DUREMAX® MBE

Fast Dry 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 APAS 2973 V10 assessed and confirmed to meet all requirements on specific certified products.

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 immersion in fresh and salt water for untinted Light Base, Clear Base, and factory-packed Light Grey.
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
FINISH	Semi-Gloss
COLOUR	Light Grey
COMPONENTS	Two
VOLUME SOLIDS	71% ± 2 (Light Grey)
VOC LEVEL	<250 g/L (Light Grey)
FLASH POINT	23°C
POT LIFE	1 Hour (15L, 25°C)
SPRAY LIFE	1 Hour (15L, 25°C)
MIXING RATIO V/V	Part A : 3 Part B : 1
THINNER	920-81942 Duthin® 450
THINNER – HOT WEATHER	920-08925 Dulux® Epoxy Thinner
PRODUCT CODE	758-38678 Light Grey 758-63001 Light Base 758-63003 Clear Base 976-H0352 Standard Hardener

APPLICATION CONDITIONS

	Min	Max
Air Temp.	5°C	40°C
Substrate Temp.	5°C	40°C
Relative Humidity		85%

COATING THICKNESS (MICRONS)

	Min	Max	Recommended
Wet film per coat (µm)	145^	425	285
Dry film per coat (µm)	100	300	200

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

SUITABLE SUBSTRATES	Suitably prepared substrates including blast-cleaned steel and blast-cleaned galv. Not recommended directly to Aluminium.
PRIMERS	Not required or a specified Dulux® primer if needed
TOPCOATS	Specified Dulux® topcoat
APPLICATION METHODS	Conventional and airless spray

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

					OVERCOAT	
Temperature	**Humidity**	**Touch**	**Handle**	**Full Cure**	**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.
[1]**If 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	1st Coat 2nd Coat 3rd Coat	Zincanode® 402 Duremax® MBE 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	1st Coat 2nd Coat 3rd Coat	Zincanode® 402 Duremax® MBE 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	1st Coat 2nd Coat 3rd Coat 4th Coat	Durepon® EZP Duremax® MBE Quantum® FX Quantum® Clearcoat	75 µm 125 µm 55 µm 45 µm
STEEL – NEW	Interior	Abrasive blast clean AS1627.4 Class 2.5	1st Coat 2nd Coat	Duremax® GPE ZP Duremax® MBE	125 µm 200 µm
STEEL – NEW	Interior	Abrasive blast clean AS1627.4 Class 2.5	1st Coat	Duremax® MBE	300 µm
STEEL – HDG	Exterior	Clean, degrease and whip blast surface per AS 2312.2	1st Coat 2nd Coat 3rd Coat	Durepon® EZP Duremax® MBE Weathermax® HBR	75µm 225 µm 100 µm

NOTE: If the 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. 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.

HDG: Prepare all hot dip galvanized surfaces in accordance with the requirements of Section 7.5.3, "Preparation of Painting" of AS 2312.2.

APPLICATION

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.

APPLICATION EQUIPMENT

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%.

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)

NOTE: A 2 metre x ¼" (6.35mm) whip hose is allowed at the end of the material hose for greater ease of application.

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%.

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)

NOTE: Low temperatures and/or long hose lengths require higher material pressure.

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.

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.

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® 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

	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 UP	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 the 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 a 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 the risk of inhalation of spray mists exists, wear a 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 are coated with this paint. Grind off the coating before welding.

COMPANY INFORMATION

Dulux Protective Coatings is a division of:

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
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PACKAGING, TRANSPORT AND STORAGE

PACKAGING	Available in 15 litre packs
TRANSPORTATION WEIGHT	1.7 kg/litre (Average of components)
DANGEROUS GOODS	Part A: Class 3 UN 1263 Part B: Class 3 UN 1263