

# METALSHIELD® PRIMER & FINISH

## Anti-corrosive Primer Finish

LI 013

- FEATURES**
- PRIMER FINISH
  - SINGLE PACK PRODUCT
  - RAPID DRYING
  - HIGH GLOSS FINISH
  - CONTAINS ZINC PHOSPHATE
  - TINTABLE – AVAILABLE IN OVER 2,500 PASTEL COLOURS USING THE COLORFAST® TINT SYSTEM

**USES** METALSHIELD® PRIMER & FINISH is a single pack, air drying coating based on a modified alkyd resin. The incorporation of rust inhibitive zinc phosphate pigment enables direct application to blast or chemically cleaned steel, providing both corrosion protection and a decorative finish in one coat.

METALSHIELD® PRIMER & FINISH is an economical finishing alternative in sheltered or mild environments or for simple refurbishing after repair. Typical areas of application include structural frames and trusses for factories and warehouses, farm equipment and other light fabricated steelwork.

### SPECIFICATIONS

#### RESISTANCE GUIDE

<b>WEATHERABILITY</b>	Will chalk on exterior exposure. Chalking will not detract from the protective properties of the coating.	<b>SOLVENTS</b>	Resists mineral turpentine. Poor resistance to esters, ketones, ethers, chlorinated solvents and similar strong solvents
<b>HEAT RESISTANCE</b>	Up to 80°C dry heat	<b>WATER</b>	Resists rain and condensation. Not recommended for permanently damp or immersed exposure
<b>SALTS</b>	Poor resistance to most 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>	Alkyd enamel primer-finish		<b>APPLICATION CONDITIONS</b>			
<b>FINISH</b>	High Gloss			Min	Max	
<b>COLOUR</b>	White, Golden Yellow, Black and a range of pastel tinted colours.		<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>	43% (White)			Min	Max	Recommended
<b>VOC LEVEL</b>	<490 g/L (White)		<b>Wet film per coat (µm)</b>	90	135	116
<b>FLASH POINT</b>	-1°C		<b>Dry film per coat (µm)</b>	40	60	50
<b>POT LIFE</b>	Not applicable		<b>SUITABLE SUBSTRATES</b>	Abrasive blast cleaned, hand cleaned or power tool cleaned steel		
<b>MIXING RATIO V/V</b>	Single pack		<b>PRIMERS</b>	Not applicable		
<b>THINNER – BRUSH</b>	965-H0010	Metalshield® Brush Thinner	<b>APPLICATION METHODS</b>	Conventional, airless spray or air assisted spray. Brush suitable for small areas only.		
<b>THINNER – SPRAY</b>	965-H0009	Metalshield® Spray Thinner				
<b>PRODUCT CODE</b>	357-63001	White/Light Base				
	357-39141	Golden Yellow				
	357-00070	Black				

#### DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS\*

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min <sup>1</sup>	Max
25° C	50%	20 Minutes	2 Hours	7 Days	24 Hours	Extended

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

<sup>1</sup>Overcoating can occur up to 4 hours after the initial application or after 24 hours. Failing to observe these limits may result in "frying". If in doubt test a small inconspicuous area first. Allow longer times under cold conditions.

#### SPREADING RATE ASSUMING NO LOSSES

**8.6 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.

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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	Mild (AS2312.1 Cat C1)	Power tool clean AS1627.2 Abrasive blast AS1627.4	1 <sup>st</sup> Coat Metalshield® PRIMER & FINISH	50 µm

NOTE: If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT and full opacity. For steelwork in moderate to severe corrosivity environments, a heavy duty protective coating system is recommended. Refer to a Dulux Protective Coatings Consultant.

<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.</p> <p><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.</p>												
<b>APPLICATION</b>	<p>Mix each can thoroughly using a power mixer until the contents are uniform. Ensure each can 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.</p>												
<b>BRUSH/ROLLER</b>	<p>Suitable for small areas only. Apply even coats of the material to the prepared surface. When brushing and rolling additional coats may be required to attain the specified thickness. Thin if necessary with up to 100 ml/litre of Metalshield® Brush Thinner (965-H0010) to aid application.</p>												
<b>CONVENTIONAL SPRAY</b>	<p>Thin up to 150 ml/litre with Metalshield® Spray Thinner (965-H0009) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%.</p> <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> </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.)
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<b>AIRLESS SPRAY</b>	<p>Standard airless spray equipment such as a Graco Xtreme 30:1 with a fluid tip of 13-15 thou (0.33-0.38mm) and an air supply capable of delivering 550-690 kPa (80-100 p.s.i.) at the pump. Thinning is not normally required but up to 50 ml/litre of Metalshield® Spray Thinner (965-H0009) may be added to aid application.</p>												
<b>PRECAUTIONS</b>	<p>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® representative 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. 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. Overcoating can occur up to 4 hours after the initial application or after 24 hours. Failing to observe these limits may result in "frying" or wrinkling. If in doubt test a small inconspicuous area first. Allow longer times under cold conditions. Do not apply over scale bearing steel. Do not apply on structures subject to sustained surface temperatures above 65°C or where spillage of strong solvent or oils may occur. Abrasive blast cleaned surfaces must be primed within 4 hours. This product is not suitable to be topcoated by two pack heavy-duty coatings or directly applied over galvanised iron, or zinc rich coatings.</p>												
<b>CLEAN UP</b>	<p>Clean all equipment with METALSHIELD® Brush Thinner (965-H0010) or METALSHIELD® Spray Thinner (965-H0009) immediately after use.</p>												
<b>OVERCOATING</b>	<p>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.</p>												
<b>SAFETY PRECAUTIONS</b>	<p><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></p>												
<b>STORAGE</b>	<p>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.</p>												
<b>HANDLING</b>	<p>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.</p>												
<b>USING</b>	<p>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.</p>												
<b>FLAMMABILITY</b>	<p>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.</p>												
<b>WELDING</b>	<p>Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.</p>												

### 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 1 and 4 litre cans
TRANSPORTATION WEIGHT	1.12 kg/litre (White)
DAANGEROUS GOODS	Class 3 UN 1263

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