

# **METALSHIELD®** ALL SURFACE PRIMER

### **Universal Metal Primer**

LI 014

- **FEATURES** FAST DRYING
  - CONTAINS ZINC PHOSPHATE
  - GOOD CORROSION PROTECTION
  - SUITABLE FOR PRIMING ALL METALS INCLUDING ALUMINIUM AND GALVANISED STEEL
  - SUITABLE FOR FIBREGLASS

USES METALSHIELD® ALL SURFACE Primer is a single pack, fast drying primer suitable for all metal surfaces. The zinc phosphate pigmentation in the formula provides corrosion protection on mild steel and wrought iron, and therefore METALSHIELD® ALL SURFACE Primer is the preferred metal primer for METALSHIELD® alkyd topcoats in mildly corrosive environments.

METALSHIELD® ALL SURFACE Primer is ideal for suitably prepared ferrous and non-ferrous metals including mild steel, wrought iron, aluminium, copper and galvanised steel, Colorbond®, Zincalume® and fibreglass. Typical areas of application include structural frames and trusses of factories and warehouses, farm equipment and other light fabricated steelwork.

### **SPECIFICATIONS**

RESISTANCE GUIDE							
WEATHERABILITY	Will chalk on exterior exposure. Use a weatherable topcoat.	SOLVENTS	Withstands intermittent splash and spillage of aliphatic and aromatic hydrocarbons				
HEAT RESISTANCE	Up to 65°C dry heat	WATER	Resists rain and condensation. No recommended for permanently dam or immersed exposure				
SALTS	Excellent resistance to splash and spillage of neutral salt solutions	ALKALIS	Not recommended where fumes, splash or spillage may occur				
ACIDS	Not recommended where fumes, splash or spillage may occur	ABRASION	Good when fully cured				

	spillage may	occur						
TYPICAL PROPERTIES AND APPLICATION DATA								
CLASSIFICATION	All metal zinc phosphate primer		APPLICATION CONDITIONS					
FINISH	Flat			Min	Max			
COLOUR	Neutral Grey		Air Temp.	10°C	40°C			
			Substrate Temp.	10°C	40°C			
			Relative Humidity		85%			
COMPONENTS	One							
VOLUME SOLIDS	15% COATING THICKNESS (MICRONS)							
VOC LEVEL	<710g/L			Min	Max	Recommended		
FLASH POINT	-18°C		Wet film per coat (µm)	65	100	65		
POT LIFE	Not applicable		Dry film per coat (μm)	10	15	10		
MIXING RATIO V/V	Single Pack							
THINNER - BRUSH	965-63023	Dulux® Urethane Thinner	SUITABLE	Prepared mild steel, aluminium,				
THINNER – SPRAY	965-63023	Dulux <sup>®</sup> Urethane Thinner or acetone	SUBSTRATES	galvanized steel, other non ferrous metals Colorbond® , Zincalume® and fiberglass				
PRODUCT CODE	366-H0070	Neutral Grey	PRIMERS	Not applicable				
			TOPCOATS	Dulux® Me	etalshield <sup>®</sup> a	alkyd topcoats		

### DRYING CHARACTERISTICS AT 10 µm DRY FILM THICKNESS\*

					OVERCOAT		
Temperature	Humidity	Touch	Handle	Full Cure	Min	Max	
25° C	50%	20 minutes	1 Hour*	7 Days	1 Hour	Extended	

<sup>\*</sup> 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

15.0 square metres per litre equals 10 µm dry film thickness

APPLICATION Brush, roller, conventional and HVLP

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

## METALSHIELD® ALL SURFACE PRIMER

### 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 C1-2)	Power tool clean AS1627.2 St 3 Abrasive blast AS1627.4 Class 2	1 <sup>st</sup> Coat 2 <sup>nd</sup> Coat	motation of the Garrage Control	10 μm 50 μm
STEEL - NEW	Low corrosivity (AS2312.1 Cat C1-2)	Power tool clean AS1627.2 St 3 Abrasive blast AS1627.4 Class 2	1 <sup>st</sup> Coat 2 <sup>nd</sup> Coat		10 μm 50 μm
NON FERROUS METALS AND FIBREGLASS	Exterior/Interior	Clean, degrease and abrade surface	1 <sup>st</sup> Coat 2 <sup>nd</sup> Coat		10 μm 50 μm

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

## **PREPARATION**

SURFACE Steel: Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Degrease with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer's written instructions and all safety warnings. Abrasive blast clean to a minimum of AS1627.4 Class 2.5 with a blast profile of 40 - 70 microns. Remove all dust brushing or vacuum. Steel where abrasive blast cleaning is not viable: Rust, mill scale, oxide deposits and old paint films on metal surfaces must be removed by power tool cleaning according to AS1627.2 Class 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. Whip blast with fine non-metallic media such as plastic, glass or garnet to provide a key. Remove all dust with compressed air. Alternatively, degrease and abrade the surface with a nonmetallic abrasive pad wetted with Gamlen CA 1 (a free-rinsing, alkaline detergent) and water. Rinse thoroughly with fresh potable water.

### APPLICATION

Mix thoroughly using a power mixer until the contents are uniform. Remix thoroughly before application.

BRUSH/ROLLER | Suitable for small areas only. When brushing and rolling additional coats may be required to attain the specified thickness.

CONVENTIONAL **SPRAY**  Thin up to 150 ml/litre with Acetone or Dulux® Urethane Thinner (965-63023) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%.

Typical Set-up Graco AirPro:

Pressure at Triton 308: 70-100 kPa (10-15 p.s.i.) 380-410 kPa (55-60 p.s.i.) Pressure at Gun:

1.4mm (239542)

HVLP: 1.4 Fluid Tip

**AIRLESS SPRAY** 

Not recommended

This is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may **PRECAUTIONS** 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. 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. Do not overcoat before the minimum overcoat interval or wrinkling may occur. The surface can be marked for several days after application. Abrasive blast

cleaned surfaces must be primed within 4 hours.

Clean all equipment with Dulux® Urethane Thinner (965-63023) immediately after use **CLEAN UP** 

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 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 and using. Always wash hands before smoking, eating,

**USING** 

drinking or using the toilet. Use with good ventilation and avoid inhalation of spray mists and fumes. When spraying, wear combined organic vapour/particulate

**FLAMMABILITY** 

respirator. Users must always comply with their respective State Spray Painting Regulations at all times 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<sub>2</sub> 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** 

A.B.N. 67 000 049 427

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**PACKAGING, TRANSPORT AND STORAGE** PACKAGING Available in 500mL, 1 and 4 litre cans

TRANSPORTATION WEIGHT 1 053 kg/litre DANGEROUS GOODS Class 3 UN 1263

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