Dulux PROTECTIVE COATINGS

METALSHIELD® RUST DEFENCE™

Direct to Metal, Modified Acrylic, Self-Priming Finish LI016

FEATURES

- RETAINS COLOUR & SHEEN FOR LONGER THAN CONVENTIONAL ALKYD BASED PAINTS
- FAST-DRY MODIFIED ACRYLIC, TOUCH DRY IN 30 MINS, RECOAT IN 1 HOUR AT 25°C
- TINTABLE TO 1000'S OF DULUX COLOURS
- AVAILBLE IN GLOSS AND SATIN FINISHES

USES

METALSHIELD® RUST DEFENCE™ is a single component modified acrylic, designed to provide anti-corrosive properties. It is also designed for direct to metal application where suitable preparation has taken place. This fast-drying technology is ideal for projects that require easy application and quick turnaround.

METALSHIELD® RUST DEFENCE™ is isocyanate-free with fast dry properties, so is well suited for on-site application.

SPECIFICATIONS

RESISTANCE GUIDE

WEATHERABILITY	Excellent gloss retention and chalk resistance on exterior exposure	SOLVENTS	Resists splashes of ethanol
HEAT RESISTANCE	Up to 55°C dry heat	WATER	Very good resistance to fresh and salt water splash and spillage, but not suitable for immersion
SALTS	Unaffected by splash and spillage of neutral and alkaline salt solutions		
ACIDS	Suitable for splash and spillage of mild organic acids	ALKALIS	Good resistance to splash of most common alkalis
		ABRASION	Good when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Modified Acrylate Copolymer
FINISH	Gloss and Satin
COLOUR	White, an extensive range of colours using the Dulux Authentic Colour® Low VOC Tint System, and Black
COMPONENTS	One
VOLUME SOLIDS	39% (White)
VOC LEVEL	<50 g/L (White, untinted)
FLASH POINT	Not applicable
POT LIFE	Not applicable
MIXING RATIO V/V	Single Pack
THINNER	Potable water
PRODUCT CODE	54X-04912 Gloss Vivid White 54X-04914 Gloss Deep Base 54X-16101 Gloss Ultra Deep Base 54X-87663 Gloss Extra Bright Base 54X-00070 Gloss Black 54Z-04912 Satin Vivid White 54Z-04914 Satin Deep Base 54Z-16101 Satin Ultra Deep Base 54Z-87663 Satin Extra Bright Base 54Z-00070 Satin Black

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)	80	105	90
Dry film per coat (µm)	30	40	35

SUITABLE SUBSTRATES	Suitably prepared metals including bare steel, aluminum, zinc coated steel and wrought iron.
PRIMERS	Dulux® PRECISION® All Metal Primer (51W-89937)
APPLICATION METHODS	Air Spray, Airless Spray, Brush, Roller

DRYING CHARACTERISTICS AT 35 µm DRY FILM THICKNESS*

					OVERCOAT	
Temperature	Humidity	Touch	Handle	Full Cure	Min	Max
10° C	50%	1.5 Hours	3 Hours	7 days	3 Hours	Extended
15° C	50%	1 Hour	2 Hours	7 days	2 Hours	Extended
25° C	50%	30 Minutes	1 Hour	7 days	1 Hour	Extended

*The drying 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

11.1 square metres per litre equals 35 µm dry film thickness

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

Metalshield® Rust Defence™

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	Low corrosivity (AS2312.1 Cat C2)	Power tool clean AS1627.2	1st Coat 2nd Coat	Metalshield® Rust Defence™ Metalshield® Rust Defence™	35 µm 35 µm
STEEL	Very low corrosivity (AS2312 Cat C1)	Power tool clean AS1627.2	1st Coat 2nd Coat	Metalshield® Rust Defence™ Metalshield® Rust Defence™	35 µm 35 µm
ALUMINIUM	Exterior/Interior	Clean, degrease and abrade surface	1st Coat 2nd Coat	Metalshield® Rust Defence™ Metalshield® Rust Defence™	35 µm 35 µm
ZINCALUME	Exterior/Interior	Clean, degrease and abrade surface	1st Coat 2nd Coat	Metalshield® Rust Defence™ Metalshield® Rust Defence™	35 µm 35 µm
GALVANISED STEEL	Exterior/Interior	Clean, degrease and abrade surface	1st Coat 2nd Coat	Metalshield® Rust Defence™ Metalshield® Rust Defence™	35 µm 35 µm

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

SURFACE PREPARATION

Steel: Wipe the surface with Metalshield Brush Thinner (965-H0010) to remove all residual grease, oil, and dirt. Mill scale, oxide deposits, and old paint films on metal surfaces must be removed by power tool cleaning according to AS1627.2 Coating performance is proportional to the degree of surface preparation.

Non-ferrous metals: Round off all sharp edges. Remove grease, oil, and other contaminants in accordance with AS1627.1. Degrease and abrade the surface with a non-metallic abrasive pad wetted with Gamlen CA 1 (a free-rinsing, alkaline detergent) and water. Rinse thoroughly with fresh potable water.

For recommendations on abrasive or whip blast cleaning, refer to your Protective Coatings Representative

Rusted bare metal surfaces: Remove all loose, flaky rust by scraping, sanding or wire brushing. Dust and wash off and allow to thoroughly dry. Then apply Dulux PRECISION® All Metal Primer

Pre-primed metal surfaces: Dust and wash off and allow to thoroughly dry. Apply Dulux PRECISION® All Metal Primer.

Aged and previously painted metal surfaces: remove all unsound paint and scrape off all loose and flaking paint. Sand all surfaces to a flat finish. Ensure thorough and uniform abrasion of all surfaces, to promote good key for adhesion of the new coating system. Dust and wash off using Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer's written instructions and all safety warnings. Allow to thoroughly dry. No primer required if the surface is in sound condition[1] with no rust. Apply Dulux PRECISION® All Metal Primer.

[1] Ensure surface is sound by cutting a small X through the existing paint with a sharp blade, press cellulose-tape firmly across the cut and then rip off the tape. If the paint comes off, it is unsound and should be removed. Repeat at random in a number of areas to test the surface.

APPLICATION

Mix thoroughly using a power mixer until the contents are uniform. Ensure paint has been tinted to the correct colour before use. DULUX® ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF INCORRECT COLOUR. Box all containers to ensure colour consistency. Remix thoroughly before application.

BRUSH/ROLLER

Apply even coats of the material to the prepared surface. Additional coats may be required to attain the specified thickness. Thinning is not normally required; however, up to 50 ml/litre of potable water may be added to aid application.

CONVENTIONAL SPRAY

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.)

PRECAUTIONS

This is an industrial product designed for use by experienced applicators. Where conditions may require variation from the recommendations on this Product Data Sheet contact your nearest Dulux® Protective Coatings Consultant for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the written consent of Dulux® Protective Coatings Australia. The rate of cure is dependent upon temperature. Do not apply at temperatures below 10°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. The surface to be coated must be free of moisture, contaminants, mill scale and loose flakes.

CLEAN UP

Clean all equipment with clean potable or tap water immediately after each use.

OVERCOATING

Degrease with Gamlen CA 1 according to the data sheet. Test adhesion of existing coating as described in Surface Preparation Note 1 above. 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 SHEETS are available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au

STORAGE

The product is NOT classified as dangerous goods for transport or storage. Store in well ventilated bunded area under cover and away from sources of heat. 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 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.

USING

Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spraying, users must comply with their respective State Spray Painting Regulations.

FLAMMABILITY

This product is non flammable. 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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DuluxGroup (New Zealand) Pty Ltd
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 500ml, 1 litre and 4 litre packs
TRANSPORTATION WEIGHT	1.42 kg/litre (Average of components)
DANGEROUS GOODS	Non Dangerous Goods

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