

# METALSHIELD<sup>®</sup> ETCH PRIMER

Ready For Use Universal Etch Primer

LI 009

- FEATURES**
- READY FOR USE
  - RAPID DRY AND FAST RECOAT
  - IDEAL FOR PRIMING ALL FERROUS AND NON-FERROUS METALS
  - SUITABLE FOR APPLICATION DIRECT TO FIBREGLASS SURFACES
  - WIDE RANGE OF TOPCOAT TYPES CAN BE USED
  - TOUCHUP SPRAYPAKS AVAILABLE

**USES** METALSHIELD<sup>®</sup> ETCH PRIMER is a fast-cure etch primer for shop or site application over suitably prepared metal substrates, ready to overcoat in only 10 minutes under normal conditions. METALSHIELD<sup>®</sup> ETCH PRIMER is ideal where high adhesion, fast turn around and single pack convenience are required.

METALSHIELD<sup>®</sup> ETCH PRIMER can be used over appropriately prepared aluminium, zinc coated steel, stainless steel, mild steel and other non-ferrous metals. Also suitable for application direct to fibreglass surfaces. Intended for application direct to prepared metal surfaces or as a spot primer for exposed metal/fibreglass surfaces only.

**SPECIFICATIONS** AS/NZS 3750.17 Type 1

## RESISTANCE GUIDE

<b>WEATHERABILITY</b>	Will chalk on exterior exposure. Use a weatherable topcoat.	<b>SOLVENTS</b>	Resists 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 when suitably topcoated. Not recommended for permanently damp or immersed exposure
<b>SALTS</b>	Unaffected by splash and spillage of most salt solutions	<b>ALKALIS</b>	Suitable for splash and spillage exposure to weak alkalis with suitable topcoat
<b>ACIDS</b>	Suitable for splash and spillage exposure to weak acids with suitable topcoat	<b>ABRASION</b>	Fair

## TYPICAL PROPERTIES AND APPLICATION DATA

<b>CLASSIFICATION</b>	Ready for use universal etch primer	<b>APPLICATION CONDITIONS</b>			
<b>FINISH</b>	Low Sheen		Min	Max	
<b>COLOUR</b>	Black, Light Grey and Medium Grey. Touchup spraypaks also available.	<b>Air Temp.</b>	10°C	45°C	
		<b>Substrate Temp.</b>	10°C	45°C	
		<b>Relative Humidity</b>		85%	
<b>COMPONENTS</b>	One	<b>COATING THICKNESS (MICRONS)</b>			
<b>VOLUME SOLIDS</b>	8%		Min	Max	Recommended
<b>VOC LEVEL</b>	<750 g/L	<b>Wet film per coat (µm)</b>	125	188	125
<b>FLASH POINT</b>	<0°C	<b>Dry film per coat (µm)</b>	10	15	10
<b>POT LIFE</b>	Not applicable	<b>SUITABLE SUBSTRATES</b>	Mild steel, aluminium, galvanized steel, stainless steel and fibreglass		
<b>MIXING RATIO V/V</b>	Single pack	<b>TOPCOATS</b>	Single and two pack Dulux <sup>®</sup> topcoats		
<b>THINNER – SPRAY</b>	965-H0011 Metalshield <sup>®</sup> Etch Primer Thinner	<b>APPLICATION METHODS</b>	Conventional spray and HVLP spray		
<b>PRODUCT CODE</b>	466-00070 Black 466-89931 Light Grey 466-89932 Medium Grey				

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

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min	Max
25° C	50%	10 Minutes	30 Minutes	45 Minutes	10 Minutes	Extended

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

## SPREADING RATE 8.0 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 Abrasive blast AS1627.4	1 <sup>st</sup> Coat Metalshield® Etch Primer 2 <sup>nd</sup> Coat Metalshield® Premium Enamel	10 µm 50 µm
STEEL – NEW	Low corrosivity (AS2312.1 Cat C1-2)	Power tool clean AS1627.2 Abrasive blast AS1627.4	1 <sup>st</sup> Coat Metalshield® Etch Primer 2 <sup>nd</sup> Coat Luxathane® HPX	10 µm 50 µm
NON FERROUS METALS AND FIBREGLASS	Exterior/Interior	Clean, degrease and abrade surface	1 <sup>st</sup> Coat Metalshield® Etch Primer 2 <sup>nd</sup> Coat Metalshield® Premium Enamel	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.</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> <p><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>	Recommended only for spot patching on rivets, seams, etc.
<b>CONVENTIONAL SPRAY</b>	Thinning not required but up to 50ml/litre with Metalshield® Etch Primer Thinner (965-H0011) may be used to aid atomisation. Apply in multiple wet coats overlapping each pass 50%. 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
<b>AIRLESS SPRAY</b>	Not recommended
<b>TOUCH UP SPRAYPAKS</b>	Refer to the details located on the back of the Touchup Spraypak aerosol can. Note – a slight colour variation may occur compared to the standard product due to film build, application methods and technique.
<b>PRECAUTIONS</b>	This is an industrial product designed for use by experienced Protective Coatings 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 5°C. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Do not apply over scale bearing steel. Abrasive blast cleaned surfaces must be primed within 4 hours. Excessive film thickness should be avoided as this may result in delamination.
<b>CLEAN UP</b>	Clean all equipment with Metalshield® Etch Primer Thinner (965-H0011) 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  
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DuluxGroup (New Zealand) Pty Ltd  
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## PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 1, 4 and 15 litre cans Available in 300g Aerosols
TRANSPORTATION WEIGHT	0.88 kg/litre
DAANGEROUS GOODS	Class 3 UN 1263 Aerosols Class 2 UN 1950

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