

Dulux Powder Coatings Duratec®

AU_DP01897

Product Code	900 Line
Approval	Meets and/or exceeds requirements of AS 3715 and AAMA 2604. Classification of fire performance 900-line has a Group Classification of 1 according to the National Construction Code (NCC) Volume One Specifications C1.10 and A 2.4 of the Building Code of Australia (BCA).

Description

Duratec® is a thermosetting TGIC free powder coating designed specifically for where colour and gloss retention are critical. Duratec® is formulated with advanced polyester resin technology and high performance pigments to conform with the performance requirements of AAMA2604 It has superior gloss and colour retention compared with standard polyester powder coatings. Duratec® 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"> ▪ 20 year durability warranty* ▪ Good flow out ▪ No solvents or emissions & TGIC free ▪ Tough polyester ▪ Guaranteed performance | <ul style="list-style-type: none"> ▪ Excellent colour retention ▪ Smooth film appearance ▪ Less waste and pollution to the environment & reduced risk to health ▪ Hard wearing/serviceable finish |
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Uses

Duratec® is suitable for a variety of substrates where colour retention is desired.

Precautions And Limitations

Duratec® 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.

Matt products require higher temperature or longer cure duration than Gloss and Satin products, please refer to the cure schedules above. 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 components which are exposed to constant temperatures exceeding 120°C.
Not recommended for post-forming.

Performance Guide

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

Typical Properties																						
Gloss Level	At 60° as required: Gloss: >80%, Satin: 60 - 80%, Matt: 25 - 45		Coverage	8 - 10 m2/kg corresponds to 80 microns cured film thickness																		
Shelf Life	12 months when stored below 25°C/dry conditions		V.O.C Level	Nil																		
Colour	A range of stock and project specific colours.																					
Meets GBCA VOC Requirement?	<p>Yes. Dulux Powder Coatings:</p> <ul style="list-style-type: none"> ▪ Contain no harmful volatile organic solvents ▪ Free of heavy metal pigments such as lead, cadmium, arsenic & mercury ▪ Proven low temperature curing technology ▪ Produced with stringent Safety, Health & Environmental policies and standards ▪ Developed with consideration of life cycle analysis, to guide our suppliers and the materials we use ▪ Manufactured in facilities where significant energy and resources employed in production, are measured with aggressive reduction targets in place ▪ Produced and used with minimal waste <p>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.</p>																					
Film Build (microns)	Between 50- 110 microns		Clean Up	Dust or vacuum loose powder. Avoid use of compressed air.																		
Application Method	Electrostatic Spray		Specific Gravity	1.3-1.5 @colour																		
Flexibility	Ltd less than or = 80 inch/lb		Pencil Hardness	Min H																		
Knoop Hardness	N/A		Cross Hatch Adhesion	No removal																		
Chemical Resistance	<table border="0"> <tr> <td>Mortar</td> <td>Resistant</td> </tr> <tr> <td>White Spirits</td> <td>Resistant</td> </tr> <tr> <td>Ethanol</td> <td>Resistant</td> </tr> <tr> <td>Xylene</td> <td>Slight softening/limit contact</td> </tr> <tr> <td>Methyl Ethyl Ketone</td> <td>Softens/avoid contact</td> </tr> <tr> <td>Ethyl Acetate</td> <td>Softens/avoid contact</td> </tr> </table>			Mortar	Resistant	White Spirits	Resistant	Ethanol	Resistant	Xylene	Slight softening/limit contact	Methyl Ethyl Ketone	Softens/avoid contact	Ethyl Acetate	Softens/avoid contact							
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Application Guide

Surface Preparation	<ul style="list-style-type: none"> For Aluminium 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 (refer AS1627.6-2003 Section 3) For Mild Steel Mild steel contains less than 0.25% carbon. New mild steel surfaces should be inspected for millscale, rust, sharp edges, burr marks and welding flux, forming or machine oils, salts, chemical contamination or mortar splashes on them, all of which which must be removed. Sa 2½ Very thorough blast cleaning. When viewed without magnification, the surface shall be free from visible oil, grease and dirt, and shall be free from mill scale, rust, paint coatings and foreign matter. Any remaining contamination shall show only as slight stains in the form of spots or stripes and correspond to the prints designated Sa 2½ in AS 1627.9.
Application Procedure And Equipment	<ul style="list-style-type: none"> 1 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. <p>Electrostatic spray. 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 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.</p>

Care And Maintenance

Reference should be made to AAMA 609 & 610 standard for cleaning of surfaces. 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

MSDS Number	DLXGHSEN001359	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 (No. 13960128) 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

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

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DuluxGroup (Australia) Pty Ltd 1956 Dandenong Road, Clayton, Victoria 3168 AU ABN 67 000 049 427