

DUREMAX[®] MBE

Fast Dry Medium Build General Purpose Epoxy

PC 252

- FEATURES**
- RAPID OVERCOATING PROPERTIES
 - EXCELLENT ADHESION
 - EASE OF SPRAY APPLICATION
 - SUITABLE FOR APPLICATION TO SUITABLY PREPARED METAL

USES DUREMAX[®] MBE is a 2 component, high solids, fast curing, epoxy primer. Specifically designed for application to blasted steel. It offers excellent barrier protection and is ideal for use in environments where fast drying or rapid recoating is required. DUREMAX[®] MBE is compatible with a wide range of primers and topcoats.

SPECIFICATIONS
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 and UV resistance | SOLVENTS | Resists splash and spillage of most hydrocarbon solvents, refined petroleum products and most common alcohols |
| HEAT RESISTANCE | Up to 120°C dry heat | WATER | Excellent resistance to fresh and salt water. |
| SALTS | Excellent resistance to neutral and alkali salts | ALKALIS | Suitable for splash and spillage of strong alkali |
| ACIDS | Suitable for splash and spillage of mild acids | ABRASION | Good when fully cured |

TYPICAL PROPERTIES AND APPLICATION DATA (STANDARD HARDENER)

| | | | | | |
|------------------------------|---|------------------------------------|---|------|-------------|
| CLASSIFICATION | General purpose epoxy coating | APPLICATION CONDITIONS | | | |
| FINISH | Semi-Gloss | | Min | Max | |
| COLOUR | Light Grey | Air Temp. | 5°C | 40°C | |
| COMPONENTS | Two | Substrate Temp. | 5°C | 40°C | |
| VOLUME SOLIDS | 71% (Light Grey) | Relative Humidity | | 85% | |
| VOC LEVEL | <250 g/L (Light Grey) | COATING THICKNESS (MICRONS) | | | |
| FLASH POINT | 23°C | | Min | Max | Recommended |
| POT LIFE | 1 Hour (15L, 25°C) | Wet film per coat (µm) | 145 [^] | 425 | 285 |
| SPRAY LIFE | 1 Hour (15L, 25°C) | Dry film per coat (µm) | 100 | 300 | 200 |
| MIXING RATIO V/V | Part A : 3 Part B : 1 | SUITABLE SUBSTRATES | Suitably prepared substrates including blast cleaned steel and blast cleaned galv. Not recommended direct to Aluminium. | | |
| THINNER | 920-81942 Duthin [®] 450 | PRIMERS | Not required or a specified Dulux [®] primer if needed | | |
| THINNER – HOT WEATHER | 920-08925 Dulux [®] Epoxy Thinner | TOPCOATS | Specified Dulux [®] topcoat | | |
| PRODUCT CODE | 758-38678 Light Grey 976-H0352 Standard Hardener | APPLICATION METHODS | Conventional and airless spray | | |

[^]Air-spray application will be required to achieve a lower WFT

DRYING CHARACTERISTICS AT 200 µm DRY FILM THICKNESS* (STANDARD HARDENER)

| Temperature | Humidity | Touch | Handle | Full Cure | OVERCOAT | |
|-------------|----------|---------|----------|-----------|----------|------------------|
| | | | | | Min | Max ¹ |
| 5° C | 50% | 4 Hours | 12 Hours | 7 Days | 12 Hours | 7 Days |
| 15° C | 50% | 2 Hours | 6 Hours | 7 Days | 6 Hours | 7 Days |
| 25° C | 50% | 1 Hours | 3 Hours | 7 Days | 3 Hours | 7 Days |

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

¹If the maximum overcoat interval is exceeded then the surface MUST be thoroughly and uniformly abraded to ensure maximum intercoat adhesion.

SPREADING RATE
with Standard Hardener
assuming no losses

3.6 square metres per litre equals 200 µm dry film thickness

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

DUREMAX[®] MBE

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.

| SURFACE | ENVIRONMENT | PREPARATION GUIDE | SYSTEM | DFT (µm) |
|-------------|--|--|---|-----------------------------------|
| STEEL – NEW | Very high corrosivity (AS2312.1 Cat C5) System PUR 5 | Abrasive blast clean AS1627.4 Class 2.5 | 1 st Coat Zincanode [®] 402 2 nd Coat Duremax [®] MBE 3 rd Coat Weathermax [®] HBR | 75 µm 200 µm 100 µm |
| STEEL – NEW | High corrosivity (AS2312.1 Cat C5) System PUR 4 | Abrasive blast clean AS1627.4 Class 2.5 | 1 st Coat Zincanode [®] 402 2 nd Coat Duremax [®] MBE 3 rd Coat Luxathane [®] HPX | 75 µm 125 µm 50 µm |
| STEEL – NEW | High corrosivity (AS2312.1 Cat C4) Exceeds System PUR3 | Abrasive blast clean AS1627.4 Class 2.5 | 1 st Coat Durepon [®] EZP 2 nd Coat Duremax [®] MBE 3 rd Coat Quantum [®] FX 4 th Coat Quantum [®] Clearcoat | 75 µm 125 µm 55 µm 45 µm |
| STEEL – NEW | Interior | Abrasive blast clean AS1627.4 Class 2.5 | 1 st Coat Duremax [®] GPE ZP 2 nd Coat Duremax [®] MBE | 125 µm 200 µm |
| STEEL – NEW | Interior | Abrasive blast clean AS1627.4 Class 2.5 | 1 st Coat Duremax [®] MBE | 300 µm |
| STEEL – HDG | Exterior | Clean, degrease and whip blast surface per AS 2312.2 | 1 st Coat Durepon EZP 2 nd Coat Duremax [®] MBE 3 rd Coat Weathermax [®] HBR | 75µm 225 µm 100 µm |

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

| SURFACE PREPARATION | <p>Steel: Round off all rough welds, sharp edges and remove weld spatter. Degrease in accordance with AS1627.1. Abrasive blast clean to a minimum of AS1627.4 Class 2.5 using ISO8501-1 as a pictorial guide.</p> <p>HDG: Prepare all hot dip galvanized surfaces in accordance with the requirements of Section 7.5.3, "Preparation of Painting" of AS 2312.2.</p> | | | | | | | | | | | | | | | | | | | | | | |
|--|---|------------------|----------------------------------|----------------------------------|-----------------------------------|--|---------------------------------------|------------------|--------------------------|-----|-----------|---------|-------------|---------------|--------------------|-------------------|-----------------------------|----------------|--------------|----------------------------------|----------------------------------|-----------------------------------|-----------------------------------|
| APPLICATION | <p>Mix each pack thoroughly using a power mixer until the contents are uniform. Mix the contents of both packs together thoroughly using a power mixer. Box all containers before use to ensure colour consistency. Remix thoroughly before application.</p> <p>Airless Spray: Graco Z45 spray pump or equivalent. Thinning is not normally required but up to 50 ml/litre or 5% of Dulux[®] Duthin 450 Thinner (920-81942) may be added to aid application. Apply in multiple wet coats overlapping each pass 50%.</p> <table border="1"> <thead> <tr> <th>Tip Orifice</th> <th>Atomising Pressure</th> <th>Mat'l Hose ID</th> <th>Pump Manifold Filter</th> </tr> </thead> <tbody> <tr> <td>0.017" – 0.021" (431 - 533 microns)</td> <td>2,700 – 3,500 psi (1861 – 241 bar)</td> <td>3/8" (9.5 mm)</td> <td>60 mesh (250 microns)</td> </tr> </tbody> </table> <p>NOTE: A 2 metre x 1/4" (6.35mm) whip hose is allowed at the end of the material hose for greater ease of application.</p> <p>Air Spray: Graco Triton 308 or equivalent. Thinning is not normally required but up to 100 ml/litre or 10% of Dulux[®] Duthin[®] 450 (920-81942) may be added to aid application. Apply in multiple wet coats overlapping each pass 50%.</p> <table border="1"> <thead> <tr> <th>Gun</th> <th>Fluid Tip</th> <th>Air Cap</th> <th>Air Hose ID</th> <th>Mat'l Hose ID</th> <th>Atomising Pressure</th> <th>Material Pressure</th> </tr> </thead> <tbody> <tr> <td>Graco Air Pro or Equivalent</td> <td>2.2 mm (0.086)</td> <td>Graco 192318</td> <td>5/16" or 3/8" (7.9 or 9.5 mm)</td> <td>3/8" or 1/2" (9.5 or 12.7 mm)</td> <td>60 to 70 PSI (4.14 – 4.83 Bar)</td> <td>20 to 25 PSI (1.83 – 1.72 Bar)</td> </tr> </tbody> </table> <p>NOTE: Low temperatures and/or long hose lengths require higher material pressure.</p> <p>Roller: Thin 10% to 15% with Dulux[®] Duthin[®] 450 (920-81942). Recommended for small touch up areas only. Use 10 mm to 12 mm synthetic woven nap covers. Note: Two or more coats may be required to obtain recommended film thicknesses.</p> <p>Brush: Thin 10% to 15% with Dulux[®] Duthin[®] 450 (920-81942). Recommended for small touch up areas only. Use high quality natural or synthetic bristle brushes. Note: Two or more coats may be required to obtain recommended film thicknesses.</p> | Tip Orifice | Atomising Pressure | Mat'l Hose ID | Pump Manifold Filter | 0.017" – 0.021" (431 - 533 microns) | 2,700 – 3,500 psi (1861 – 241 bar) | 3/8" (9.5 mm) | 60 mesh (250 microns) | Gun | Fluid Tip | Air Cap | Air Hose ID | Mat'l Hose ID | Atomising Pressure | Material Pressure | Graco Air Pro or Equivalent | 2.2 mm (0.086) | Graco 192318 | 5/16" or 3/8" (7.9 or 9.5 mm) | 3/8" or 1/2" (9.5 or 12.7 mm) | 60 to 70 PSI (4.14 – 4.83 Bar) | 20 to 25 PSI (1.83 – 1.72 Bar) |
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| 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[®] Protective Coatings 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[®] Protective Coatings Australia. Freshly mixed material must not be added to material that has been mixed for some time. Do not apply at temperatures below 5°C when using a Standard hardener. In hot weather conditions where a slower thinner is required use</p> | | | | | | | | | | | | | | | | | | | | | | |

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|---------------------------|--|
| CLEAN UP | Dulux® Epoxy Thinner (920-08925). Do not apply at relative humidity above 85% or when the surface is less than 3°C above the dewpoint. Contact Dulux® Protective Coatings Consultant for immersion use. Clean all equipment with Dulux® Duthin® 450 (920-81942) immediately after use. |
| OVERCOATING | For atmospheric service: Assess the condition of aged coatings and the viability of an overcoat system in accordance with the latest versions of SSPC TU No.3, ASTM D 5064, and ASTM D 5065. Consult your local Dulux® Protective Coatings Consultant for specific surface preparation and coating system recommendations. |
| 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 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 | 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 spraying, users must comply with their respective State Spray Painting Regulations. |
| 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, CO ₂ 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 | | PACKAGING, TRANSPORT AND STORAGE | |
|--|---|----------------------------------|--|
| Dulux Protective Coatings is a division of | | PACKAGING | Available in 15 litre packs |
| DuluxGroup (Australia) Pty Ltd 1956 Dandenong Road, Clayton 3168 A.B.N. 67 000 049 427 | DuluxGroup (New Zealand) Pty Ltd 150 Hutt Park Road, Lower Hutt, NZ A.B.N. 55 133 404 118 | TRANSPORTATION WEIGHT | 1.7 kg/litre (Average of components) |
| | | DAANGEROUS GOODS | Part A: Class 3 UN 1263 Part B: Class 3 UN 1263 |

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