

# 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® 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®, Zinalume® 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

<b>WEATHERABILITY</b>	Will chalk on exterior exposure. Use a weatherable topcoat.	<b>SOLVENTS</b>	Withstands intermittent splash and spillage of aliphatic and aromatic hydrocarbons
<b>HEAT RESISTANCE</b>	Up to 65°C dry heat	<b>WATER</b>	Resists rain and condensation. Not recommended for permanently damp or immersed exposure
<b>SALTS</b>	Excellent resistance to splash and spillage of neutral salt solutions	<b>ALKALIS</b>	Not recommended where fumes, splash or spillage may occur
<b>ACIDS</b>	Not recommended where fumes, splash or spillage may occur	<b>ABRASION</b>	Good when fully cured

#### TYPICAL PROPERTIES AND APPLICATION DATA

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

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

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

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

**SPREADING RATE** 15.0 square metres per litre equals 10 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.

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## 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 Metalshield® All Surface Primer 2 <sup>nd</sup> Coat Metalshield® Premium	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 Metalshield® All Surface Primer 2 <sup>nd</sup> Coat Metalshield® QD Topcoat	10 µm 50 µm
NON FERROUS METALS AND FIBREGLASS	Exterior/Interior	Clean, degrease and abrade surface	1 <sup>st</sup> Coat Metalshield® All Surface Primer 2 <sup>nd</sup> Coat Metalshield® Premium	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

<b>SURFACE PREPARATION</b>	<p><b>Steel:</b> 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. <b>Steel where abrasive blast cleaning is not viable:</b> 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. <b>Non-ferrous metals:</b> 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 non-metallic abrasive pad wetted with Gamlen CA 1 (a free-rinsing, alkaline detergent) and water. Rinse thoroughly with fresh potable water.</p>												
<b>APPLICATION</b>	Mix thoroughly using a power mixer until the contents are uniform. Remix thoroughly before application.												
<b>BRUSH/ROLLER</b>	Suitable for small areas only. When brushing and rolling additional coats may be required to attain the specified thickness.												
<b>CONVENTIONAL SPRAY</b>	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%.												
	<table border="0"> <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</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
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	HVLP:	1.4 Fluid Tip											
<b>AIRLESS SPRAY</b>	Not recommended												
<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. 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.												
<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 bonded area under cover. Store in 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 and using. Always wash hands before smoking, eating, drinking or using the toilet.												
<b>USING</b>	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.												
<b>FLAMMABILITY</b>	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.												
<b>WELDING</b>	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  
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

## 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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