

Duralloy®

Page 1 of 4

High Durability Powder Coating

Product Code: 915 Line

Specification met: Meets and/or exceeds requirements of AS3715, BS6496, AAMA2603-05

Description

Duralloy® is a TGIC free, tough thermosetting powder coating that exhibits decorative and durability characteristics suitable for interior and exterior product applications combined with excellent overall performance.

Features

Benefits

10 year Film Integrity Warranty*	Guaranteed performance on correctly pre-treated aluminium
10 year Colour Warranty*	Very good colour retention
Low cure	Cost savings on energy or increased line speeds
Wide product range	Extensive selection of colours
No solvents or emissions	Less waste and pollution to the environment

* Warranties are only available when application is completed by DGL Camel Registered Applicators using correctly pretreated Extruded Aluminium. For full details and conditions, including limitations, refer to Duralloy Performance Warranty.

Uses

Duralloy® was developed primarily for use on extruded aluminium, including window and door joinery, and extruded aluminium panel work on residential and light commercial buildings.

Performance Guide

Weather	1 years Florida according to AAMA2603-05 Color Change $\Delta E < 5$ Gloss Retention $> 30\%$ Chalking Less than No.8	Salt Spray	Excellent salt spray resistance over pre-treated aluminium. (1500 hours ASTM B117)
Heat	Excellent resistance to 120°C continuous service conditions.	Humidity	Excellent resistance to 38°C/100% humidity for 1000 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
		Knoops Hardness	Min 15
Flexibility	Limited ≤ 80 inch/lb Avoid post fabrication or refer to applicator's manual for further details	Cross Hatch Adhesion	No removal

Duralloy®

Page 2 of 4

Product Guide

Chemical Resistance

Mortar	Resistant	Xylene	Slight softening/limit contact
Ethanol	Softens/avoid contact	Ethyl Acetate	Softens/avoid contact
Methyl Ethyl Ketone	Softens/avoid contact	White Spirits	Resistant
Colour	A range of stock colours and made to order solid colours	Specific gravity	1.3 - 1.7 @ colour
Gloss Level	25 - 98% at 60°	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	6
	200	8
	180	10
Cured Film Thickness	Recommended:	80 µm
	Range:	50 – 110 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 AS1627.6-1994 Section 3 to achieve a coating corresponding to Class 2 or 4 or BS6496, according to application. Chemical supplier recommendations should also be adhered to, as appropriate. Suitable pre-treatment includes:

Aluminium	Yellow chromate or brown chromate	(refer AS1627.6-1994)
-----------	-----------------------------------	-----------------------

Application Procedure and Equipment

- 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.

Duralloy®

Page 3 of 4

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 solvent (available from DGL Camel Powder Coatings) for 30 seconds. Surface should be wiped dry and immediately checked for softening. Only slight surface softening should occur.

Care and Maintenance

As a general rule, cleaning of externally located powder coating surfaces must take place every six months. Where salts/pollutants are more prevalent such as seaside, industrial and geothermal 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, Turpentine, White 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 Chemical Data Sheet available through Sales and Customer Service Offices.

Phone:

86 769 8755 8778

Precautions and Limitations

- Duralloy® is only available in colours which meet DGL Camel Powder Coatings pigmentation criteria. Strong, bold colours may not necessarily meet these criteria and should be referred to DGL Camel Powder Coatings before specifying.
- As a result of possible wide application variations and stoving conditions, some products and colours may show variation between DGL Camel 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.
- 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.
- Excessive bending or post fabrication may cause cracking of the pretreatment and powder coating. Specifiers are advised to discuss post fabrication techniques with DGL Camel or the Registered Applicator prior to commencing such fabrication



Duralloy®

- Please refer to the Duralloy Performance Warranty for conditions & limitations which effect the warranties described in this data sheet.

Transport and Storage

Sizes:	20 kg	Flashpoint:	N/A
Weight:	20 kg	UN:	N/A
Dangerous Goods Class:	N/A	Package Group:	N/A
Shipment Name:	Not dangerous goods. No special transport requirements.		

DGL Camel Powder Coating (Dongguan) Ltd	Dulux Powder Coatings	DGL Powder Coatings
Yan Tian District, Feng Gang	1-15 Pound Road West	31B Hillside Road
Dong Guan, Guang Dong 523701	Dandenong South, Victoria, 3175	Glenfield, Auckland
PRC	Australia	New Zealand
Telephone: 86 769 8755 8778	61 3 9542 4500	64 9 441 8244
Fax: 86-769-8756 9339	61 3 9542 4542	64 9 441 8242

TM Duralloy The words DGL International and the Squares Device are trade marks.

DISCLAIMER: Any advice, recommendation, information, assistance or service provided by DGL Powder Coatings in relation to goods manufactured by it or their use and application is given in good faith and is believed by DGL Powder Coatings to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by DGL Powder Coatings provided without liability or responsibility PROVIDED THAT the foregoing shall not exclude, limit, restrict or modify the right entitlements and remedies conferred upon any person or the liabilities imposed upon DGL Powder Coatings by any condition or warranty implied by applicable legislation, regulation or other Government ordinance voiding or prohibiting such exclusion, limitation or modification