

INDUSTRIAL ALUMINIUM

Heat Resisting Aluminium Enamel

PC 652

- FEATURES**
- MAXIMUM BRILLIANCE AND REFLECTIVE PROPERTIES
 - GOOD MOISTURE RESISTANCE WITH EXCELLENT WEATHERING
 - RECOMMENDED FOR STORAGE TANKS FOR HEAT REFLECTION
 - WITHSTANDS TEMPERATURES TO 200°C

USES INDUSTRIAL ALUMINIUM is a metallic flake filled finish based on a highly durable oleoresinous medium designed to give excellent resistance to moisture and weathering for a thin film coating. The finish also provides maximum brilliance and reflective properties. It is recommended for all applications requiring temperature control in mild industrial and coastal areas.
It is typically specified over conventional, or epoxy metal primers for tank farms, silos, ducting and general structural steelwork. Also suitable for the protection of galvanised roofing, gates and fencing.

SPECIFICATIONS

RESISTANCE GUIDE

HEAT RESISTANCE	Up to 205°C dry heat.	ALKALIS	Not recommended where fumes, splash or spillage may occur.
WEATHERABILITY	Excellent in all but the most aggressive chemical and marine exposure.	SALTS	Unaffected by splash and spillage of neutral salt solutions.
SOLVENTS	Resists splash and spillage of aliphatic hydrocarbons.	WATER	Resists rain and condensation. Not recommended for permanently damp or immersed exposure.
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	Min	Max	
FINISH	Metallic Sheen		Air Temperature	5°C	40°C	
COLOUR	Bright Aluminium		Substrate Surface Temperature	5°C	40°C	
COMPONENTS	One		Relative Humidity		85%	
SOLIDS BY VOLUME	36%			Min	Max	Recom.
VOC LEVEL	<500 g/L		Wet film per coat (microns)	45	70	55
FLASH POINT	-3°C		Dry film per coat (microns)	15	25	20
POT LIFE	Not applicable		SUITABLE SUBSTRATES	Suitably primed steel, aluminium or zinc coated steel.		
MIXING RATIO (V/V)	Single Pack		PRIMERS	Alkyd and most two pack primers.		
THINNER	Brush	Mineral Turpentine	APPLICATION METHODS	Brush, roller, conventional, airless spray or air assisted spray.		
	Spray	965-63034 DUTHIN [®] 340 Spray Thinner				
PRODUCT CODE	325-63008	Industrial Aluminium				

Drying characteristics at 20 microns dry film thickness

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

TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

A spreading rate of 18.0 sq. metres per litre corresponds to 20 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	Hand or Power tool clean AS1627.2 St 3 Abrasive blast AS1627.4 Class 1	1st Coat	LUXAPRIME® Zinc Phosphate	75 Microns
		2nd Coat	INDUSTRIAL ALUMINIUM	20 Microns
		1st Coat	METALSHIELD® High Build ZP Primer	50 Microns
		2nd Coat	INDUSTRIAL ALUMINIUM	20 Microns
		3rd Coat	INDUSTRIAL ALUMINIUM	20 Microns
		<u>Heat Resistance Only</u>		
ALUMINIUM	Clean, degrease and abrade surface	1st Coat	LUXEPOXY® 4 White Primer	25 Microns
		2nd Coat	INDUSTRIAL ALUMINIUM	20 Microns
		3rd Coat	INDUSTRIAL ALUMINIUM	20 Microns

SURFACE PREPARATION It is recommended that specifiers follow the guidelines for surface preparation from the data sheet for the primer selected. The primer surface must be free from grease, oil, dirt and other loosely adhering materials.

Heat Resistance Only:

Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Rust, millscale, oxide deposits and old paint films on metal surfaces should be removed by hand or power tool (AS1627.2 St 3) cleaning as a minimum. Coating performance is proportional to the degree of surface preparation and abrasive blast cleaning to a minimum AS1627.4 Class 2.5 is preferred for more severe environments. Remove all dust by brushing or vacuum cleaning.

APPLICATION Stir each can thoroughly until the contents are uniform. Use of a power mixer is recommended. Remix thoroughly before using.

BRUSH/ROLLER Apply even coats of the mixed material to the prepared surface. Thin if necessary with up to 50 ml/litre with mineral turpentine to ease 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 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 or 33:1 Bulldog 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 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 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 is not suitable to be directly applied over galvanised iron or zinc rich coatings.

CLEAN UP Clean all equipment with DUTHIN® 340 Spray Thinner (965-63034) 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.

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 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 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, CO₂ 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 15 litre pails
TRANSPORTATION WEIGHT 1.04 kg/litre
DANGEROUS GOODS Class 3 UN 1263

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