



Pacificgold[®] Metallica[™]



POWDER & INDUSTRIAL COATINGS

Metallica[™] Modified Epoxy Powder Coating

Product Code:	914 Line
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Description

Metallica[™] has been developed as a high reflective metallic coating. It should be considered where the cost of using polished chrome exceeds budget expectations although it should also be noted, the colour and reflectivity do not match that of chrome.

As Metallica[™] contains metallic pigments, the use of the powder for exterior decoration and internal high wear areas, needs to be carefully evaluated prior to use as the metallic pigments may tarnish. A clear topcoat for these situations is available and must be used.

Read this Data Sheet and the associated Application Notes thoroughly before application of Metallica[™].

Features	Benefits
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Film integrity	Long intact life of coating
Tough modified epoxy	Hard wearing/serviceable finish with clear top coat
No solvents or emissions	Less waste and pollution to the environment

Uses

Metallica[™] has a multitude of uses over various substrates including steel and aluminium. Examples include: bicycles, garden tools, lawn mowers, indoor furniture, office fittings and barbecue frames.

Performance Guide

Flexibility	Pass 160 inch/lb	Pencil Hardness	Min H
		Cross Hatch Adhesion	No removal

Product Guide

Gloss Level	Visual - Satin	Specific gravity	Average 1.5
		Shelf life	12 months when stored below 25°C/dry conditions

Application Data

Application Method	Electrostatic spray . It is not suitable for application by friction charging equipment. Note : In some cases metallic particles may build up on electrodes causing problems with some electrostatic equipment. See Data Sheet 'Application Notes: Metallic Finishes' for Application recommendations.
Clean Up	Dust or vacuum loose powder. Avoid use of compressed air.

Metallica™

Cure Schedule	Metal Temperature (°C)	Time (minutes)	
	200	9	
	190	10	
Cured Film Thickness	Recommended:	80 µm	
	Range:	50 – 120 µm	
Theoretical spreading rate at recommended film thickness			
A coverage rate of 8 - 10 m ² /kg is commonly experienced. 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 degreased and pre-treated for all exterior exposure. 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			
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)	Box feeders are not recommended due to the potential metallic separation.		
2.	Apply by electrostatic spray. Not suitable for friction charging.		
3.	Reclaim: the recommended ratio for Metallica™ is nine parts virgin powder to one part reclaim.		
4.	Cure as per recommendations outlined above.		
5.	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.		
6.	Not recommended on aluminium extrusion.		
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 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: Solvents and/or cleaning agents known to be harmful will stain a Metallica™ coating. Test a non-critical area before using any cleaning agent.			
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 (No. 13542504) available through Sales and Customer Service Offices.			
Phone: Australia:-	13 24 99	New Zealand:-	09 441 8244

Precautions and Limitations

- The metallic component of the powder coating will behave somewhat differently in an electrostatic field to a conventional powder coating. This may give rise to the following effects:
 - the colour of the cured powder coating will vary when the same powder coating is applied through different spray equipment. Where a metallic colour has been specified the applicator should ensure that the spray equipment will provide a colour which is acceptable to the client and monitor the gun settings, etc. so that consistency can be achieved when using Metallica™ again an exceptionally good earth connection is required to ensure safety. An inadequate earth may lead to arcing from the spray gun
 - the powder coating must be uniform before it can be applied successfully. To ensure this it is recommended that the entire contents of the powder box be loaded to the fluidising hopper and fluidised for 10 minutes prior to application. The use of box feed units is not recommended as uniformity of metallics may become irregular.
 - metallic powder coatings are not recommended for application through friction charging equipment
 - colour will change on varying curing parameters, make sure the cure is the same for each substrate, varying thicknesses and top to bottom of the oven
- For the best results with metallic finishes, a reduced application voltage (less than 50%) on the spray equipment is suggested. An external charging nozzle may also give superior results to an internal electrode charging system.
- 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.
 - A clear topcoat is required when exposing Metallica™ to harsh environments - suggest Crystal™ Clear 904-85520.

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.		
	Dulux Powder & Industrial Coatings	Dulux Powder & Industrial Coatings	
	1-15 Pound Road	31B Hillside Road	
	Dandenong South, VIC 3175	Glenfield, Auckland 0627	
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