

METALSHIELD® PREMIUM

UV Resistant Gloss Silicone Enamel Topcoat

LI 011

- FEATURES**
- EXCELLENT GLOSS RETENTION – FAR SUPERIOR TO STANDARD ALKYD ENAMELS
 - FASTER DRYING THAN STANDARD SILICONE ALKYD ENAMELS & LONG OIL ALKYDS
 - SINGLE PACK PRODUCT WITH A HIGH GLOSS FINISH
 - TINTABLE – AVAILABLE IN OVER 5,000 COLOURS USING THE COLORFAST® TINT SYSTEM

USES METALSHIELD® PREMIUM is a UV resistant silicone modified enamel topcoat. It is an easy to use, high gloss, single pack, air-drying topcoat. Its unique fast dry formulation offers faster turn-around times. METALSHIELD® PREMIUM also has vastly superior weathering properties to that of conventional alkyd enamels. The silicone modification is particularly effective in resisting dirt pick-up from diesel fumes and coal and iron ore dust. Typical areas of use include tank farms, doors, transmission towers, bridge structures and the exteriors of commercial and light industrial buildings. METALSHIELD® PREMIUM has been formulated for use within the COLORFAST® Industrial Colour System, thus offering an extensive, readily available colour range.

SPECIFICATIONS
RESISTANCE GUIDE

WEATHERABILITY	Good gloss and chalk resistance on exterior exposure	SOLVENTS	Resists splash and spillage of aliphatic and aromatic hydrocarbons
HEAT RESISTANCE	Up to 90°C dry heat	WATER	Resists rain and condensation. Not recommended for permanently damp or immersed exposure
SALTS	Excellent resistance to neutral and acid salt solutions	ALKALIS	Not recommended where fumes, splash or spillage may occur
ACIDS	Suitable for splash and spillage exposure to weak solutions of acids	ABRASION	Very good when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Silicone alkyd enamel	APPLICATION CONDITIONS			
FINISH	High Gloss		Min	Max	
COLOUR	White, Black and a full range of tinted colours and factory packaged colours	Air Temp.	10°C	40°C	
		Substrate Temp.	10°C	40°C	
		Relative Humidity		85%	
COMPONENTS	One	COATING THICKNESS (MICRONS)			
VOLUME SOLIDS	46% (Light Base)		Min	Max	Recommended
VOC LEVEL	<410 g/L (White)	Wet film per coat (µm)	87	130	109
FLASH POINT	>1°C	Dry film per coat (µm)	40	60	50
POT LIFE	Not applicable	SUITABLE SUBSTRATES	Primed steel, aluminium, fibreglass MDF, galvanised steel or concrete		
MIXING RATIO V/V	Single Pack	PRIMERS	Most Dulux® single pack and two pack primers		
THINNER – BRUSH	965-H0010 Metalshield® Brush Thinner	TOPCOATS	N/A		
THINNER – SPRAY	965-H0009 Metalshield® Spray Thinner	APPLICATION METHODS	Brush, roller, conventional, airless spray or air assisted spray		
PRODUCT CODE	384-63001 Light Base 384-63002 Deep Base 384-63003 Clear Base 384-00070 Black 384-63143 White 384-39141 Golden Yellow 384-89968 Monument® 384-88680 Signal Red 384-60342 Woodland Grey®				

DRYING CHARACTERISTICS AT 50 µm DRY FILM THICKNESS*

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min ¹	Max ²
25° C	50%	2 Hours	6 Hours	7 Days	24 Hours	7 Days

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

¹Overcoating can occur up to 1 hour after 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.

²If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion.

SPREADING RATE 9.2 square metres per litre equals 50 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	Mild - Moderate (AS2312 Cat C1-2) System ALK3	Power tool clean AS1627.2 St 3 Abrasive blast AS1627.4 Sa 2	1 st Coat Luxaprime® ZP 2 nd Coat Metalshield® Premium	75 µm 50 µm
STEEL – NEW	Mild (AS2312 Cat C1)	Power tool clean AS1627.2 Abrasive blast AS1627.4	1 st Coat Metalshield® High Build ZP Primer 2 nd Coat Metalshield® Premium	50 µm 50 µm
HARDWOOD & MDF	Interior	Sand and dust down before and after first coat.	1 st Coat DULUX® Acrylic Primer Undercoat 2 nd Coat Metalshield® Premium	35 µm 50 µm
ALUMINIUM FIBREGLASS	Exterior/Interior	Clean, degrease and abrade surface	1 st Coat LUXEPOXY® 4 White Primer 2 nd Coat Metalshield® Premium	50 µm 50 µm

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

SURFACE PREPARATION	Specifiers should follow the surface preparation guidelines from the data sheet for the primer or first coat selected. The surface must be clean, sound and free from moisture, grease, oil, dirt, rust, loose paint, and other contaminants. Degrease surface with Gamlen CA 1 detergent (according to the manufacturer's written instructions and all safety warnings) and then abrade to provide a suitable key for the coating system.
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. Thin if required with up to 50 ml/litre with Metalshield® Brush Thinner (965-H0010) to aid application.
CONVENTIONAL SPRAY	Thin up to 100 ml/litre with Metalshield® Spray Thinner (965-H0009) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%.
AIRLESS SPRAY	Typical Set-up Graco AirPro: 1.4mm (239542) Pressure at Triton 308: 70-100 kPa (10-15 p.s.i.) Pressure at Gun: 340-410 kPa (50-60 p.s.i.)
PRECAUTIONS	Standard airless spray equipment such as a Graco Xtreme 30:1 or Graco Merkur 30:1 with a fluid tip of 11-13 thou (0.28-0.33mm) 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 may be added to aid application.
CLEAN UP	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 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 1 hour after the initial application or after 24 hours. Do not overcoat before the minimum overcoat interval – to do so 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 galvanised iron or zinc rich coatings.
OVERCOATING	Clean all equipment with Metalshield® Brush Thinner or Metalshield® Spray Thinner immediately after use.
SAFETY PRECAUTIONS	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
STORAGE	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
HANDLING	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.
USING	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.
FLAMMABILITY	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.
WELDING	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 ₂ or dry chemical powder. On burning will emit toxic fumes.
	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
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DuluxGroup (New Zealand) Pty Ltd
150 Hutt Park Road, Lower Hutt, NZ
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING Available in 1 and 4 litre cans

TRANSPORTATION WEIGHT 1.25 kg/litre

DAANGEROUS GOODS Class 3 UN 1263

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