

Dulux Duremax GPE Zinc Phosphate





NZDI0897

Description
DULUX DUREMAX GPE Zinc Phosphate - General Purpose Epoxy Zinc Phosphate Primer

Features And Benefits	
<ul style="list-style-type: none"> • Excellent Durability • Ease of Application • Anti-corrosive Pigmentation • Good abrasion resistance • High build formulation 	<ul style="list-style-type: none"> • Suitable for a wide range of environments • Can be applied by brush, roller or spray methods • Provides excellent corrosion protection • Provides superior edge protection

Uses
DUREMAX® GPE Zinc Phosphate has been locally developed specially for Australasian conditions using the latest epoxy technology. It is a general-purpose epoxy zinc phosphate primer used on mild steel. DUREMAX® GPE Zinc Phosphate 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. DUREMAX® GPE Zinc Phosphate is suitable for fresh and salt-water immersion when suitably topcoated. It is compatible over inorganic zinc and epoxy primers and can be topcoated with a wide range of coating types.

Performance Guide			
Weatherability	Some chalking/yellowing will occur on exposure. This won't detract from the resistance properties.	Salts	Excellent resistance to neutral and alkali salts.
Heat Resistance	Up to 120°C dry heat.	Water	Excellent resistance to immersion in fresh and salt water when suitably topcoated.
Solvents	Resists splash/spillage of most hydrocarbon solvents, refined petroleum products and most common alcohols.	Abrasion	Good when fully cured.
Acids	Suitable for splash and spillage of mild acids.	Alkalis	Suitable for splash and spillage of strong alkali.

Typical Properties			
Finish	Semi Gloss	Colour	Grey (Approximate Match to AS2700 N33 Lightbox Grey)
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"> • 780-52033 (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	71		
	Min	Max	Recommended
Wet Film Per Coat (microns)			174
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 71 **V.O.C. Level** <330 g/L **Pot Life** 3-4 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			125	Substrate Surface Temp.	5	45
				Relative Humidity	0	85
				Concrete Moisture Content		

Solids By Volume 72% **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
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		

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
5 C	50%	7 Hours	14 Hours	7 Days	14 Hours	4 Weeks
10 C	50%	5 Hours	9 Hours	7 Days	9 Hours	4 Weeks
15 C	50%	3 Hours	5 Hours	7 Days	5 Hours	4 Weeks
25 C	50%	90 Minutes	3 Hours	7 Days	3 Hours	4 Weeks

# 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	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. * When used for non-immersion conditions. Refer to PRECAUTIONS section for overcoating intervals and requirements for immersion service.

Surface Preparation

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.

Application Guide

Application Method	Stir each can thoroughly until the contents are uniform. Use of a power mixer is recommended. Mix the contents of both packs together thoroughly using a power mixer and allow to stand for 10 minutes. Remix thoroughly before using.
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	Thinning is not normally required, however a small amount (5% or less by volume) of Dulux Prothinner 400 (920-81942) can be added. Typical Set-up Graco Delta Gun: Pressure at Pot: Pressure at Gun: 1.8mm (239543) 70-100 kPa (10-15 p.s.i.) 380-415 kPa (55-60 p.s.i.)
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 400 may be added to ease application.
Precautions	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® Epoxy Thinner (920-08925) 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 be placed under immersion conditions. For best results in water immersion conditions replace Dulux Prothinner400 with Dulux CR Reducer. 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.
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	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	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	USING: Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear combined organic vapour/particulate respirator. When spray painting, users should comply with the provisions of the respective Health & Safety in Employment Regulations.
Flammability	FLAMMABILITY: This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE.
Welding	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

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

Disclaimer

Dulux and Other marks followed by ® are registered trademarks. Marks followed by the symbol of ™ are trademarks.

The data provided within the Duspec system is correct at the time of publication, however it is the responsibility of those using this information to check that it is current prior to specifying or using any of these coating systems.

DISCLAIMER: Any advice, recommendation, information, assistance or service provided by any of the divisions of DuluxGroup (New Zealand) Pty Ltd or its related entities (collectively, DuluxGroup) in relation to goods manufactured by it or their use and application is given in good faith and is believed by DuluxGroup to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by DuluxGroup is 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 DuluxGroup by any condition or warranty implied by Commonwealth, State or Territory Act or ordinance void or prohibiting such exclusion limitation or modification. Coating systems can be expected to perform as indicated on the Duspec Spec Sheet so long as applications and application procedures of the individual products are followed as recommended on the appropriate Product data Sheet. "Orica" "Dulux" "Berger" "Berger Gold Label" "Hadrian" "Walpamur" "Levene" "Acratex" and Other marks followed by ® are registered trademarks. Marks followed by the symbol ™ are trademarks.

Please note that this document is only valid for 60 days from the date of issue.

DuluxGroup (New Zealand) Pty Ltd 150 Hutt Park Road NZ ACN 133 404 118