

# SGS

## Test Report

No. CANEC0804506601

Date: 21 Aug 2008

Page 1 of 5

ORICA CAMEL POWDER COATING (DONGGUAN)LTD.  
NO.11 CHANG TANG DA DAO,YANTIAN DISTRICT,FENGGANG,DONGGUAN, GUANGDONG  
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as :

Powder Coating

SGS Job No. : 11230883 - SZ  
 SGS Internal Reference No. : 2.1  
 Client Reference Information : 388 Line  
 Date of Sample Received : 15 Aug 2008  
 Testing Period : 15 Aug 2008 - 20 Aug 2008  
 Test Requested : Selected test(s) as requested by client.  
 Test Method : Please refer to next page(s).  
 Test Results : Please refer to next page(s).  
 Conclusion : Based on the performed tests on submitted sample(s), the results comply with the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of  
SGS-CSTC Ltd.



Huang Fang, Sunny  
Sr. Engineer

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company.

GZCM 2606825

# SGS

## Test Report

No. CANEC0804506601

Date: 21 Aug 2008

Page 2 of 5

### Test Results:

ID for specimen 1 : CAN08-045066.001  
 Description for specimen 1 : Dk-red powder

### RoHS Directive 2002/95/EC

Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
Cadmium (Cd)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	N.D.	2	100
Lead (Pb)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	N.D.	2	1000
Mercury (Hg)	mg/kg	IEC 62321/2nd CDV (111/95/CDV), ICP-OES	N.D.	2	1000
Hexavalent Chromium (CrVI) by alkaline extraction	mg/kg	IEC 62321/2nd CDV (111/95/CDV), UV-Vis	N.D.	2	1000
Sum of PBBs	mg/kg	-	N.D.	-	1000
Monobromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Dibromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Tribromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Tetrabromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Pentabromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Hexabromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Heptabromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Octabromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Nonabromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Decabromobiphenyl	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Sum of PBDEs	mg/kg	-	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Dibromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Tribromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Tetrabromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Pentabromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Hexabromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Heptabromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Octabromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Nonabromodiphenyl ether	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	
Decabromodiphenyl ether ##	mg/kg	IEC 62321/2nd CDV (111/95/CDV), GC-MS	N.D.	5	

### Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. ## = The exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 01.04.2008. Subsequently DecaBDE will be included in the sum of PBDE after 01.07.2008
5. "-" = Not regulated

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company.



# SGS

## Test Report

No. CANEC0804506601

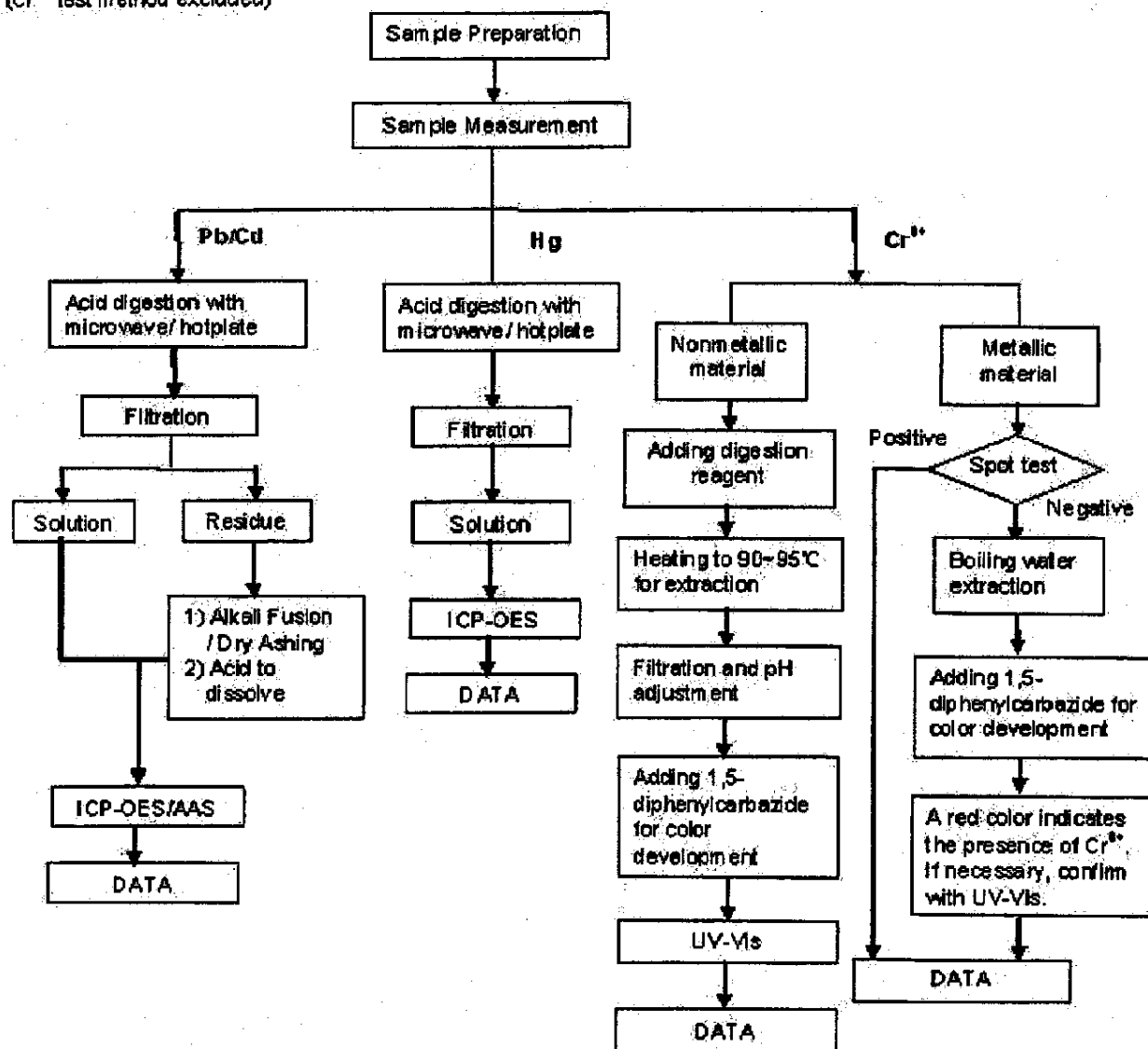
Date: 21 Aug 2008

Page 3 of 5

## ATTACHMENTS

### Testing Flow Chart

- 1) Name of the person who made measurement: Bowen Chen
- 2) Name of the person in charge of measurement: Adams Yu
- 3) These samples were dissolved totally by pre-conditioning method according to below flowchart. (Cr<sup>6+</sup> test method excluded)



This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company.

# SGS

## Test Report

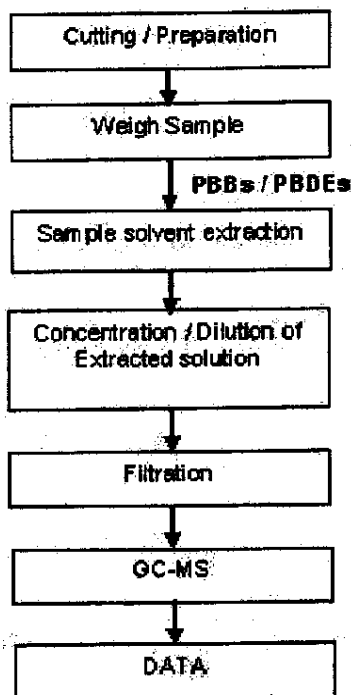
No. CANEC0804506601

Date: 21 Aug 2008

Page 4 of 5

### Testing Flow Chart

- 1) Name of the person who made measurement: Lina Tang
- 2) Name of the person in charge of measurement: Nina Wu



This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not constitute part of a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company.

GZCM 2606828

# SGS

## Test Report

No. CANEC0804506601

Date: 21 Aug 2008

Page 5 of 5

Sample photo:



SGS authenticates the photo on original report only  
 \*\*\* End of Report \*\*\*

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at [http://www.sgs.com/terms\\_and\\_conditions.htm](http://www.sgs.com/terms_and_conditions.htm). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company.



SGS-CSTC Standards Technical Services Co., Ltd.  
 Guangzhou Branch: Guangzhou Chemical Laboratory

198 Kezhu Road, Sciencetech Park Guangzhou Economic & Technology Development District, Guangzhou, China 510663  
 中国·广州·经济技术开发区科学城科珠路198号

510663 t (86-20) 82155555 f (86-20) 82075125  
 邮编: 510663 t (86-20) 82155555 f (86-20) 82075125 e sgs.china@sgs.com

GZCM 2606829

www.cn.sgs.com

## Multi Purpose Polyester Powder Coating

<b>Product Code:</b>	908 Line
<b>Specification met:</b>	Meets and/or exceeds requirements of AS3715, BS6496, BS6497.

### Description

**Industry Series** is a range of tough thermosetting powder coatings that exhibits decorative and durability characteristics suitable for interior and exterior product applications combined with excellent overall performance.

### Features

### Benefits

Tough, one coat finish	Versatile
Interior/exterior applications	Suitable for most environments
Fast cure baking	Improved productivity
Easy to apply	Smooth attractive finish/quality

### Uses

**Industry Series** polyester powders have a multitude of uses over various metal substrates from steel to aluminium. Examples of applications include general metal products such as sheet metal cabinets, playground equipment, tubular furniture and fencing.

### Performance Guide

<b>Weather</b>	Good resistance to weathering. Suitable for outdoor applications.	<b>Salt Spray</b>	Good. < 3mm adhesion loss at scribe after 250 hours salt spray on pre-treated steel, 1000 hours on pre-treated aluminium.
<b>Heat</b>	Good resistance to 120°C continuous service conditions.	<b>Humidity</b>	Good resistance to 38°C/100% humidity for 1000 hours on pre-treated aluminium.
<b>Acid</b>	Resistant to spills of dilute acid. Avoid contact.	<b>Abrasion</b>	Good resistance to abrasion.
<b>Alkali</b>	Resistant to spills of dilute alkali. Avoid contact.	<b>Pencil Hardness</b>	Min H
		<b>Knoops Hardness</b>	Average 15
<b>Flexibility</b>	Excellent > 160 inch/lb	<b>Cross Hatch Adhesion</b>	No removal

### Chemical Resistance

<b>Mortar</b>	Resistant	<b>White Spirits</b>	Resistant
<b>Ethanol</b>	Resistant	<b>Xylene</b>	Slight softening/limit contact
<b>Methyl Ethyl Ketone</b>	Softens/avoid contact	<b>Ethyl Acetate</b>	Softens/avoid contact

<i>Product Guide</i>			
<b>Colour</b>	A standard range of solid colours. Special colours available on a made to order basis.	<b>Specific gravity</b>	1.3 - 1.7 @ colour
<b>Gloss Level</b>	30 - 90% at 60° as required.	<b>Shelf life</b>	12 months when stored below 30°/dry conditions
<i>Application Data</i>			
<b>Application Method</b>	Electrostatic spray.		
<b>Clean Up</b>	Dust or vacuum loose powder. Avoid use of compressed air.		
<b>Cure Schedule</b>	<b>Metal Temperature (°C)</b>	<b>Time (minutes)</b>	
	210	8	
	200	10	
	180	15	
<b>Cured Film Thickness</b>	Recommended:	80 µm	
	Range:	50 – 120 µm	
Note: Light colours may require a higher minimum film build for optimum coverage and colour consistency.			
<b>Theoretical spreading rate at recommended film thickness</b>			
A coverage rate of 8 - 10m <sup>2</sup> /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.			
<i>Application Guide</i>			
<b>Surface Preparation</b>			
Surfaces should be prepared according to appropriate standards such as AS3715, BS6496, BS6497			
All surfaces should be degreased and pre-treated for optimum performance. Suitable pre-treatment includes:			
Aluminium	Yellow chromate or green chromate/phosphate	(refer AS3715 and/or BS6496)	
Ferrous metals	Zinc phosphate or Iron phosphate	(refer BS6497)	
Zinc Coated Metals (eg. galvanising)	Zinc Phosphate or chromate	(refer BS6497)	
Stainless Steel	Suitable metal blast. Recommended maximum blast profile of 25µm		
<b>Application Procedure and Equipment</b>			
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.		
3.	Cure as per recommendations outlined above.		
4.	Test for cure of the coating by contact with a drop of Corsol PGMA (available from Orica 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 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. 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 (No. 13542428) available through Sales and Customer Service Offices.

Phone: Australia:-	13 24 99	New Zealand:-	09 828 1008.
--------------------	----------	---------------	--------------

## Precautions and Limitations

- As a result of possible wide application variations and stoving conditions, some products and colours may show variation between Orica 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.

## Transport and Storage

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

Orica Camel Powder Coating (Dongguan) Ltd	Dulux Powder Coatings	Orica Powder Coatings
Yan Tian District, Feng Gang	51 Winterton Road	31B Hillside Road
Dong Guan, Guang Dong 523701	Clayton, Victoria, 3168	Glenfield, Auckland
PRC	Australia	New Zealand
	ACN 004 117 828	
<b>Telephone:</b> 86-769-755-8778	61 3 9542 4500	64 9 441 8244
<b>Fax:</b> 86-769-756-9339	61 3 9542 4542	64 9 441 8242



# Industry Series

<sup>TM</sup> Industry Series, the word Orica, the Ring Device, and the Orica mark are trademarks of the Orica Group of Companies.

DISCLAIMER: Any advice, recommendation, information, assistance or service provided by Orica Powder Coatings in relation to goods manufactured by it or their use and application is given in good faith and is believed by Orica Powder Coatings to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by Orica 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 Orica Powder Coatings by any condition or warranty implied by applicable legislation, regulation or other Government ordinance voiding or prohibiting such exclusion, limitation or modification

## Dupol

Page 1 of 4

# Durable Polyester Powder Coating

**Product Code:** 954 Line

**Specification met:** Meets and/or exceeds requirements of AS3715, BS6496, AAMA2603.2002

### Description

**Dupol** is a tough thermosetting polyester powder coating with decorative and durability characteristics suitable for interior and exterior product applications which exhibit excellent overall performance.

### Features

### Benefits

Tough, one coat finish	Versatile
Interior/exterior applications	Suitable for most environments
Film integrity	Long intact life of coating
No solvents or emissions	Less waste and pollution to the environment

### Uses

**Dupol** 954 was developed primarily for use on aluminium, including window and door joinery, and extruded aluminium panel work on residential and light commercial buildings.

### Performance Guide

<b>Weather</b>	Good resistance to weathering. Suitable for outdoor applications.	<b>Salt Spray</b>	1000 hours on pre-treated aluminium.
<b>Heat</b>	Excellent resistance to 120°C continuous service conditions.	<b>Humidity</b>	Good resistance to 38°C/100% humidity for 1000 hours on pre-treated aluminium.
<b>Acid</b>	Resistant to spills of dilute acid. Avoid contact.	<b>Abrasion</b>	Good resistance to abrasion.
<b>Alkali</b>	Resistant to spills of dilute alkali. Avoid contact.	<b>Pencil Hardness</b>	Min H
<b>Flexibility</b>	Excellent > 160 inch/lb	<b>Knoops Hardness</b>	Average 15
		<b>Cross Hatch Adhesion</b>	No removal
<b><u>Chemical Resistance</u></b>			
<b>Mortar</b>	Resistant	<b>White Spirits</b>	Resistant
<b>Ethanol</b>	Resistant	<b>Xylene</b>	Slight softening/limit contact
<b>Methyl Ethyl Ketone</b>	Softens/avoid contact	<b>Ethyl Acetate</b>	Softens/avoid contact

## Dupol

Page 2 of 4

### Product Guide

<b>Colour</b>	A range of stock and made to order solid colours	<b>Specific gravity</b>	1.3 - 1.7 @ colour
<b>Gloss Level</b>	25 - 98% at 60°, as required	<b>Shelf life</b>	12 months when stored below 30°C/dry conditions

### Application Data

<b>Application Method</b>	Electrostatic spray.		
<b>Clean Up</b>	Dust or vacuum loose powder. Avoid use of compressed air.		
<b>Cure Schedule</b>	<b>Metal Temperature (°C)</b>	<b>Time (minutes)</b>	
	210	8	
	200	10	
	180	15	
<b>Cured Film Thickness</b>	Recommended:	80 µm	
	Range:	50 – 120 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 - 10m<sup>2</sup>/kg corresponds to 80µm 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 appropriate standards such as AS3715, BS6496, AAMA2603.2002

All surfaces should be degreased and pre-treated for optimal performance. Suitable pre-treatment includes:

Aluminium                      Yellow chromate or green chromate/phosphate                      (refer AS3715 and/or BS6496)

#### 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.
3. Cure as per recommendations outlined above.
4. Test for cure of the coating by contact with a drop of solvent (available from Orica Camel Powder Coatings) for 30 seconds. Surface should be wiped dry and immediately checked for softening. Only slight surface softening should occur.

## Dupol

Page 3 of 4

### *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:** 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. 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 (No. 13542403) available through Sales and Customer Service Offices.

Phone: PRC 86 769 8755 8778

### *Precautions and Limitations*

- As a result of possible wide application variations and stoving conditions, some products and colours may show variation between Orica 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.



## Dupol

### Transport and Storage

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

Orica Camel Powder Coatings (Dongguan) Ltd Yan Tian District, Feng Gang Dong Guan, Guang Dong PRC	Dulux Powder Coatings 51 Winterton Road Clayton, Victoria, 3168 Australia ACN 004 117 828	Orica Powder Coatings 31B Hillside Road Glenfield, Auckland New Zealand
<b>Telephone:</b> 86 769 8755 8778	61 3 9542 4500	64 9 441 8244
<b>Fax:</b> 86 769 8756 9339	61 3 9542 4542	64 9 441 8242

<sup>TM</sup> Dupol, the word Orica, the Ring Device, and the Orica mark are trademarks of the Orica Group of Companies.

DISCLAIMER: Any advice, recommendation, information, assistance or service provided by Orica Powder Coatings in relation to goods manufactured by it or their use and application is given in good faith and is believed by Orica Powder Coatings to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by Orica 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 Orica Powder Coatings by any condition or warranty implied by applicable legislation, regulation or other Government ordinance voiding or prohibiting such exclusion, limitation or modification



# PACIFICGOLD<sup>®</sup>

ARCHITECTURAL AND INDUSTRIAL POWDER COATINGS

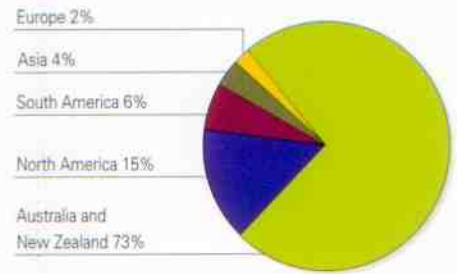


**Orica Camel Profile**

# About "Orica"



• Geographic Exposure by percentage



## History of Orica Powder Coatings

Today, Orica is one of the largest publicly-owned companies in Australia.

We have undergone several transformations since we started operating 130 years ago as a supplier of explosives to the Victorian gold fields. The original company, Jones, Scott and Co., was bought by Nobel that went on to merge with Brunner Mond and Co., United Alkali Company and British Dyestuffs Corporation to form Imperial Chemical Industries Plc (ICI Plc).

In 1928 Imperial Chemical Industries of Australia and New Zealand (ICI ANZ) was incorporated to acquire and coordinate all Australasian interests of ICI Plc. In 1971 the company became ICI Australia. In July 1997 ICI Australia became an independent Australasian company after its parent company, ICI Plc, divested its 62.4 per cent shareholding in the company. As a result of the sell-down ICI Australia was required to change its name and on 2 February 1998 we became known as Orica.

Orica employs over 10,000 skilled and enthusiastic people in over 40 countries, turning science into the solutions that meet basic

human needs.

Today Orica is a multi-billion dollar company and is one of the top 50 companies listed on the Australian Stock Exchange.

Orica Consumer Products manufactures and markets icon brands including Dulux, Berger, British Paints, Levene, Cabot's, Feast Watson, Intergrain, Acratex, Selleys, Rota Cota, Poly, Turtle Wax, Yates, Thrive, Zero and Dynamic Lifter in Australia and New Zealand. An extensive range of powder coatings is manufactured and marketed in Australia, New Zealand and the Asia-Pacific region.

Orica Powder Coatings began manufacturing in Australia and New Zealand in 1975 and the products produced have been sold domestically and internationally. Orica Powder Coatings has powder manufacturing plants in Auckland – New Zealand, and Melbourne – Australia, along with sales representation in Singapore, Malaysia, Taiwan and the USA. Exports of Orica powder coatings currently go to more than 15 countries.

The Orica powder coatings factory has been outfitted with the most modern technology and European sourced powder manufacturing

equipment available. It is capable of supplying a wide range of high quality, and highly specified powder coatings based on well engineered proven technology.

## Partnerships with our Customers

Partnership with our customers is more to us than just supply of the product. To deliver solutions which truly fit our customers' needs, collaborative teams associated with each market area in which Orica Powder Coatings operates are continuously improving the quality and performance of our products and benchmarking our performance. We also support our customers with technical advice which helps them to use our products to best effect.

## Research & Development

To ensure that we meet our customers' exacting requirements, our products are researched and developed in our world-class ISO and NATA-accredited research laboratories. We manufacture our wide range of products in ISO accredited plants located throughout Australia, New Zealand, Fiji and Papua New Guinea.

## 澳瑞凯粉末涂料历史

澳瑞凯公司是当今澳大利亚最大的全资公司之一。成立于1874年，我们作为维多利亚黄金领域的供应商，已经进行过多次改组。1928年，澳大利亚和新西兰帝王化学工业（CIANZ）合作协调 to acquire and coordinate all Australasian interests of ICI Plc. In 1971 the company became ICI Australia. 1997年，ICI脱离母公司，成为独立的澳大利亚公司，拥有公司62.4%的股份。由于于1998年2月2日更名为澳瑞凯。

澳瑞凯在全球40多个国家雇有超过10000名富有专业精神的技术人员，运用科学技术提供解决方案，满足人们的需求。

今天，澳瑞凯资产达到百万亿以上，在澳大利亚股票交易市场名列前50名。

澳瑞凯消费品经销商和市场品牌包括多乐士、Berger, British Paints, Levene, Cabot's, Feast Watson, Intergrain, Acratex, Selleys, Rota Cota, Poly, Turtle Wax, Yates, Thrive, Zero and Dynamic Lifter in Australia and New Zealand.大量的粉末涂料销往澳大利亚、新西兰和其他东亚国家。

澳瑞凯粉末涂料从1975年开始在澳大利亚和新西兰进行生产，销往国内外。澳瑞凯粉末涂料在奥克兰、新西兰、墨尔本等地设有工厂，在新加坡、马来西亚、台湾、和美国设有经销商，畅销15个国家。

澳瑞凯粉末涂料工厂配备有最先进的科技和欧洲粉末制造设备，能够大规模地生产高质量的特种粉末涂料。

## 客户服务

我们向客户不仅仅提供优质的产品，还为真正满足客户需求而积极合作，提供有用的解决方案。澳瑞凯粉末涂料致力于持续改进产品的质量和提高产品性能基准，为客户提供技术支持，帮助他们有效使用我们的产品。

## 研究开发

为确保准确满足客户的特定需求，我们的产品经过研发，达到世界ISO标准和NATA实验室标准。澳大利亚、新西兰、新奥尔良的工厂也达到ISO标准等级。

## Corporate Profile

Camelpaint Chemicals Co., Ltd. focuses on the Paint's Business within the NLPP Group. Camelpaint has accumulated 75 years experience in paint manufacturing and marketing, and has its Head Office in Hong Kong, with 6 offices and 2 plants in China, and 3 licensees in South East Asia.

Camelpaint's portfolio comprises of 6 business platforms: Decorative, Architectural, Industrial, Wood, Fluoropolymer and Powder Coatings. Each business aims to serve the particular needs of their markets through the provision of specifically designed products and services.

Manufacturing and research are centralized at our 500,000 square feet site in Dongguan, China.

The ISO9001:2000 accredited factory provides production and logistics support to the various businesses. The plant is capable of producing 25 million litres of wet paint, and the dedicated Powder Coatings plant up to 5,000 tonnes annually.

Camel has forged successful alliances to further enhance our market position. These include licensees in Singapore, Thailand and Malaysia, and a joint venture with Orica Australia for the manufacture and marketing of Powder Coatings.

New technology development is supplemented through close relationships with both North American and European paint manufacturers, leaders in their fields, as well as with local institutions engaged in joint product research.

Camelpaint's commitment to achieving the highest standards of professionalism in serving our customers, remains central to building on the company's long and respected history.

## Corporate Value

A company committed to the achievement of industry leadership in the delivery of the highest standard of professionalism in customer service, technology and manufacturing excellence, building on over 70 years of paints industry experience, further enhanced by alliances with leaders in their respective fields, and through the commitment of a highly trained and motivated, market-driven organization.



## 集团介绍

国民漆厂集团全资附属机构骆驼漆化工有限公司，总公司位于香港，拥有75年油漆制造及市场推广经验。主要产品市场包括装饰涂料、建筑涂料、工业涂料、木器涂料、粉末涂料及氟碳涂料。

主要姊妹公司有东莞秉顺制漆有限公司及澳瑞凯骆驼粉末涂料有限公司，于中国设有2个厂房，6个办事处（东莞、上海、北京、广州、南海、武汉），并于东南亚设有3个授权生产商。

东莞秉顺制漆有限公司为各市场中央生产、科研、物流中心，占地50万尺，可年产2,500万公升油漆及5,000吨粉末涂料，并拥有ISO 9001:2000证书，进一步加强公司于技术发展、市场推广及生产系统之配合，为各地客户提供更全面之产品及服务。

除合资公司澳瑞凯骆驼及泰国、新加坡、马来西亚之授权生产外，更积极于世界各地发展及寻求各类与化工行业有关之合作项目，促进集团于不同之业务发展。项目包括与欧美漆厂合作新产品及与本地大学合作特别科研等等。

展望未来，本公司将凭着70多年之经验，以香港为基，继续以专业知识及严谨态度，透过不断提升及发展多元化产品，循序渐进的拓展公司于中国及东南亚市场之业务。

## 集团理念

骆驼漆，秉承70多年的专业制漆经验，在生产、技术和客户服务等领域表现出高标准的专业精神，从与各个行业领域的精楚结成联盟的合作关系中又得到进一步的加强，并且通过接受了专业培训、以市场为主导的团队的共同承诺与努力，骆驼漆将继续巩固其在涂料行业的领导地位。



# About "Orica Camel"

## Two Parties

"Orica Camel", which is a joint venture of two international painting producers: "Orica" & "Camel", focused on providing domestic customers superior quality and the best services with advanced technology.

## Quality Commitment

We are not only committed to the quality of our products, systems and services, all "Orica Camel" employees and facilities are committed to the pursuit of excellence, and operate at the highest standards in the markets in which we operate.

## Business Philosophy

In the years ahead, innovation, solidity and reliability remain the cornerstones of the "Orica Camel" philosophy. With our strong commitment to the industry and customers, we are aiming to become the first class Powder Coating manufacturers around China, and let more and more customers benefit from our quality products and services.

## 合作双方

"澳瑞凯骆驼"是两家有多年发展涂料经验的境外公司"澳瑞凯"和"骆驼"共同斥资在中国成立的公司。"澳瑞凯骆驼"将会利用其先进和不断创新的技术为国内客户提供高品质的产品和最好的服务。

## 品质保证

我们不仅对产品质量、售后服务等作出承诺,而且所有的"澳瑞凯骆驼"员工和设备都承诺为追求最高标准的出色表现。

## 经营理念

在未来的几年,"创新、可靠、信赖"将会是"澳瑞凯骆驼"的经营哲学基础。以我们对客户和行业的承诺,我们目标要成为中国一流的粉末涂料品牌,并且让愈来愈多的客户受益于我们高质产品和服务!



# PACIFICGOLD®

太平洋黄金



## Production Line of Pacific Gold

Pacific Gold is a portfolio of multipurpose, tough, durable and high quality powder coatings that have been specifically designed to exceed your expectations. Pacific Gold encompasses both interior and exterior products with a wide range of possible gloss levels, which provides your products with a long lasting and superior finish and makes your product durable, attractive and scratch resistant.

## 太平洋黄金产品介绍

太平洋黄金是一种持久耐用、高品质、多功能的粉末涂料，适用于工业及建筑领域。其专业品质超越您的期望，拥有广泛的亮度选择，为室内及室外的各种物品提供持久、亮丽的表面，使您的物品更耐用、光鲜且防磨损。

<b>DUPOL®</b>	Interior / exterior polyester	<b>PG288®</b>	Interior / exterior TGIC free polyester
<b>ANTI GRAFFITI®</b>	Exterior durable powder designed for ease of Graffiti removal	<b>MICROTEC®</b>	Thin and ultra thin film
<b>COPOL®</b>	Interior hybrid	<b>DURALLOY®</b>	7 year colour & 10 year film integrity warranty
<b>DUREPOXY®</b>	Interior epoxy	<b>DURATEC®</b>	10 year colour & 10 year film integrity warranty
<b>PYROTEC®</b>	FR-fire resistant powder coating HR-Heat resistant powder-up to 500 C	<b>FLUOROSSET FP®</b>	An Ultra Durable Fluoropolymer Powder 20 year colour & film integrity warranty

## FLUOROSSET®

## FLUROPEARL®

### 超级耐候性PVF2氟碳涂料

#### Fluoroset®

Fluoroset® are formulated with Polyvinylidene Fluoride (PVF2) resin. They contain a minimum of 70% PVF2 resin to ensure remarkable long term colour stability, resistance to chalking and corrosion. It is available in a solid or metallic finish based on a 2 or 3 coat liquid system respectively. It has been used extensively on major architectural projects around Australia and

#### 产品介绍

Fluoroset®有实色和金属铝粉两种，基于2-3层体系：分别是底漆、Fluoroset®有色面漆和罩光清漆（用于金属色）。在金属面漆上用一层罩光清漆是为了起到保护作用。金属面漆中含有金属铝粉，如表面不加保护，金属铝粉会因与大气产生氧化反应，而导致颜色变化。Fluoroset®底漆和Fluoroset®金属漆是经证明首选及优良品质的产品，能确保涂层表面保持长久如新。

Fluropearl®是2涂层体系，比起Fluoroset®金属铝粉漆，它能呈现珍珠光彩般的效果，且无需罩光清漆，可降低成本。Fluoroset®底漆与之配合使用。

#### 品质保证

澳瑞凯提供20年的涂膜完整性保证和20年色泽稳定性保证。

Fluoroset®、Fluropearl®超越严格的AAMA2605-05标准：挤出铝型材和铝板的高性能有机涂层产品规格、性能指标及测试方法。这一标准对涂层符合严格的颜色变化、粉化和光泽持久性都有详细规范，同时涂膜完整性要在佛罗里达气候条件下达到至少10年保证。

across Asia Pacific. Pacific gold Flash Primer and Pacific gold Fluoroset Metallic Clear are the approved primer and top coats recommended to ensure the long life of the coating and preserve the attractive appearance.

#### Fluropearl®

Fluropearl® is a 2 coat liquid system which offers a pearlescent effect comparable to the appearance of a metallic Fluoroset® without the need and expense of the additional clear coat. Fluoroset® Flash Primer is the recommended primer. Formulated with Polyvinylidene Fluoride (PVF2) resins for long term colour stability and resistance to chalking and corrosion, Fluropearl® has been used extensively on the aluminium extrusion and cladding on many major Australasian projects.

#### Performance Guaranteed

Orica Camel offers a 15 year film integrity and a 15 year colour warranty for Fluoroset® and Fluropearl® when applied by a Orica Camel Registered Applicator.

Fluoroset® and Fluropearl® exceed the strict standards of AAMA 2605-05 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminium Extrusion and Panels. This standard requires coatings to meet a rigorous colour change, chalking and gloss retention specification, whilst maintaining its film integrity for a minimum 10 years exposure performance in the harsh Florida climate.



Equitable Bank  
Manilla

# PACIFIC GOLD®

太平洋黄金



澳瑞凯骆驼粉末涂料(东莞)有限公司

中国广东省东莞市凤岗镇雁田管理区

邮政编号: 523701

电话: (769) 8756 9332 传真: (769) 8756 9339

骆驼漆化工有限公司

香港九龙观塘兴业街1号骆驼漆中心6楼

电话: (852) 2389 1231 传真: (852) 2343 5273

佛山办事处

中国广东省佛山市祖庙路33号百花广场1616-1618室

邮政编号: 528000

电话: (0757) 8834 0007 传真: (0757) 8834 0129

上海办事处

中国上海长宁区延安西路728号华敏粉饰国际12楼K座

邮政编号: 200050

电话: (021) 5237 9988 传真: (021) 5237 0580

北京办事处

中国北京朝阳区东三环霄云路26号鹏润大厦B座2702室

邮政编号: 100016

电话: (010) 8458 4966 传真: (010) 8458 4977

[www.orica.com](http://www.orica.com)

[www.oricacamel.com](http://www.oricacamel.com)