

Dulux Duremax GPE Semi Gloss





NZDI0912

Description
DULUX DUREMAX GPE is a general purpose epoxy coating.

Features And Benefits	
<ul style="list-style-type: none"> Excellent Durability Excellent Resistance to Hot Water Ease of Application 	<ul style="list-style-type: none"> Suitable for a wide range of environments Suitable for hot water (up to 80°C) immersion Can be applied by brush, roller or spray methods

Uses
DUREMAX® GPE has been locally developed specially for Australasian conditions using the latest epoxy technology. It is a general-purpose epoxy coating used on steel, galvanising and concrete. DUREMAX® GPE is a high performance coating for the protection of structures exposed to severe environments such as chemical plants, offshore platforms, refineries, shiploaders, coal wash plants etc. Untinted DUREMAX® GPE is suitable for fresh and salt-water immersion except when cured with Quickturn™ hardener. It is compatible over inorganic zinc and epoxy primers and can be topcoated with a wide range of coating types.

Performance Guide			
Weatherability	Epoxy coatings may yellow with time. On exterior exposure some chalking may also occur. This will not detract from the protective properties of the coating. Use a weatherable topcoat if required for appearance.	Salts	Excellent resistance to neutral and alkali salts.
Heat Resistance	Up to 120°C dry heat.	Water	Excellent resistance to fresh and salt water. Tinted colours are not recommended for immersion.
Solvents	Resists splash/spillage of most hydrocarbon solvents, ref.petroleum products and common alcohols.	Abrasion	Good when fully cured.
Acids	White and colours are suitable for splash and spillage of mild acids.	Alkalis	Suitable for splash and spillage of strong alkali.

Typical Properties			
Finish	Semi Gloss	Colour	White, Black, MIO, selected factory made colours and a range of tinted colours.
Components	2	Pot Life	3-4 hours @ 25°C
Shelf Life	12 months minimum @ 25°C	Mixing Ratio (V/V)	4 pt A : 1 pt B by volume
Thinner	Prothinner 400 (965-63021)	Suitable Substrates	Blast cleaned steel. Prepared concrete, aluminium and galvanised steel
Line/Shade	<ul style="list-style-type: none"> 780-line (Part A) 976-84577 (Part B) 		
Application Methods	 Air Spray  Airless Spray  Brush  Roller		
Application Conditions		Min	Max
	Air Temperature	10	45
	Substrate Surface Temperature	10	45
	Relative Humidity	0	85
Solids By Volume	72		
	Min	Max	Recommended
Wet Film Per Coat (microns)			175
Dry Film Per Coat (microns)			125
Recoat Time (min)	8 Hours	4 Weeks*	
Theoretical Spread Rate (m²/L)			5.8

Hardener Details

Hardener Title STANDARD HARDENER

	Coating Thickness (microns)			Application Conditions (°C)		
	Min	Max	Recommended	Min	Max	
Wet Film per Coat			175	Air Temp.	10	45
Dry Film per Coat			125	Substrate Surface Temp.	10	45
				Relative Humidity	0	85
				Concrete Moisture Content		

Solids By Volume 75 **V.O.C. Level** <300 g/L **Pot Life** 2 Hours (4L, 25C)

Drying characteristics at 125 microns dry film thickness

Temperature	Humidity	Touch	Handle	Full Cure	Recoat Min	Recoat Max
10 C	50%	16 Hours	28 Hours	7 Days	28 Hours	4 Weeks
15 C	50%	12 Hours	20 Hours	7 Days	20 Hours	4 Weeks
25 C	50%	4 Hours	10 Hours	7 Days	8 Hours	4 Weeks

Hardener Title FAST CURE HARDENER

	Coating Thickness (microns)			Application Conditions (°C)		
	Min	Max	Recommended	Min	Max	
Wet Film per Coat			170	Air Temp.	5	45
Dry Film per Coat			124	Substrate Surface Temp.	5	45
				Relative Humidity	0	85%
				Concrete Moisture Content		<10

Solids By Volume 75 **V.O.C. Level** <300g/L **Pot Life** 2 Hours (4L, 25C)

Drying characteristics at 125 microns dry film thickness

Temperature	Humidity	Touch	Handle	Full Cure	Recoat Min	Recoat Max
5 C	50%	9 Hours	18 Hours	7 Days	18 Hours	4 Weeks
10 C	50%	6 Hours	14 Hours	7 Days	14 Hours	4 Weeks
15 C	50%	5 Hours	10 Hours	7 Days	10 Hours	4 Weeks
25 C	50%	2.5 Hours	6 Hours	7 Days	6 Hours	4 Weeks

Hardener Title QUICKTURN HARDENER

	Coating Thickness (microns)			Application Conditions (°C)		
	Min	Max	Recommended	Min	Max	
Wet Film per Coat			175	Air Temp.	5	35
Dry Film per Coat			125	Substrate Surface Temp.	5	35
				Relative Humidity	0	85
				Concrete Moisture Content		<10

Solids By Volume 72 **V.O.C. Level** <310 g/L **Pot Life** 90 Minutes (4L, 25C)

Drying characteristics at 125 microns dry film thickness

Temperature	Humidity	Touch	Handle	Full Cure	Recoat Min	Recoat Max
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TYPICAL SPREADING RATE AT RECOMMENDED DRY FILM BUILD

A spreading rate of 5.8sq. meters per litre corresponds to 125 microns

	dry film thickness assuming no losses. Practical spreading rates will vary depending on such factors as method and condition of application and surface roughness
Hardener Section Footer	<p>These figures are given as a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying. If the maximum overcoat interval is exceeded then the surface MUST be abraded to ensure maximum intercoat adhesion. Use of fast or low temperature hardeners may result in increased yellowing and a reduction of gloss level.</p> <p>* When used for non-immersion conditions. Refer to PRECAUTIONS section for overcoating intervals and requirements for immersion service.</p>

<p>Surface Preparation</p> <p>STEEL Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. For steel substrates, abrasive blast clean to a minimum of AS1627.4 Class 2.5 with a blast profile of 40-70 microns. For non-ferrous substrates whip blast. Immersed steel must be prepared to AS1627.4 Class 3. Remove all dust by brushing or vacuum cleaning.</p> <p>CONCRETE Remove all laitance, form release, curing compounds, oil, grease and other surface contaminants. Diamond grind, track or light shot-blast to provide suitable profile. Remove all dust by vacuum cleaning. Fill any large voids exposed using Luxepoxy Filler. Cement based substrates should be at least 21 days old before coating.</p>
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Application Guide	
Application Method	<p>Stir each can thoroughly until the contents are uniform. Use of a power mixer is recommended. Ensure bases have been tinted to the correct colour before use – DULUX ASSUMES NO RESPONSIBILITY FOR THE APPLICATION OF AN INCORRECT COLOUR. Mix the contents of both packs together thoroughly using a power mixer and allow to stand for 10 minutes. Box all containers before use to ensure colour consistency. Remix thoroughly before using.</p> <p>BRUSH/ROLLER: Apply even coats of the mixed material to the prepared surface. When brushing and rolling additional coats may be required to attain the specified thickness.</p> <p>CONVENTIONAL SPRAY: Thinning is not normally required, however a small amount (5% or less by volume) of DULUX Prothinner 400 (965-63021) can be added. Typical set-up: De Vilbiss JGA 502 Gun: 704 Air Cap, E Fluid Tip, E Needle Iwata W70 Gun: 021 Air Cap, 021 Fluid Needle, 021 Fluid Nozzle Pressure at Pot: 65-100 kPa (10-15 p.s.i.) Pressure at Gun: 385-420 kPa (55-60 p.s.i.)</p> <p>AIRLESS SPRAY: Standard airless spray equipment such as Graco, Binks or others using a 45:1 pump ratio with a fluid tip of 17-21 thou (0.43-0.53mm) Brush, roller, conventional or airless spray</p>
Brush/Roller	Apply even coats of the mixed material to the prepared surface. When brushing and rolling additional coats may be required to attain the specified thickness.
Conventional Spray	<p>Thinning is not normally required, however a small amount (5% or less by volume) of Dulux Prothinner 400</p> <p>Typical Set-up Graco Delta Gun: Pressure at Pot: Pressure at Gun: 1.8mm (239543) 65-100 kPa (10-15 p.s.i.) 380-415 kPa (55-60 p.s.i.)</p>
Airless Spray	Standard airless spray equipment such as a Graco 45:1 Xtreme with a fluid tip of 17-21 thou (0.43-0.53mm) and an air supply capable of delivering 550-690 kPa (80 -100 psi) at the pump. Thinning is not normally required but up to 50ml/litre of Dulux Prothinner may be added to ease application.
Precautions	<p>This is an industrial product designed for use by experienced Protective Coating applicators. Where conditions may require variation from the recommendations on this Product Data Sheet contact your nearest Dulux® representative for advice prior to painting. Do not apply in conditions outside the parameters stated in this document without the express written consent of Dulux® Australia. Freshly mixed material must not be added to material that has been mixed for some time. Do not apply at temperatures below 10°C when using Standard hardener or 5°C when using Fast Cure or Quickturn™ hardener. In hot weather use Dulux Prothinner 400 for improved flow. Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Do not use Quickturn™ hardener for immersion conditions. When used for immersion conditions the maximum overcoat interval is 3 days. The coating MUST be fully cured and solvent free prior to being placed under immersion conditions. For best results in water immersion conditions replace Dulux Prothinner with Dulux CR Reducer (965-63020). Do NOT use as a primer over galvanised steel when using Fast Cure hardener as delamination can occur. Use of fast or low temperature hardeners may result in increased yellowing and a reduction of gloss level.</p>
Clean Up	Clean all equipment with Prothinner 400 (965-63021) immediately after use.

Overcoating

Aged coating should be tested for lifting by a method suitable to the coating thickness, for example 'X' cut or crosshatch methods. If it lifts, remove it. The surface must be free of oil, grease and other contaminants.
 If the coating has exceeded the maximum recoat interval then abrade the surface.
 High-pressure water blast at 1,200 - 1,500 p.s.i. to remove loosely adhering chalk and dust.

Health And Safety

Safety Precautions	# Read Data Sheet, Material Safety Data Sheet and any precautionary labels on containers.
Storage	Store as required for a flammable liquid Class 3a in a bunded area under cover. Store in well-ventilated area away from sources of heat or ignition. Keep containers closed at all times
Handling	# As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be avoided by good occupational work practice. Eye protection approved to AS1337 should be worn where there is a risk of splashes entering the eyes. Always wash hands before smoking, eating, drinking or using the toilet.
Using	For detailed information refer to the product label and the current Material Safety Data Sheet available through Dulux Sales and Customer Service offices.
Flammability	This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE.
Welding	Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

In the case of emergency, please call 0800 734 607

Resistance Guide

Chemical	Permanent Exposure	Intermittent Exposure
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Transport And Storage

Dangerous Goods Part A			
Class	3b	UN Number	1263
Dangerous Goods Part B			
Class	8	UN Number	2734

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