

# EPINAMEL® DTM985 (Formerly Macropoxy® 985)

P33.03

# **Description**

- A two-component, surface tolerant, high solids, directto-metal, high-build, polyamine adduct cured epoxy coating approved to APAS 2973.
- Conforms to AS/NZS 3750.14.
- Conforms to AS/NZS 4020:2018 (factory made white only).

# **Product Characteristics**

- Maintenance coating for use in a wide range of industrial applications as a primer, build coat or finish coat.
- Tolerant to lower grades of steel preparation for atmospheric exposure.
- Excellent re-coatability.
- Cures down to 0°C with Low Temperature (LT) Part B.
- Excellent abrasion resistance.
- Resistant to splash of alkali, mineral oils, solvents and dilute acids.
- Suitable for immersion in salt and fresh water.
- Suitable for sewerage immersion applications such as wet wells and storage tanks (both for steel and concrete substrates).
- Can be applied to existing piling between tides or for new work.
- Can be exposed to water immersion shortly after application.
- Suitable with well-designed cathodic protection systems.

#### **Colours and Gloss**

- AS 2700 colour card, micaceous iron oxide colour range – gloss.
- Factory colours: white, black, N53 grey blue, Y14 golden yellow, MIO 802, MIO 814, MIO N53.
- Only factory manufactured white and black colours are suitable for immersion applications.

# **Recommended Film Thickness (Per Coat)**

	Minimum	Maximum	Typical
Dry film thickness (µm)	150	500	250
Wet film thickness (µm)	176	590	295
Theoretical spreading rate (m²/l)	5.7	1.7	3.4

# Basic Data at 25°C

Solids content approx.	85% by volume
Mix ratio	3A:1B by volume
Touch dry after	3-4 hours (Std Part B) 2.5 hours (LT Part B)
Full cure	5 days (Std Part B) 3 days (LT Part B)

# **Surface Preparation**

All surfaces to be coated must be clean, dry and free from chalking and contamination.

# **PREVIOUS SUITABLE COAT**

- Dry and free from any contamination and sufficiently roughened if necessary.
- Oil and grease should be removed from all surfaces in accordance with AS 1627.1 solvent cleaning.

#### **MILD STEEL**

- Blast clean in accordance with AS 1627.4 to Sa 2½ minimum (AS 1627.9), surface profile 40-70 microns.
- Power tool clean in accordance with AS 1627.2 to St 2 minimum (AS 1627.9), (atmospheric exposure only).

# **GALVANISED STEEL**

- Blast clean in accordance with AS 1627.4 to Sa 2½ lightly blast using an inert grit or power tool clean to achieve a roughened uniform flat appearance (atmospheric exposure only).
- If oxidation occurs between blasting and application, the surface should be reblasted to the specified visual standard
- Surface defects revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.
- Substrate temperature must be at least 5°C during application and 3°C above dew point.
- Relative humidity should not exceed 85%.

# **CONCRETE**

- Must be free from bond breakers, curing agents or any other contaminants that may interfere with adhesion.
- Acid etch to remove all laitance (atmospheric exposure only).
- Blast clean to remove all laitance.
- Moisture content of concrete should be max. 4%.
- Ensure all new concrete is fully cured prior to coating. Typically, this may take a minimum of 4-6 weeks.

# **Application Instructions**

- Mixing ratio by volume: 3A:1B.
- Mix Epinamel DTM985 Part A with Epinamel DTM985/DTS680 Standard or Low Temperature (LT) Part B only.
- Induction time none.
- Pot life at 25°C: 2 hours (Std Part B), 45 min (LT Part B).
- Stir the components and mixed product well using a mechanical mixer.
- Low temperature Part B is not recommended for use at Temperatures above 35°C.
- The temperature of the mixed product must be above 15°C, otherwise extra thinner may be required to obtain application viscosity.
- Too much thinner will result in lower sag resistance and slower cure.
- Thinner should only be added after mixing the components.
- Freshly catalysed material should not be added to product that has been mixed for some time.

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P33.03

- Wattyl recommends the use of coating inspection reports in compliance with AS/NZS 3894.10,11,12 refer to Information Sheet I-20 for more information.
- for recommendations outside those contained in this data sheet, refer to Wattyl.

# **Application Methods**

	AIRLESS SPRAY	AIR SPRAY	BRUSH/ROLLER Only for touch up and spot repair
Recommended thinner	Thinner L760	Thinner L760	Thinner L760
Volume of thinner	0-10%	0-10%	0-10%
Tip	0.53- 0.58mm (0.021- 0.023 inch)	1.5- 2.0mm (0.059- 0.0078 inch)	<ul> <li>The maximum dry film thickness that can be achieved when</li> </ul>
Fluid/ Atomised pressure	15 MPa (2100 psi)	0.2-0.4 MPa (30-60 psi)	<ul><li>brushing/rolling is 100 microns.</li><li>Nylon/polyester or natural bristle brushes</li></ul>
Pump	30:1	-	recommended.
Hose	½" ID (6.3mm)	-	<ul> <li>Recommended roller cover</li> </ul>
Filter	60 mesh	-	should be 10mm woven with a solvent resistant core.

# **CLEANING SOLVENT**

Thinner L760

Note: In warmer conditions, replace some or all of Thinner L760 with Thinner L765 (slow thinner).

 If spraying for extended periods or if stopping work it is recommended to intermittently flush out spray lines.

# **Safety Precautions**

- Flammable. Avoid contact with heat and naked flame.
- Avoid contact with skin and eyes.
- Use gloves, mask and goggles during application.
- Provide adequate ventilation when using in confined spaces.
- This product is intended for use in industrial situations by professional applicators in accordance with the advice given on this sheet. All work involving the use and application of this product should be carried out in compliance with all relevant Health, Safety & Environmental standards and regulations and must not be used without reference to the safety data sheet (SDS).

# **Additional Data**

# **OVERCOATING TABLE**

Overcoating interval for Epinamel DTM985 cured with Standard Part B when top coating with **Epinamel DTM985**.

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	Interval	5°C	15°C	25°C	35°C	
	Min	16 hrs	6 hrs	3 hrs	2 hrs	
	Max	3 mths	3 mths	2 mths	2 mths	

Overcoating interval for Epinamel DTM985 cured with LT Part B when top coating with **Epinamel DTM985**.

Interval	5°C	15°C	25°C	35°C
Min	8 hrs	5 hrs	3 hrs	1½ hrs
Max	3 mths	2 mths	2 mths	1 mth

Overcoating interval for Epinamel DTM985 cured with Standard Part B when top coating with **two-pack polyurethanes.** 

Interval	5°C	15°C	25°C	35°C	
Min	16 hrs	8 hrs	4 hrs	2 hrs	
Max	•	1	mth		

Overcoating interval for Epinamel DTM985 cured with LT Part B when top coating with **two-pack polyurethanes**.

Interval	5°C	15°C	25°C	35°C
Min	16 hrs	6 hrs	4 hrs	2 hrs
Max	1 mth	1 mth	14 days	14 days

Overcoating interval for Epinamel DTM985 cured with Standard Part B when top coating with **Paracryl IF540 and SeaPro TC170.** 

Interval	5°C	15°C	25°C	35°C
Min	16 hrs	8 hrs	4 hrs	2 hrs
Max	1 mth	1 mth	14 days	7 days

Overcoating interval for Epinamel DTM985 cured with LT Part B when top coating with **Paracryl IF540 and SeaPro TC170.** 

Interval	5°C	15°C	25°C	35°C	
Min	8 hrs	6 hrs	4 hrs	2 hrs	
Max	14 davs	14 davs	7 days	7 days	

Overcoating interval for Epinamel DTM985 cured with Standard Part B when top coating with **SeaPro TC90**.

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Interval	5°C	15°C	25°C	35°C	
Min	2 hrs	2 hrs	1 hr	1 hr	
Max	8 hrs	6 hrs	4 hrs	2 hrs	

Overcoating interval for Epinamel DTM985 cured with LT Part B when top coating with **SeaPro TC90**.

Interval	5°C	15°C	25°C	35°C	
Min	2 hrs	2 hrs	1 hr	½ hr	
Max	4 hrs	3 hrs	2 hrs	1 hr	

<sup>\*</sup> surface must be dry and free from chalking and contamination prior to overcoating. If overcoating interval is exceeded, the surface must be dry and free from chalking and contamination and sufficiently roughened

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P33.03

# **CURING AND POTLIFE TABLE**

Curing and Potlife Table for Epinamel DTM985 cured with Standard Part B.

Paint temperature	5°C	15°C	25°C	35°C
Dry to handle	24 hrs	12 hrs	6 hrs	3 hrs
Full cure	14 days	7 days	5 days	3 days
Potlife (at applicable viscosity)	8 hrs	4 hrs	2 hrs	1 hr

Curing and Potlife Table for Epinamel DTM985 cured with LT Part B.

Paint temperature	5°C	15°C	25°C	35°C
Dry to handle	14 hrs	5 hrs	2½ hrs	NR
Full cure	12 days	7 days	3 days	NR
Potlife (at applicable viscosity)	3 hrs	1½ hrs	45 mins	NR

- Adequate ventilation must be continuously maintained during application and curing.
- Suitable for application between tides, allow 30 minutes set up time before immersion.
- Coating will continue to cure when immersed in water.
- Premature exposure to water may cause colour or gloss change but will not affect the coating performance.

# **Precautions**

For recommendations outside those contained in this data sheet, refer to Wattyl.

# **Product Compatibility**

#### **PRIMERS**

- Galvit EP100
- Galvit ES510
- Galvit ES600
- Epinamel PR250
- Epinamel PR360ZPS

#### **TOPCOATS**

- Epinamel DTM985
- Poly U400 (colours)
- Poly U750 (colours)
- Paracryl IF540 (colours)
- SeaPro TC170 Tiecoat
- SeaPro TC90

# **Storage and Packaging**

- Shelf life at least 12 months.
- All components shall be stored in a dry internal environment at between 5°C and 35°C.
- Packaging: 20 litre kit (15 litre Part A, 5 litre Part B)
   4 litre kit (3 litre Part A, 1 litre Part B)
- Product line: 2007.

For the most up to date information, please visit our website at <a href="www.wattylpc.com.au">www.wattylpc.com.au</a>, or contact us at Australia 132 101 (Australia) 0800 825 7727 (New Zealand).

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