

INDUSTRIAL ALUMINIUM

Heat Resisting Aluminium Enamel

PC 652

- FEATURES**
- WITHSTANDS TEMPERATURES TO 200°C
 - EXCELLENT HEAT REFLECTIVE PROPERTIES
 - EXCELLENT WEATHERING RESISTANCE
 - HIGH METALLIC LUSTRE
 - GOOD MOISTURE RESISTANCE
 - RECOMMENDED FOR STORAGE TANKS FOR HEAT REFLECTION

USES INDUSTRIAL ALUMINIUM is a durable oleoresinous enamel coating containing high levels of aluminium flake. The finish provides a bright metallic sheen and excellent heat reflective properties. INDUSTRIAL ALUMINIUM is recommended for all applications requiring temperature control. INDUSTRIAL ALUMINIUM is formulated to give relatively high resistance to moisture and weathering for a single pack low film coating.

INDUSTRIAL ALUMINIUM has been extensively used over conventional and epoxy metal primers for overland pipelines, tank farms, silos, ducting and general structural steelwork. Also suitable for the protection of galvanised steel roofing, gates and fencing.

SPECIFICATIONS

RESISTANCE GUIDE

WEATHERABILITY	Excellent. Superior to conventional alkyd enamels	SOLVENTS	Resists splash and spillage of aliphatic hydrocarbons
HEAT RESISTANCE	Up to 200°C dry heat	WATER	Resists rain and condensation. Not recommended for permanently damp or immersed exposure
SALTS	Excellent resistance to neutral salt solutions	ALKALIS	Not recommended where fumes, splash or spillage may occur
ACIDS	Not recommended where fumes, splash or spillage may occur	ABRASION	Fair when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA

CLASSIFICATION	Heat resisting aluminium enamel	APPLICATION CONDITIONS			
FINISH	Gloss with bright metallic lustre		Min	Max	
COLOUR	Bright Aluminium	Air Temp.	5°C	45°C	
		Substrate Temp.	5°C	45°C	
		Relative Humidity		85%	
COMPONENTS	One	COATING THICKNESS (MICRONS)			
VOLUME SOLIDS	36%		Min	Max	Recommended
VOC LEVEL	<500 g/L	Wet film per coat (µm)	45	70	55
FLASH POINT	-3°C	Dry film per coat (µm)	15	25	20
POT LIFE	Not applicable	SUITABLE SUBSTRATES	Suitably primed steel, aluminium and galvanised steel		
MIXING RATIO V/V	Single Pack	PRIMERS	Most Dulux® single pack and two pack primers		
THINNER – BRUSH	Mineral Turpentine	TOPCOATS	Not applicable		
THINNER – SPRAY	965-63034 Duthin® 340 Spray Thinner	APPLICATION METHODS	Brush, roller, conventional, airless spray or air assisted spray		
PRODUCT CODE	325-63008 Industrial Aluminium				

DRYING CHARACTERISTICS AT 20 µm DRY FILM THICKNESS*

Temperature	Humidity	Touch	Handle	Full Cure	OVERCOAT	
					Min	Max
25° C	50%	4-6 Hours	16 Hours	7 Days	16 Hours	Extended

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

SPREADING RATE ASSUMING NO LOSSES

18.0 square metres per litre equals 20 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 – Medium corrosivity (AS2312 Cat C2-4)	Abrasive blast AS1627.4 Class 2 or power tool clean AS1627.2 St 3	1 st Coat Luxaprime® ZP 2 nd Coat Industrial Aluminium 3 rd Coat Industrial Aluminium	75 µm 20 µm 20 µm
STEEL – NEW	Very low corrosivity (AS2312 Cat C1) Heat resistance only	Abrasive blast AS1627.4 Class 2 or power tool clean AS1627.2 St 3	1 st Coat Industrial Aluminium 2 nd Coat Industrial Aluminium	20 µm 20 µm
ALUMINIUM	Exterior/Interior	Clean, degrease and abrade surface	1 st Coat Luxepoxy® 4 White Primer 2 nd Coat Industrial Aluminium 3 rd Coat Industrial Aluminium	50 µm 20 µm 20 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.

SURFACE PREPARATION	<p>Specifiers should follow the surface preparation guidelines from the data sheet for the primer or first coat selected.</p> <p>Steel: 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 data sheet. Abrasive blast clean to a minimum of AS1627.4 Class 2. Remove all dust brushing or vacuum. Steel where abrasive blast cleaning is not viable: 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.</p> <p>Aluminium: Round off all sharp edges. Remove grease, oil and other contaminants in accordance with AS1627.1. Whip blast with fine non-metallic media to provide a key. Remove all dust. Alternatively, degrease and abrade with an abrasive nylon pad wetted with Gamlen CA 1 and water. Rinse thoroughly with potable water.</p>
APPLICATION	Mix each can thoroughly using a power mixer until the contents are uniform. Remix thoroughly before and occasionally during application to prevent settling.
BRUSH/ROLLER	Apply even coats to the prepared surface. Thin if necessary with up to 50 ml/litre with mineral turpentine to aid application. When brushing and rolling additional coats may be required to attain the specified thickness.
CONVENTIONAL SPRAY	Thin up to 50ml/litre with Duthin® 340 Spray Thinner (965-63034) to aid atomisation. Add only enough thinner to achieve 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.)
AIRLESS SPRAY	Standard airless spray equipment such as a Graco Xtreme 30:1 or Graco Merkur 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 Duthin® 340 Spray Thinner (965-63034) may be added to aid 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 5°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. This product must not be directly applied on galvanised iron or zinc rich coatings.
CLEAN UP	Clean all equipment with Duthin® 340 Spray Thinner (965-63034) immediately after use.
OVERCOATING	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.
SAFETY PRECAUTIONS	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
STORAGE	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.
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 spraying, users must comply with their 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.

COMPANY INFORMATION

Dulux Protective Coatings a division of
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DuluxGroup (New Zealand) Pty Ltd
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING Available in 15 litre pails
TRANSPORTATION WEIGHT 1.04 kg/litre
DANGEROUS GOODS Class 3 UN 1263

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