



Worth doing, worth Dulux.

Dulux Duralloy®



POWDER & INDUSTRIAL COATINGS

Dulux TGIC Free Extra Durable Powder Coating			
Product Code:	915 Line		
Specification met:	Meets and/or exceeds requirements of AAMA2603 and AS3715. Classification of fire performance; 915-line has a Group classification of 1-S according to the NZ Building Code verification method C/VM2 Appendix A (ref, BRANZ Fire Test report FH 5532-TT)		
Description			
Duralloy® Powder Coating is a TGIC free polyester powder coating range of tough thermoset powder coatings with decorative and durability characteristics that are suitable for internal use and external product applications and which exhibit excellent overall performance. Duralloy® is formulated with advanced polyester resin technology and high performance pigments to meet or exceed the performance requirements of AAMA2603 and AS3715			
Features		Benefits	
10 year film integrity	Warranted performance on correctly pre-treated aluminium when applied by a Dulux Registered Applicator.		
10 year colour warranty .	Very good colour retention, warranted performance on correctly pre-treated aluminium when applied by a Dulux Registered Applicator.		
Environmental warranty statement	Contains no PVC or heavy metal with extremely low VOC emissions		
Registered applicators	Quality assurance systems in place		
High transfer efficiency	Increased first pass transfer		
Low cure	Cost savings on Energy or increased line speeds		
Good flow out	Smooth film appearance		
Tough polyester	Hard wearing/serviceable finish		
Uses			
Duralloy® Powder Coating was developed primarily for use on extruded aluminium, including window and door joinery and extruded aluminium panel work on residential and light commercial buildings. Duralloy® may however, be used for a variety of purposes over varied substrates, from steel to aluminium. Examples of their application include bicycles, garden tools, lawn mowers and automotive components.			
Performance Guide			
Weather	Excellent resistance to weathering.	Salt Spray	Excellent salt spray resistance over pretreated aluminium. (1,500 hours - unaffected @ ASTM B117) 2-3mm adhesion loss at scribe after 250hrs salt spray on pretreated steel panels
Heat	Excellent resistance to 120°C continuous service conditions.	Humidity	Excellent resistance to 38°C/100% humidity for 1,500 hours on pre-treated aluminium.
Acid	Resistant to spills of dilute acid. Avoid contact.	Abrasion	Very good resistance to abrasion
Alkali	Resistant to spills of dilute alkali. Avoid contact.	Pencil Hardness	Min F
Flexibility	Pass 13 Nm (120 in-lb)	Cross Hatch Adhesion	No removal

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Chemical Resistance

Mortar	Resistant	White Spirits	Slight softening/limit contact
Ethanol	Resistant	Xylene	Slight softening/limit contact
Methyl Ethyl Ketone	Softens/avoid contact	Ethyl Acetate	Softens/avoid contact

Product Guide

Colour	A wide range of stock and made to order solid colours & pearlescent colours	Specific gravity	1.3 - 1.7 @ colour
Gloss Level	25 - 98% at 60° as required	Shelf life	12 months when stored below 25°C/dry conditions

Application Data

Application Method	Electrostatic spray.		
Clean Up	Dust or vacuum loose powder. Avoid use of compressed air.		
Cure Schedule	Metal Temperature (°C)	Time (minutes)	
	210	5	
	200	6	
	180	8	
Matt product	210	8	
	200	10	
	190	15	
Cured Film Thickness	Recommended:	80 µm	
	Range:	50 – 120 µm	

Note: Light colours may require a higher minimum film build for optimum coverage and colour consistency.

Theoretical spreading rate at recommended film thickness

A coverage rate of 8 - 10m²/kg corresponds to 80 µm cured film thickness assuming no loss. Practical spreading rates will vary due to such factors as method and conditions of application and surface profile and texture.

Application Guide

Surface Preparation

Surfaces should be prepared according to AS1627.6 Section 3 to achieve a conversion coating corresponding to Class 1. Chemical supplier recommendations should also be adhered to, as appropriate. Suitable pre-treatment includes:

Aluminium	Chrome chromate or green chromate/phosphate	(refer AS1627.6)
Ferrous metals	Abrasive blast (SA 2.5)/Zincshield™ powder primer, Or Zinc phosphate or Iron phosphate	(refer Zincshield™ Data Sheet)
Zinc Coated Steels (eg. Galvanising)	Zinc Phosphate or chromate	

Application Procedure and Equipment

Applied by Dulux Powder Coatings Duralloy® Registered Applicators with equipment and control systems to enable correct metal pre-treatment and control of the application and stoving as set out in the Duralloy® Applicators Manual.

1a)	For fluidised bed, ensure uniform fluidisation of powder. Fluidised powder should resemble “simmering liquid”. Aged or compacted powder may require pre-conditioning for several minutes to fluidise evenly.
1b)	For box feeders, ensure probe is fully inserted in powder and operated as per manufacturer’s recommendations.
2.	Apply by electrostatic spray.
3.	Cure as per recommendations outlined above.
	Care should be exercised when stoving at 220°C or above as some colours are prone to discolouration.
4.	Test for cure of the coating by contact with a drop of Corsol PGMA (available from Dulux Powder Coatings) for 30 seconds. Surface should be wiped dry and immediately checked for softening. Only slight surface softening should occur.

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Care and Maintenance

Reference should be made to AAMA609 and 610 standard for cleaning of surfaces. This is a condition of the warranty.

In broad terms, cleaning of externally located powder coating surfaces must take place every three months. Where salts/pollutants are more prevalent such as seaside and industrial areas, a cleaning program should be carried out more frequently.

THREE STEPS TO CLEANING POWDER COATED SURFACES

1. Remove loose deposits with a wet sponge (avoid scratching the surface by dry dusting).
2. Using a soft clean cloth and a mild detergent in warm water, clean the powder coating to remove dust, salt or other deposits.
3. Always rinse after cleaning with fresh water to remove any remaining detergent.

WARNING: In some cases, strong solvents recommended for thinning various types of paints and also for cleaning up mastics/sealants are harmful to the extended life of the powder coated surface. These solvents should not be used for cleaning purposes and will render the warranty void if used. If paint splashes or sealants/mastics need to be removed then the following solvents can be used safely: Methylated Spirits, Ethyl Alcohol, Isopropanol.

Health and Safety

The MSDS is an integral part of using this product as it contains information on the potential health effect of exposure, personal protective equipment needed and other relevant SH&E information.

For detailed information, refer to product label and the current Safety Data Sheet available via the www.duluxpowdercoatings.co.nz or through Sales and Customer Service Offices.

Phone: Australia:-	13 24 99	New Zealand:-	09 441 8244.
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Precautions and Limitations

- Strong, bold colours may not necessarily meet these criteria and so should be referred to Dulux Powder Coatings before specifying.
- As a result of possible wide application variations and stoving conditions, some products and colours may show a variance between Dulux Powder Coatings prepared samples and production applied material. Therefore, it is the applicator and/or their customer's responsibility to ensure the product conforms to their requirements.
- For optimum performance ensure recommended dry film thickness is obtained. Some light colours require increased film thickness average to achieve optimal consistency.
- Not recommended for use in highly corrosive environments such as severe marine or industrial locations.
- Not recommended for components which are exposed to constant temperatures exceeding 120°C.

Dulux Powder Coatings is under no obligation to replace product or repair damages that may result from the use of this product in any way other than stated on the Product data sheet or Material safety data sheet.

Transport and Storage

Sizes:	20 kg & 3 Kg	Flashpoint:	N/A
Weight:	20 kg & 3 Kg	UN:	N/A
Dangerous Goods Class:	N/A	Package Group:	N/A
Shipment Name:	Not dangerous goods. No special transport requirements.		
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	Dandenong South, VIC 3175	Glenfield, Auckland 0627	
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