DUREMAX® GPE ZP
General Purpose Epoxy Zinc Phosphate Primer
PC 215

FEATURES
• EXCELLENT DURABILITY IN A WIDE RANGE OF ENVIRONMENTS
• EASE OF APPLICATION - SPRAY, BRUSH, ROLLER
• INHIBITIVE CORROSION PROTECTION
• GOOD ABRASION RESISTANCE
• HIGH BUILD FORMULATION PROVIDES SUPERIOR EDGE PROTECTION COMPARED WITH CONVENTIONAL ZINC PHOSPHATE EPOXIES

USES
DUREMAX® GPE ZP has been locally developed specially for Australasian conditions using the latest epoxy technology. It is a general-purpose epoxy primer enhanced with zinc phosphate pigment for inhibitive corrosion protection on mild steel. DUREMAX® GPE ZP is a high performance coating for the protection of structures exposed to severe environments such as chemical plants, offshore platforms, refineries, ship loaders and coal wash plants.

SPECIFICATIONS
AS/NZS 3750.13

RESISTANCE GUIDE
WEATHERABILITY
Will yellow with time and chalk on exterior exposure. Neither yellowing nor chalking detracts from the protective properties of the coating. Use a weatherable topcoat if required for appearance.

HEAT RESISTANCE
Up to 120°C dry heat

SALTS
Excellent resistance to neutral and alkaline salts

ACIDS
Suitable for splash and spillage of mild acids

SOLVENTS
Resists splash and spillage of most hydrocarbon solvents, refined petroleum products and most common alcohols

WATER
Excellent resistance to fresh and salt water but not suitable for immersion

ALKALIS
Suitable for splash and spillage of strong alkali

ABRASION
Good when fully cured

TYPICAL PROPERTIES AND APPLICATION DATA (STANDARD HARDENER)
CLASSIFICATION
Anticorrosive epoxy primer

FINISH
Semi Gloss

COLOUR
Light-mid grey (approximate match to AS2700 N33 Lightbox Grey)

COMPONENTS
Two

VOLUME SOLIDS
71%

VOC LEVEL
<330 g/L

FLASH POINT
4°C

POT LIFE
3 – 4 hours (4 litre kit, 25°C)

MIXING RATIO V/V
Part A : 4 Part B : 1

THINNER
920-08925 Dulux® Epoxy Thinner
920-81942 Dulux® Duthin® 450

THINNER – LOW TEMPERATURES
780-52033 Grey
976-84577 Standard Hardener
976-84741 Fast Cure Hardener
976-84892 Quickturn™ Hardener

PRODUCT CODE

APPLICATION CONDITIONS
Min Max

Air Temp. 10°C 45°C

Substrate Temp. 10°C 45°C

Relative Humidity 85% <10%

Concrete Moisture

COATING THICKNESS (MICRONS)

Min Max Recommended

Wet film per coat (μm)

Dry film per coat (μm)

140 280 175

100 200 125

SUITABLE SUBSTRATES

Blast cleaned steel and galvanised steel

PRIMERS
Not applicable

TOPCOATS
Most Dulux® two pack topcoats

APPLICATION METHODS
Brush, roller, conventional, airless spray or air assisted spray

DRYING CHARACTERISTICS AT 125 μm DRY FILM THICKNESS* (STANDARD HARDENER)

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Humidity</th>
<th>Touch</th>
<th>Handle</th>
<th>Full Cure</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>10°C</td>
<td>50%</td>
<td>16 Hours</td>
<td>28 Hours</td>
<td>7 Days</td>
<td>28 Hours</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>15°C</td>
<td>50%</td>
<td>12 Hours</td>
<td>20 Hours</td>
<td>7 Days</td>
<td>20 Hours</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>25°C</td>
<td>50%</td>
<td>4 Hours</td>
<td>10 Hours</td>
<td>7 Days</td>
<td>8 Hours</td>
<td>4 Weeks</td>
</tr>
</tbody>
</table>

*These figures are 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.

SPREADING RATE
with Standard Hardener
assuming no losses
5.7 square metres per litre equals 125 μm dry film thickness

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.
### DUREMAX® GPE ZP

#### FAST CURE HARDENER

**COATING THICKNESS (MICRONS)**

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>135</td>
<td>270</td>
<td>170</td>
</tr>
</tbody>
</table>

**APPLICATION CONDITIONS**

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C</td>
<td>45°C</td>
</tr>
</tbody>
</table>

**SOLIDS BY VOLUME**

| 75%  |

**VOC LEVEL**

| <300 g/L |

**POT LIFE**

| 2 hours (4 litre kit, 25°C) |

**DRYING CHARACTERISTICS AT 125 μm DRY FILM THICKNESS* (FAST CURE HARDENER)**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Humidity</th>
<th>Touch</th>
<th>Handle</th>
<th>Full Cure</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C</td>
<td>50%</td>
<td>9 Hours</td>
<td>18 Hours</td>
<td>7 Days</td>
<td>18 Hours</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>10°C</td>
<td>50%</td>
<td>6 Hours</td>
<td>14 Hours</td>
<td>7 Days</td>
<td>14 Hours</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>15°C</td>
<td>50%</td>
<td>5 Hours</td>
<td>10 Hours</td>
<td>7 Days</td>
<td>10 Hours</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>25°C</td>
<td>50%</td>
<td>2.5 Hours</td>
<td>6 Hours</td>
<td>7 Days</td>
<td>6 Hours</td>
<td>4 Weeks</td>
</tr>
</tbody>
</table>

*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying.

1 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.

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### SPREADING RATE

6.0 square metres per litre equals 125 μm dry film thickness

**with Fast Cure Hardener assuming no losses**

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.

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### QUICKTURN™ HARDENER

**COATING THICKNESS (MICRONS)**

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
<th>Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>280</td>
<td>175</td>
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</table>

**APPLICATION CONDITIONS**

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C</td>
<td>35°C</td>
</tr>
</tbody>
</table>

**SOLIDS BY VOLUME**

| 72%  |

**VOC LEVEL**

| <310 g/L |

**POT LIFE**

| 90 Minutes (4 litre kit, 25°C) |

**DRYING CHARACTERISTICS AT 125 μm DRY FILM THICKNESS* (QUICKTURN™ HARDENER)**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Humidity</th>
<th>Touch</th>
<th>Handle</th>
<th>Full Cure</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C</td>
<td>50%</td>
<td>7 Hours</td>
<td>14 Hours</td>
<td>7 Days</td>
<td>14 Hours</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>10°C</td>
<td>50%</td>
<td>5 Hours</td>
<td>9 Hours</td>
<td>7 Days</td>
<td>9 Hours</td>
<td>4 Weeks</td>
</tr>
<tr>
<td>15°C</td>
<td>50%</td>
<td>3 Hours</td>
<td>5 Hours</td>
<td>7 Days</td>
<td>5 Hours</td>
<td>4 Weeks</td>
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<tr>
<td>25°C</td>
<td>50%</td>
<td>90 Minutes</td>
<td>3 Hours</td>
<td>7 Days</td>
<td>3 Hours</td>
<td>4 Weeks</td>
</tr>
</tbody>
</table>

*These figures are a guide only, as ventilation, film thickness, humidity, thinning and other factors will influence the rate of drying.

1 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.

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### SPREADING RATE

5.8 square metres per litre equals 125 μm dry film thickness

**with Quickturn™ Hardener assuming no losses**

NOTE: Practical spreading rates will vary depending on such factors as application method, ambient conditions, surface porosity and roughness.
DUREMAX® GPE ZP

TYPICAL SYSTEMS

This is a guide only and not to be used as a specification. Your specific project needs must be discussed with a Dulux Protective Coatings Consultant.

<table>
<thead>
<tr>
<th>SURFACE</th>
<th>ENVIRONMENT</th>
<th>PREPARATION GUIDE</th>
<th>SYSTEM</th>
<th>DFT (μm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEEL – NEW</td>
<td>Moderate – High (AS2312.1 Cat C4)</td>
<td>Abrasive blast clean AS1627.4 Class 2.5</td>
<td>1st Coat</td>
<td>Duremax® GPE ZP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd Coat</td>
<td>Duremax® GPE MIO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3rd Coat</td>
<td>Duremax® GPE MIO</td>
</tr>
<tr>
<td>STEEL – NEW</td>
<td>Mild – Moderate (AS2312.1 Cat 3)</td>
<td>Abrasive blast clean AS1627.4 Class 2.5</td>
<td>1st Coat</td>
<td>Duremax® GPE ZP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd Coat</td>
<td>Weathermax® HBR</td>
</tr>
<tr>
<td>STEEL – NEW</td>
<td>Interior</td>
<td>Abrasive blast clean AS1627.4 Class 2.5</td>
<td>1st Coat</td>
<td>Duremax® GPE ZP</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2nd Coat</td>
<td>Duremax® GPE</td>
</tr>
</tbody>
</table>

NOTE: If application is by brush or roller, additional coats will be necessary to achieve the minimum DFT and full opacity.

SURFACE PREPARATION

Steel: Round off all rough welds, sharp edges and remove weld spatter. Remove grease, oil and other contaminants in accordance with AS1627.1. Degrease with Gamlen CA 1 (a free-rinsing, alkaline detergent) according to the manufacturer’s written instructions and all safety warnings. Abrasive blast clean to a minimum of AS1627.4 Class 2.5.

APPLICATION

Mix each can thoroughly using a power mixer until the contents are uniform. Mix the contents of both packs together thoroughly using a power mixer and allow to stand for 10 minutes. Remix thoroughly before application.

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® Epoxy Thinner (920-08925) or Duthin® 450 (920-81942) can be added.

AIRLESS SPRAY

Standard airless spray equipment such as Graco Xtreme 45:1 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 usually required but up to 50ml/litre of Dulux® Epoxy Thinner (920-08925) or Duthin® 450 (920-81942) may be added to aid 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® Consultant 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 cold conditions. Where a fast thinner is required, use Duthin® 450 (920-81942). Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. DO NOT USE on galvanised steel when using Fast Cure hardener as delamination can occur.

CLEAN UP

Clean all equipment with Dulux® Epoxy Thinner (920-08925) or Duthin® 450 (920-81942) immediately after use.

OVERCOATING

Degrease with Gamlen CA 1 according to the data sheet. Test adhesion of existing coating by standard cross hatch adhesion test. If the coating fails, remove it. High-pressure water wash at 8.3 to 10.3 MPa (1,200-1,500 p.s.i.) to remove chalk and dust. Abrade surface to provide a good key for the new coating. Epoxies must be abraded if recoated outside the recoat window.

SAFETY PRECAUTIONS

Read Data Sheet, SAFETY DATA SHEET and any precautions on container labels. SAFETY DATA SHEET is available from Customer Service (13 23 77) or www.duluxprotectivecoatings.com.au

STORAGE

Store as required for a flammable liquid Class 3 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 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

Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear a self-contained breathing apparatus. Use with good ventilation and avoid inhalation of spray mists and fumes. If risk of inhalation of spray mists exists, wear a self-contained breathing apparatus.

FLAMMABILITY

This product is flammable. All sources of ignition must be eliminated in, or near the working area. DO NOT SMOKE. Fight fire with foam, CO2 or dry chemical powder. On burning will emit toxic fumes.

WELDING

Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

COMPANY INFORMATION

Dulux Protective Coatings a division of DuluxGroup (Australia) Pty Ltd DuluxGroup (New Zealand) Pty Ltd
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A.B.N. 67 000 049 427 A.B.N. 55 133 404 118

PACKAGING, TRANSPORT AND STORAGE

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PC 215 August 2018 Page 3 of 3