective Coatings a division of		PACKAGING	Available in 4 litre kits
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	TRANSPORTATION WEIGHT	1.10 kg/litre (Average of components)
		DAANGEROUS GOODS	Part A: Non Dangerous Goods Part B: Non Dangerous Goods

Dulux, Selleys, Weathershield, Acrashield and Muck-off are registered trade marks of DuluxGroup (Australia) Pty Ltd. Surfaceshield is a trade mark of DuluxGroup (Australia) Pty Ltd. Colorbond is a registered trade mark of BlueScope Steel Limited

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.

SURFACESHIELD™ FP - Satin

Non-Sacrificial Water Borne Anti-Graffiti Clearcoat

PC 954

- FEATURES**
- SUITABLE FOR PAINTED SURFACES SUCH AS WEATHERSHIELD® AND ACRASHIELD®
 - SUITABLE FOR UNPAINTED CONCRETE, BRICKS, STONE AND MASONRY SURFACES.
 - WATER BASED, LOW VOC AND LOW ODOUR
 - OVERCOATABLE WITH LIGHT ABRASION
 - EXCELLENT GLOSS RETENTION

USES SURFACESHIELD™ FP (Fluorinated Polymer) is a two-component, non-sacrificial, water borne anti-graffiti clear coat. The coating appears opaque on application and dries clear to visually guide the applicator to ensure all areas are covered evenly.

Once SURFACESHIELD™ FP is fully cured, it can withstand repeated cleaning using graffiti removal agents and water. SURFACESHIELD™ FP can protect a wide variety of porous materials commonly used in construction, infrastructure, retail, municipality, and public spaces. SURFACESHIELD™ FP can also be used directly over Dulux® decorative topcoats such as WEATHERSHIELD® and ACRASHIELD®.

SPECIFICATIONS

RESISTANCE GUIDE

WEATHERABILITY	Excellent 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 fluoropolymer	APPLICATION CONDITIONS			
FINISH	Satin (also available in Gloss, see relevant datasheet)		Min	Max	
COLOUR	Clear	Air Temp.	10°C	40°C	
COMPONENTS	Two	Substrate Temp.	10°C	40°C	
VOLUME SOLIDS*	>33% (Satin)	Relative Humidity		85%	
VOC LEVEL	<51 g/L (Satin)	Concrete Moisture		<10%	
FLASH POINT	N/A	COATING THICKNESS (MICRONS)			
POT LIFE	1 hour (4 litre kit, 25°C)		Min	Max	Recommended
MIXING RATIO V/V	Part A : 5 Part B : 1	Wet film per coat (µm)	90	135	120
THINNER (BRUSH)	Potable Water	Dry film per coat (µm)	30	45	40
GRAFFITI REMOVER	Selleys Muck-Off®	SUITABLE SUBSTRATES	Concrete, bricks, natural stone and other masonry surfaces. Painted surfaces and Colorbond® steel (de-gloss prior to application). For other surfaces, conduct a test sample to confirm suitability.		
PRODUCT CODE	992-H0230 Satin Clearcoat 976-H0235 Standard Hardener	PRIMERS	Not required.		
		APPLICATION METHODS	Brush and roller recommended. DO NOT EXCEED MAXIMUM FILM THICKNESS. Refer to Spray information. Spray application must be in controlled areas in accordance with state based regulations.		

*Unthinned. Please note this product **MUST BE THINNED 5%** before use. See **APPLICATION** section.

DRYING CHARACTERISTICS AT 40 µm DRY FILM THICKNESS*

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min ¹	Max ²
25° C	50%	45 Mins	24 Hours	7 Days	24 Hours	3 Days

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

¹If the maximum overcoat interval is exceeded then the surface **MUST be abraded** to ensure maximum inter-coat adhesion.

SPREADING RATE 8.2 square metres per litre equals 40 µm dry film thickness

assuming no losses

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

SURFACESHIELD™ FP

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)
PREPAINTED	Exterior	Clean and degrease surface to remove contaminants. Abrade to remove gloss.	1 st Coat 2 nd Coat	Surfashield™ FP Surfashield™ FP 40 µm 40 µm
POROUS (clay bricks, natural stone, concrete)	Exterior	Clean and degrease surface to remove contaminants, including bond breakers.	1 st Coat 2 nd Coat 3 rd Coat	Surfashield™ FP Surfashield™ FP Surfashield™ FP 40 µm 40 µm 40 µm

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

SURFACE PREPARATION	<p>The surface must be free from grease, oil, dirt, rust and other contaminants. Dulux recommends that surfaces be degreased with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer's written instructions and all safety warnings.</p> <p>Previously painted surfaces: Degrease surface. Remove unsound coatings. Feather back edges to remove ridges. Abrade entire surface of tightly adhering remaining coating to remove gloss or chalkiness and provide a suitable key for the new coating system.</p> <p>Concrete: Concrete must be at least 28 days old before coating. Remove all laitance, form release agents, curing compounds, oil, grease and other surface contaminants.</p>			
APPLICATION	<p>NOTE: DO NOT ADD WATER TO PART B AT ANY STAGE.</p> <p>7. Gently power mix each part (A and B) separately until the contents of each part is uniform.</p> <p>8. Add Part B to Part A and power mix together thoroughly. Take care not to aerate - ensure that mixing does not draw in air and generate foam.</p> <p>9. THIN 5% WITH POTABLE WATER. Add water only to the mixed product; NEVER ADD WATER TO PART B.</p> <p>10. Continue mixing through the gel phase until product appears SMOOTH and consistent.</p> <p>11. Let stand for 10 minutes.</p> <p>12. Remix thoroughly before application.</p>			
BRUSH/ROLLER	Apply even coats of the mixed material to the prepared surface. Beyond the minimum 5% thinning, the mixed product may be further thinned with up to 50 ml/litre with potable water if needed. When brushing and rolling additional coats may be required to attain the specified thickness.			
CONVENTIONAL SPRAY	Beyond the minimum 5% thinning, the mixed product may be further thinned with up to 50 ml/litre with potable water if needed. Typical Set-up			
	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.)	
AIRLESS SPRAY	Standard airless spray equipment such as a Graco Xtreme 30:1 with a fluid tip of 15-17 thou (0.38-0.43mm) and an air supply capable of delivering 550-690 kPa (80-100 p.s.i.) at the pump. Ensure you thin 5% with potable water.			
PRECAUTIONS	<p>This is an industrial product designed for use by experienced Protective Coating applicators. This product contains isocyanates and appropriate PPE is required. Spray application is only suitable in controlled environments in accordance with state-based regulations. 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 DuluxGroup (Australia) Pty Ltd. Do not use any product past its pot life. Product past its pot life may still appear fit for use but will develop substantially reduced gloss and may develop brittleness. 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 10°C, or where the surface temperature is below 10°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. You should only thin the mixed product with potable water. Do not add water to the PART B isocyanate component. Surfashield™ FP will not reach its full anti-graffiti properties until fully cured.</p>			
CLEAN UP	Clean all equipment with clean warm water immediately after use followed by DULUX® EPOXY THINNER (920-08925).			

SURFACESHIELD™ FP

CLEANING AND GRAFFITI REMOVAL	The extent of graffiti removal can vary depending on the type of graffiti and the surface roughness. Three coats of Surfaceshield™ FP is recommended to provide enough film build to cover porous materials. Complete removal of graffiti may not always be achieved and therefore cannot be guaranteed. If attempting to remove graffiti before the coating is fully cured (7 days) shadowing may occur and the coating may be damaged, affecting future removals. Selleys® Muck-off® is the recommended graffiti remover. Apply directly to the area of the substrate affected, once the graffiti starts to run immediately wipe off using a cloth or water pressure. Ensure that any water used in the graffiti removal process is contained. Selleys® Muck-off® must be removed within 60 seconds or it may cause damage to the Surfaceshield™ FP coating and/or to any coatings underneath, especially water based acrylics.
OVERCOATING	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 1,200-1,500 PSI to remove chalk and dust. Abrade surface to provide a good key for the new coating. Do not use this product directly over an epoxy or alkyd coating as these coatings will chalk and then delaminate the clearcoat.
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 and using. Always wash hands before smoking, eating, drinking or using the toilet.
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. When spraying, wear combined organic vapour/particulate respirator. Users must always comply with their 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		PACKAGING, TRANSPORT AND STORAGE	
Dulux Protective Coatings a division of		PACKAGING	Available in 4 litre kits
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	TRANSPORTATION WEIGHT	1.10 kg/litre (Average of components)
		DANGEROUS GOODS	Part A: Non Dangerous Goods Part B: Non Dangerous Goods

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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.