

## Dulux Powder Coatings Electro™

AU\_DP01900

<b>Product Code</b>	906 Line
<b>Approval</b>	Meets AS3715, BS6496, AAMA2604-10

### Description

The Electro™ range is thermosetting TGIC free powder coatings designed as an alternative to anodising for architectural, aluminium, steel and galvanised steel applications where colour retention is critical. The Electro™ range is formulated with advanced polyester resin technology and high performance pigments to conform with the performance requirements of AAMA 2604-10. It has superior gloss and colour retention when compared with standard polyester powder coatings. Electro™ is supported by a 20 year durability warranty\* when applied by a Dulux Registered Applicator.

\*Subject to the terms and conditions of the relevant product warranty. Please contact your local Dulux representative for further details.

### Features And Benefits

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| <ul style="list-style-type: none"> <li>▪ 20 year durability warranty*</li> <li>▪ Good flow out</li> <li>▪ Very low gloss</li> <li>▪ No solvents or emissions &amp; TGIC free</li> <li>▪ Tough polyester</li> <li>▪ Guaranteed performance</li> </ul> | <ul style="list-style-type: none"> <li>▪ Excellent colour retention</li> <li>▪ Quality assurance systems in place</li> <li>▪ Smooth film appearance</li> <li>▪ Tactile feel, even colour and film appearance</li> <li>▪ Less waste and pollution to the environment &amp; reduced risk to health</li> <li>▪ Hard wearing/serviceable finish</li> </ul> |
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### Uses

Electro™ has been developed as an alternative to anodised finishes for use on a wide range of metal substrates including, most architectural aluminium applications.

### Precautions And Limitations

Electro™ is only available in solid and pearl colours which meet Dulux Powder Coatings pigmentation criteria. Strong, bold colours may not necessarily meet these criteria and 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 variation 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.

Not recommended for post-forming.

### Performance Guide

<b>Exterior Durability</b>	Excellent resistance to weathering, providing extended protection for aluminium	<b>Salt</b>	Excellent salt spray resistance over pre-treated aluminium. (3000 hours ASTM B117)
<b>Heat Resistance</b>	Excellent resistance to 120°C continuous service conditions	<b>Water</b>	Excellent resistance to 38°C/100% humidity for 3000 hours on pre-treated aluminium
<b>Solvent</b>	Resistant to alcohol and white spirits. Abrasion Excellent resistance to abrasion. Abrasion Coefficient > 20 (ASTM D968)	<b>Acid</b>	Resistant to spills of dilute acid. Avoid contact
<b>Alkali</b>	Resistant to spills of dilute alkali. Avoid contact		

Typical Properties			
<b>Gloss Level</b>	5-20% at 60°	<b>Coverage</b>	8 - 10m <sup>2</sup> /kg corresponds to 80um cured film thickness
<b>Shelf Life</b>	12 months when stored below 25°C/dry conditions	<b>Colour</b>	A limited range of stock and made to order solid & pearl
<b>Meets GBCA VOC Requirement?</b>	Yes. Dulux Powder Coatings: <ul style="list-style-type: none"> <li>• Contain no harmful volatile organic solvents</li> <li>• Free of heavy metal pigments such as lead, cadmium, arsenic &amp; mercury</li> <li>• Proven low temperature curing technology</li> <li>• Produced with stringent Safety, Health &amp; Environmental policies and standards</li> <li>• Developed with consideration of life cycle analysis, to guide our suppliers and the materials we use</li> <li>• Manufactured in facilities where significant energy and resources employed in production, are measured with aggressive reduction targets in place</li> <li>• Produced and used with minimal waste</li> </ul> Consequently, Dulux® Powder Coatings are a prime consideration for projects where air quality standards have been set, such as 4, 5 & 6 Green Star Rating Projects.		
<b>Film Build (microns)</b>	Recommended 80um, range 50 120µm	<b>Clean Up</b>	Dust or vacuum loose powder. Avoid use of compressed air
<b>Application Method</b>	Electrostatic Spray. Recommended 70KV.	<b>Specific Gravity</b>	1.3 - 1.7
<b>Flexibility</b>	Limited < or = 80 inch/lb	<b>Pencil Hardness</b>	Min H
<b>Cross Hatch Adhesion</b>	No removal	<b>Chemical Resistance</b>	<b>Mortar</b> Resistant <b>White Spirits</b> Resistant <b>Ethanol</b> Resistant <b>Xylene Methyl</b> Slight softening/limit contact <b>Ethyl Ketone</b> Softens/avoid contact <b>Ethyl Acetate</b> Softens/avoid contact
<b>Cure Schedule</b>	<b>Metal Temperature (°C)</b> 200	<b>Time (minutes)</b> 10 Mins	<b>Comments</b> Metal temperature

Application Guide	
<b>Surface Preparation</b>	<ul style="list-style-type: none"> <li>• Surfaces should be prepared according to AS1627.6-2003 Section 3 to achieve a conversion coating corresponding to Class 1. chemical supplier recommendations should also be adhered to, as appropriate.</li> </ul> Suitable pre-treatment includes: Aluminium - Chrome chromate (refer AS1627.6-2003 Section 3 )
<b>Application Procedure And Equipment</b>	<ul style="list-style-type: none"> <li>• Electrostatic spray.</li> </ul> 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 - 10m <sup>2</sup> /kg corresponds to 80 microns 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. Applied by Dulux 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 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. Box feeders are not suitable for the application of pearlescent & metallic finishes. 2 Apply by electrostatic spray. 3 Cure as per recommendations outlined above. Metal temperatures in excess of 210°C should be avoided due to the possibility of colour change or thermal degradation of the polymer. 4 Test for cure of the coating by contact with a drop of Corsol PGMA for 30 seconds. Surface should be wiped dry and immediately checked for softening. Only slight surface softening should occur.

### Care And Maintenance

Reference should be made to AAMA 609 & 610-02 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

<b>MSDS Number</b>	00000022803	<b>Safety Precautions</b>	Safety Precautions 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: Australia: 13 24 99
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In the case of emergency, please call 1800 033 111

### Transport And Storage

<b>Package Weight</b>	20 Kg	<b>Shipment Name</b>	Not dangerous goods. No special transport requirements
<b>Flash Point</b>	N/A	<b>UN Number</b>	N/A
<b>Dangerous Goods Class</b>	N/A	<b>Package Group</b>	N/A

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