

Dulux Powder Coatings Armourspray® AG Gloss

AUDP1493

Product Code	910 line
Approval	AS3715 only

Description

Armourspray® AG is a powder coating offering exceptional properties in resistance to abrasion damage and allowing rapid removal of graffiti. Pentel and aerosol paint graffiti can, in general, be removed by a recommended solvent wipe of 1-2 rubs. The range is suitable both for exterior and interior exposure environments.

Features And Benefits

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| <ul style="list-style-type: none"> ▪ Excellent solvent resistance ▪ Film integrity ▪ Tough film ▪ No solvents or emissions | <ul style="list-style-type: none"> ▪ Allows easy removal of most forms of graffiti ▪ Long intact life of coating ▪ Hard wearing/serviceable finish ▪ Less waste and pollution to the environment |
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Uses

Armourspray® AG powder coatings have a multitude of uses over various substrates including steel and aluminium. Examples include: platform signage and train components, bus shelters, security lockers, telephone boxes, road and general signage, roller shutter doors, transformers, and furniture for industry and schools. Potential applications include areas in public buildings and recreation grounds such as toilet and shower cubicles, wall partitioning, food court benches, outdoor/street furniture, fixtures and fittings.

Precautions And Limitations

Some strong, bold colours may not meet performance criteria for weathering (colour change), refer 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.

Not recommended for use in highly corrosive environments such as severe marine or industrial locations.

Not recommended for components that are exposed to constant temperatures exceeding 120°C.

This product can release an irritating white fume on baking, which is particularly noticeable if there is inadequate ventilation. Ensure adequate ventilation/extraction is available when baking this product to minimise fuming.

Performance Guide

Exterior Durability	Good resistance to weathering. Suitable for outdoor applications.	Salt	< 2mm adhesion loss at scribe after 250 hours on pre-treated steel panels (ASTM B117), 1000 hours on pre-treated aluminium.
Heat Resistance	Excellent resistance to 120°C continuous service conditions.	Water	Good resistance to 38°C/100% humidity for 1000 hours on pre-treated aluminium.
Solvent	Resistant to alcohol and white spirits.	Abrasion	Excellent resistance to abrasion.

Typical Properties																					
Gloss Level	70 - 90% at 60°	Coverage	8 - 10 m ² /kg corresponds to 60-80 microns cured film thicknesses																		
Shelf Life	12 months when stored below 25°C/dry conditions.	Colour	A wide range of made to order colours.																		
Meets GBCA VOC Requirement?	Yes. Dulux Powder Coatings: <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 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.																				
Clean Up	Dust or vacuum loose powder. Avoid use of compressed air.	Application Method	Electrostatic Spray																		
Specific Gravity	1.2 - 1.67 @ colour	Flexibility	Pass 80 inch/lb																		
Pencil Hardness	Min 4H	Cross Hatch Adhesion	No removal																		
Chemical Resistance	<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">White Spirits</td> <td>Resistant</td> </tr> <tr> <td>Ethanol</td> <td>Resistant</td> </tr> <tr> <td>Methyl Ethyl Ketone</td> <td>Resistant</td> </tr> <tr> <td>Ethyl Acetate</td> <td>Resistant</td> </tr> <tr> <td>Xylol</td> <td>Resistant</td> </tr> <tr> <td>Dulon AAA Thinners</td> <td>Resistant</td> </tr> <tr> <td>10% Acetic Acid</td> <td>No effect (100hrs)</td> </tr> <tr> <td>10% Ammonium Hydroxide</td> <td>No effect (100hrs)</td> </tr> <tr> <td>10% Hydrochloric Acid</td> <td>No effect (100hrs)</td> </tr> </table>			White Spirits	Resistant	Ethanol	Resistant	Methyl Ethyl Ketone	Resistant	Ethyl Acetate	Resistant	Xylol	Resistant	Dulon AAA Thinners	Resistant	10% Acetic Acid	No effect (100hrs)	10% Ammonium Hydroxide	No effect (100hrs)	10% Hydrochloric Acid	No effect (100hrs)
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Cure Schedule	Metal Temperature (°C)	Time (minutes)	Comments																		
	210	15 minutes																			
	200	20 minutes																			
	180	25 minutes																			

Application Guide

Surface Preparation	<ul style="list-style-type: none"> ▪ All surfaces should be degreased and pre-treated for optimum performance. Suitable pre-treatment includes: Aluminium Yellow - chromate or green chromate/phosphate (refer AS3715-2002 and/or BS6496) Ferrous metals - Zinc or Iron Phosphate (refer BS6497 and/or AS/NZ4506) Zinc Coated Steels - Zinc or Iron Phosphate (refer AS/NZ4506)
Application Procedure And Equipment	<ul style="list-style-type: none"> ▪ Application Procedure and Equipment <ol style="list-style-type: none"> 1. All Armourspray® Ag powder should be sieved through a 125 micron sieve (max) prior to use due to the potential for this type of product to clump during storage. 2a) 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. 2b) For box feeders, ensure probe is fully inserted in powder and operated as per manufacturer's recommendations. 3. Apply by electrostatic spray. 4. Cure as per recommendations outlined above. 5. Due to the cure requirements of Armourspray® AG, using Clear AG over cured light powder coat colours may result in a colour change. It is recommended to complete a sample before undertaking the project. 6. Test for cure of the coating using 100 double rubs of Methyl ethyl ketone. No significant gloss change or colour transfer should occur. ▪ Electrostatic spray ▪ Theoretical spreading rate at recommended film thickness: A coverage rate of 10 - 12m²/kg is commonly experienced. Practical spreading rates will vary due to such factors as method and conditions of application and surface profile and texture.

Care And Maintenance

For easy removal of graffiti the recommended solvent is Dulux Graffiti Eraser (991-84686). Apply the solvent with a soft rag, allow the solvent to moisten the graffiti marks (approximately 30 seconds), before wiping the surface clean. 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 and industrial areas, a cleaning program should be carried out more frequently using the steps listed below.

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 or for cleaning up mastics/sealants could be harmful to the extended life of the powder coated surface. These solvents should not be used for cleaning purposes. Solvents other than the Graffiti Eraser that can be used safely are Methylated Spirits, White Spirits, Ethyl Alcohol, Isopropanol.

Health And Safety

MSDS Number	21334	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. 21334) 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.
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