



ISO-FREE 977

Two Pack Catalysed Acrylic Finish

Data Sheet: 977

Supersedes 06/07

Revised 03/08

Composition	Two component, non-yellowing, catalysed acrylic enamel finish coat with excellent durability. Available in full range of colours and fully recoatable. Free of isocyanate curing agents.			
APAS Approval	APAS-2919			
Uses and Properties	For the long term protection of steel, concrete or other surfaces exposed to chemical environment and weathering, ISO-FREE 977 possesses excellent chemical, solvent and water resistant properties, combined with excellent weathering and gloss retention. This makes ISO-FREE 977 an outstanding coating for a wide range of applications. It is free of the health hazards associated with isocyanates.			
Typical Applications	Marine Industry - Food Industry - Offshore Structures - Rail and Road Tankers - Construction Industry - Harbourside Facilities - Oil Refineries - Chemical Industry - Tank Exteriors			
Typical Systems	Substrate	Surface Preparation	Typical Application	dft μm
	Structural Steel	Surface must be clean, dry, free from oil and grease. Abrasive blast to AS1627 Part 4 Class 2½. Refer Surface Preparation Guide	1st Coat: D9 SB ZINC SILICATE ❶ 2nd Coat: AMERCOAT 370 ❷ 3rd Coat: ISO-FREE 977 ❸ Total Dry Film Thickness 1st Coat: AMERCOAT 370 thinned 15-33% with THINNER 304 2nd Coat: AMERCOAT 370 ❹ 3rd Coat: ISO-FREE 977	65-75 100-125 50-75 <u>215 min</u>
	Concrete, cement render	Fins should be ground off, edges rounded adequately by grinding, then surface roughened, and voids exposed for filling, by abrasive blast cleaning "whip blasting" - see Surface Preparation Guide ❺	1st Coat: AMERCOAT 370 15-33% with THINNER 304 2nd Coat: AMERCOAT 370 ❹ 3rd Coat: ISO-FREE 977	40-50 100-125 50-75
	Cold Rolled Steel	Degrease or solvent clean or chemically etch.	1 st Coat: FAST CURE EPOXY PRIMER 940 ❻ 2 nd Coat: ISO-FREE 977	20-25 40-50
	Galvanized Surfaces	Structural sizes - whip blast to achieve uniform anchor pattern. Sheet galvanizing or Zinalume - degrease, abrade and clean with solvent.	1st Coat: AMERCOAT 370 2nd Coat: ISO-FREE 977 1st Coat: MULTI ETCH 302 2nd Coat: ISO-FREE 977	75-100 50-75 10-15 40-50
	<p>❶ Other metallic zinc primers may be used such as AMERCOAT 68HS, AMERCOAT 471. Refer PPG Protective and Marine Coatings Technical Service.</p> <p>❷ AMERLOCK 2K and AMERCOAT 472 MIO pigmented coatings may be used as the second coat, depending on circumstances.</p> <p>❸ Two coats may be required with bright colours to achieve opacity.</p> <p>❹ AMERLOCK 2K can also be used on correctly prepared concrete.</p> <p>❺ Acid etching of new concrete is an acceptable alternative in some cases</p> <p>❻ If required, AMERCOAT 385P or AMERCOAT 182ZPK may be used with this product, depending on conditions.</p>			

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<p>General Data</p> <p>Weathering</p> <p>Finish</p> <p>Chemical Resistance</p> <p>Solvent Resistance</p> <p>Abrasion Resistance</p> <p>Immersed Conditions</p> <p>Temperature Range</p> <p>Colours</p> <p>Shelf Life</p>	<p>Excellent.</p> <p>High gloss.</p> <p>Very good.</p> <p>Excellent.</p> <p>Excellent.</p> <p>Not recommended.</p> <p>Up to 120° dry heat.</p> <p>Most colours available.</p> <p>12 months from date of shipment if stored indoors at 4°C to 38°C – Base and Hardener.</p>																
<p>Application Data</p> <p>Theoretical Coverage</p> <p>Volume Solids (theoretical)</p> <p>Hardeners</p> <p>Drying Times</p> <p>Recoating Time</p> <p>Mix Ratio</p> <p>Pot Life (@ 25°C)</p> <p>Thinning</p> <p>Method</p> <p>Precautions</p> <p>Handling</p>	<p>ISO-FREE 977 covers approximately 9.6 square metres per litre to give a dry film thickness of 50 µm. (Wet film thickness 105 µm). Material losses during mixing and application will vary and must be considered when estimating job requirements.</p> <p>48% ± 2% (white - varies with colour).</p> <p>Three hardeners available, Standard for normal spraying conditions Summer Grade for hot spraying conditions Roller Grade for brush and roller application</p> <p>STANDARD HARDENER</p> <table border="1" data-bbox="512 846 1316 976"> <thead> <tr> <th></th> <th>15°C</th> <th>25°C</th> <th>35°C</th> </tr> </thead> <tbody> <tr> <td>Touch Dry</td> <td>2 hours</td> <td>1 hour</td> <td>30 minutes</td> </tr> <tr> <td>Through Dry</td> <td>24 hours</td> <td>16 hours</td> <td>12 hours</td> </tr> <tr> <td>Min. recoat time</td> <td>24 hours</td> <td>16 hours</td> <td>12 hours</td> </tr> </tbody> </table> <p><i>Note: Drying times are dependant on air and surface temperatures as well as film thickness, surface temperature, ventilation and relative humidity.</i></p> <p>Maximum recoat indefinite but aged films must be free of all chalk, dirt and contamination before recoating. <i>Note: When applying over primer be sure to do so within the recommended recoat interval for that primer.</i></p> <p>3 parts base to 1 part hardener, (by volume)</p> <p>6 hours. Do not use after this time even if the mixed product is still liquid.</p> <p>THINNER 300. (THINNER 539 retarder thinner is available for hot, windy conditions).</p> <p>Mix ISO-FREE 977 by power stirring Base. Mix the Hardener then add to base and stir until uniform. Allow to stand 15 minutes.</p> <p>Conventional spray – typical set-up, use pressure pot unit with DeVilbiss JGA 502 gun, FF fluid tip and needle, 704 air cap or equivalent with 10mm fluid line 60-105 kPa (10-15 psi) pot pressure and 370-450 kPa (55-65 psi) atomising pressure. Thin up to 25% by volume with THINNER 300.</p> <p>Airless spray – typical set-up, use 20.6 MPa (3,000 psi) pressure and 0.33 mm (13 thou) tip. Thin up to 10% by volume with THINNER 300 if required.</p> <p>Brush or roller – No thinner required, use natural bristle brush or industrial roller. Replace Standard Hardener with Roller Grade Hardener, (for both roller and brush).</p> <p>Do not apply in thin coats. A full wet continuous coat must be applied, to ensure adequate film integrity, adhesion and durability.</p> <p>Freshly catalysed product should not be added to product that has already been catalysed for an extended period.</p> <p>Brush and roller application may require extra coats to achieve the required dry film thickness.</p> <p>Do not use Roller grade hardener for spray application.</p> <p>ISO-FREE 977 contains flammable solvents. Keep away from heat and open flame. ISO-FREE 977 should not be allowed to remain on the skin and normal hygiene standards should be observed when using this product, i.e. wear gloves, goggles and mask and rolled own sleeves when spraying. Spray painting must be performed in a properly exhausted and approved spray booth. Otherwise use a combination dust/organic vapour respirator to AS1716. Avoid breathing dust when sanding.</p>		15°C	25°C	35°C	Touch Dry	2 hours	1 hour	30 minutes	Through Dry	24 hours	16 hours	12 hours	Min. recoat time	24 hours	16 hours	12 hours
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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

