



AMERLOCK 400 MIO

High Solids Epoxy Mastic Coating

Data Sheet: 400MIO

Supersedes 06/07

Revised 03/08

Composition	Two-pack, high solids, high performance maintenance coating for concrete and steel surfaces																							
Uses and Properties	<ul style="list-style-type: none"> ◆ Surface tolerant self priming intermediate or finish coat. MIO does provide some UV resistance. ◆ Suitable for use over most existing sound coatings. ◆ Suitable for application onto high pressure water cleaned or high pressure water jet cleaned surfaces. ◆ Tolerant of prepared damp surfaces. ◆ Tolerant of hand prepared surfaces or where adherent rust remains on the prepared surface. ◆ Suitable for application with a wide variety of topcoats where improved resistance to UV is required. ◆ Good chemical resistance to splash / spill and fumes. ◆ Suitable for incidental food contact (USDA approved). 																							
Typical Applications	For the protection of steel structures in industrial facilities, bridges, tank exteriors, marine weathering, offshore, oil tanks, piping, roofs, water towers																							
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<p>❶ The shape and size of surfaces to be coated and the method of application may allow adequate protection in one coat.</p> <p>❷ Prime coats such as D9 SB ZINC SILICATE, AMERCOAT 68HS, AMERCOAT 385P, AMERCOAT 307, AMERCOAT 182ZPK and AMERCOAT 370ZP may be used depending on exposure requirements.</p> <p>❸ Wet abrasive blasting, high pressure water cleaning and jetting provided the degree of flash rusting is no greater than moderate (M) as defined in NACE No.5 / SSPC – SP12.</p> <p>❹ For improved chalk resistance and colour retention 2nd coat may be replaced with AMERCOAT 450K, ISO-FREE 977, LUSTERHANE 988 or PSX 700.</p>																								

General Data	
Weathering	Excellent. Chalks on exterior exposure without detracting from durability.
Finish	Semigloss.
Chemical Resistance	Very good resistance to splash of acids, alkalis and chemicals.
Solvent Resistance	Good resistance to most hydrocarbon solvents, distillates, oils and greases.
Abrasion Resistance	Good.
Immersion	Suitable fresh water or sea water.
Temperature Range	Up to 93°C (dry heat), 38°C (wet heat).
Colour	Natural Steel Grey. (Other colours batch quantities only)
Topcoating	Normally none, though may be topcoated with most other two pack finishes.
Shelf Life	12 months from date of shipment if stored indoors at 4°C to 38°C – Base and Hardener.

Application Data															
Theoretical Coverage	6.8 sq.m. per litre at 125 µm dry film thickness. (Wet film thickness 150 µm). Material losses during mixing and application will vary and must be considered when estimating requirements.														
Volume Solids	85% ± 2% (theoretical).														
Drying Times															
	10°C	21°C	32°C												
Touch Dry	28 h (15 h)	9 h (4 h)	4.5 h (2 h)												
Through Dry	40 h (24 h)	20 h (9 h)	12 h (5 h)												
Min. recoat time	30 h (16 h)	24 h (6 h)	8 h (4 h)												
	Note: Accelerated drying times are given in brackets, i.e. 2.5% addition of Amercoat 861 Accelerator (by volume).														
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	<i>Note: Drying times are dependent on air and surface temperatures as well as film thickness, ventilation and relative humidity. Maximum recoating time is highly dependent on actual surface temperatures – not simply ambient air temperatures. Surface temperatures should be monitored especially with sun-exposed or otherwise heated surfaces. Higher surface temperatures shorten the maximum recoat window.</i>														
	<i>When maximum recoat time is exceeded, abrade and solvent wipe the surface before recoating.</i>														
Mixing Ratio	1 part Base to 1 part Hardener.														
Pot Life	2 hours @ 25°C. (1 hour with addition of 861 Accelerator at 2.5% by volume)														
	<i>NOTE: The figures quoted for pot life and drying/curing times are not definitive. They are dependent on site conditions, such as volume of material mixed, ambient and equipment temperatures, weather and ventilation.</i>														
Mixing	Power stir the Base and Hardener, then add the Hardener to the Base with stirring. Allow to digest 10 minutes maximum before thinning (if required) and using.														
Thinners	Use THINNER 737 for thinning and THINNER 304 for clean up. Use THINNER 737 when overcoating single pack coatings.														
Equipment	<i>Airless Spray:</i> Use a 0.431mm to 0.533 mm (.017 to .021") tip size and 12 to 14 MPa pressure. <i>Conventional Spray:</i> DeVilbiss JGA 502 GUN WITH "D" needle and fluid tip, 64 aircap, or equivalent. Use 200-270 kPa pot pressure and 400 kPa atomising pressure. <i>Brush or roller:</i> Application may need additional coats to achieve required DFT.														
Safety Precautions	Recommended only for application by experienced industrial operators in industrial coating operations. When applying by brush or roller, provide adequate ventilation. When applying by spray, users must comply with relevant spray painting regulations and wear appropriate respirator to avoid inhaling vapours and spray mist. Material Safety Data Sheet is available and should be consulted.														

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PPG INDUSTRIES PTY. LTD. McNaughton Road, Clayton VIC 3168 – 24 hr Emergency Telephone 1800 033111

Telephone : (03) 9263 6000, Customer service: 1300 659 666

