

METALSHIELD[®] PLUS

QD ENAMEL Tintable Topcoat

Quick Dry Tintable Alkyd Gloss Enamel LI008

- FEATURES**
- HIGH GLOSS FINISH
 - RAPID DRY & RECOAT
 - SINGLE PACK
 - EXTENSIVE COLOUR RANGE USING COLORFAST TINT SYSTEM

USES METALSHIELD[®] PLUS QD ENAMEL Tintable Topcoat is ideal as a coating for steel in mild and commercial environments. The preferred coating where a hard wearing, fast dry, easy repair and recoat finish is required. Used to paint machinery and equipment such as cranes, trailers, pumps, compressors and as a general purpose fast dry enamel.

SPECIFICATIONS

RESISTANCE GUIDE

HEAT RESISTANCE	Up to 80°C dry heat.	ALKALIS	Not recommended where fumes, splash or spillage may occur.
WEATHERABILITY	Chalking may occur on exposure. However this won't detract from the coatings resistance properties.	SALTS	Poor resistance to most salt solutions.
SOLVENTS	Resists mineral turpentine. Limited resistance to strong solvents.	WATER	Resists rain and condensation. Not recommended for permanently damp or immersed exposure.
ACIDS	Not recommended where fumes, splash or spillage may occur.	ABRASION	Good abrasion resistance when fully cured.

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Quick dry alkyd enamel	APPLICATION CONDITIONS	Min	Max	
FINISH	High Gloss	Air Temperature	10°C	40°C	
COLOUR	Extensive range of tinted colours	Substrate Surface Temperature	10°C	40°C	
COMPONENTS	One	Relative Humidity		85%	
SOLIDS BY VOLUME	38%		Min	Max	Recom.
VOC LEVEL	<510 g/L (Light Base, untinted)	Wet film per coat (microns)	80	130	105
FLASH POINT	-1°C	Dry film per coat (microns)	30	50	40
POT LIFE	Not applicable	SUITABLE SUBSTRATES	Suitably primed mild steel, aluminium, zinc coated steel, concrete, fibreglass or MDF		
MIXING RATIO (V/V)	Single pack	PRIMERS	Alkyd based and most two pack primers		
THINNER	Brush Mineral Turpentine	APPLICATION METHODS	Conventional, airless spray or air assisted spray.		
	Spray 965-63034 DUTHIN [®] 340 Spray Thinner				
PRODUCT CODE	371-63001 CF Light Base				
	371-63002 CF Deep base				
	371-63003 CF Clear Base				

Drying characteristics at 40 microns dry film thickness

Temperature	Humidity	Touch	Handle	Full Cure	Overcoat	
					Min*	Max
25° C	50%	20 Minutes	2 Hours	7 Days	24 Hours	Indefinite

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

* 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.

TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

A spreading rate of 9.5 sq. metres per litre corresponds to 40 microns dry film thickness assuming no losses. Practical spreading rates will vary depending on such factors as method and conditions of application and surface roughness.

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TYPICAL SYSTEMS

(The typical systems are offered as a guide only and are not to be used as a specification. It is recommended that the specific needs of a project be discussed with a Dulux Protective Coatings Consultant.)

SURFACE	PREPARATION GUIDE	SYSTEM		DRY FILM THICKNESS
STEEL Mild Environments	Hand &/or Power tool clean AS1627.2:St 3 Abrasive blast AS1627.4 Class 1	1st Coat	METALSHIELD® HIGH BUILD ZP Primer	50 Microns
		2nd Coat	METALSHIELD® PLUS Topcoat	40 Microns
GALVANISED*, ALUMINIUM, FIBREGLASS	Clean, degrease and abrade surface	1st Coat	METALSHIELD® QUICK DRY Primer	35 Microns
		2nd Coat	METALSHIELD® PLUS Topcoat	40 Microns
		3rd Coat	METALSHIELD® PLUS Topcoat	40 Microns

* Note - this system is only recommended over galvanised mild steel in mild environments.

SURFACE PREPARATION	METALSHIELD® PLUS Topcoat is designed for application to suitably primed surfaces, (typically METALSHIELD® primers) or prepared sound existing coatings. Suitable primed substrates include steel, aluminium, zinc coated steel, concrete, fibreglass or MDF. It is recommended that specifiers follow the guidelines for surface preparation from the product data sheet for the primer selected. The primer surface must be free from grease, oil, dirt and other loosely adhering materials.
APPLICATION	Stir contents of each can thoroughly with a broad flat stirrer using a stirring, lifting action or use a power mixer. Ensure bases have been tinted to the correct colour before use - DULUX ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF AN INCORRECT COLOUR. Box all containers before use to ensure colour consistency. Remix thoroughly before using.
BRUSH/ROLLER	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 100ml/litre of Mineral Turpentine or DUTHIN® 340 Spray Thinner (965-63034) to ease application.
CONVENTIONAL SPRAY	Thin up to 150ml/litre with DUTHIN® 340 Spray Thinner (965-63034) to aid atomisation. Apply in multiple wet coats overlapping each pass 50%. <u>Typical Set-up</u> Graco Delta Gun: 1.4mm (239542) Pressure at Pot: 70-100 kPa (10-15 p.s.i.) Pressure at Gun: 380-410 kPa (55-60 p.s.i.)
AIRLESS SPRAY	Standard airless spray equipment such as a Graco 30:1 President with a fluid tip of 13-15 thou (0.33-0.38mm) and a tip pressure of 550-690 kPa (80-100 p.s.i.). Thinning is not normally required but up to 50 ml/litre of DUTHIN® 340 Spray Thinner (965-63034) may be added to ease application.
PRECAUTIONS	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.
CLEAN UP	Clean all equipment with DUTHIN® 340 Spray Thinner (965-63034) or Mineral Turpentine immediately after use.
OVERCOATING	Aged coating should be tested for lifting by a method appropriate to the coating thickness, for example 'X' cut or cross-hatch methods. If it lifts, remove it. The surface must be free of oil, grease and other contaminants. High-pressure water wash at 8.3 to 10.3 MPa (1,200 - 1,500 p.s.i.) to remove loosely adhering chalk and dust. Abrasion may be required depending on surface condition. Apply a further coat of METALSHIELD® PLUS Topcoat.
SAFETY PRECAUTIONS	Read Data Sheet, Material Safety Data Sheet and any precautionary labels on containers.
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 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.
USING	Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spray painting, users should comply with the provisions of the respective State Spray Painting Regulations.
FLAMMABILITY	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.
WELDING	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

MATERIAL SAFETY DATA SHEET is available from Customer Service (132377) or www.duluxprotectivecoatings.com.au

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PACKAGING	Available in 4 & 15 litre pails
TRANSPORTATION WEIGHT	1.2 kg/litre
DANGEROUS GOODS	Class 3 UN 1263

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