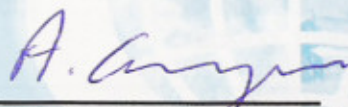


Report No: COA/01515

Issue Date: 28<sup>th</sup> April 2003

**Test Report:  
Evaluation of  
Epochem  
RS500 and  
RL500 Coating  
Systems  
Applied in Wet  
Conditions**

Authorised by:



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Epo-chem RL500PF: Applied to Wet Aged Alkyd (Test Panels: 021729A).  
 Dfts ranging from: 108 – 141 µm

Test	Result									
Application & Appearance	<p>Application: Intermittent 'skidding' of the brush over the wet surface. Presence of water adversely affected the paint substance finish (see appearance).</p> <p>Appearance: Generally satisfactory, but with elongated areas of water-affected paintwork (locally thin film).</p>									
Cross-cut adhesion test, BS3900: Part E6: 1992	Classification 0 result, triplicate determination with 3mm spacing.									
Pull-off adhesion, ASTM D4541	All three tests gave pull-off adhesion values greater than 1000 psi.									
Resistance to impact, BS3900: Part E7	No defects evident in the coating system, including cracking, flaking or detachment from the substrate.									
Resistance to humidity, BS3900: Part F2: 1973	Panels inspected after 2000 hours exposure. No signs of softening, swelling, blistering or underfilm corrosion were evident.									
Resistance to Salt Spray, BS3900: Part F12: 1997	After 2000 hours exposure, rusting and rust staining was recorded at the parallel scratches, but no undercutting present. No breakdown was noted on the remainder of the panel.									
Resistance to UV/Condensation, BS3900: Part F16: 1997	<p>No signs of cracking, flaking, blistering or loss of substrate adhesion were evident after 1000 or 2000 hours, however, slight chalking was evident after 1000 and 2000 hours exposure. Changes in colour (CMC(2:1) colour difference equation) and gloss are detailed below:</p> <table border="1"> <thead> <tr> <th>Exposure Period</th> <th>Colour Change <math>\Delta E</math></th> <th>Change in gloss 60° Head</th> </tr> </thead> <tbody> <tr> <td>1000 hours</td> <td>2.04</td> <td>-2 G.U. (3 to 1)</td> </tr> <tr> <td>2000 hours</td> <td>3.15</td> <td>-2 G.U. (3 to 1)</td> </tr> </tbody> </table>	Exposure Period	Colour Change $\Delta E$	Change in gloss 60° Head	1000 hours	2.04	-2 G.U. (3 to 1)	2000 hours	3.15	-2 G.U. (3 to 1)
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1000 hours	2.04	-2 G.U. (3 to 1)								
2000 hours	3.15	-2 G.U. (3 to 1)								

Epo-chem RS500PF: Applied to Wet Aged Alkyd (Test Panels: 021733A).  
 Dfts ranging from: 130 - 152µm

Test	Result									
Application & Appearance	<p>Application: Intermittent 'skidding' of the brush over the wet surface.</p> <p>Appearance: Generally satisfactory, but with elongated areas of water-affected paintwork (locally thin film).</p>									
Cross-cut adhesion test, BS3900: Part E6: 1992	Classification 0 result, triplicate determination with 3mm spacing.									
Pull-off adhesion, ASTM D4541	All three tests gave pull-off adhesion values greater than 1000 psi.									
Resistance to impact, BS3900: Part E7	No defects evident in the coating system, including cracking, flaking or detachment from the substrate.									
Resistance to humidity, BS3900: Part F2: 1973	Panels inspected after 2000 hours exposure. No signs of softening, swelling, blistering or underfilm corrosion were evident.									
Resistance to Salt Spray, BS3900: Part F12: 1997	After 2000 hours exposure, rusting and rust staining was recorded at the parallel scratches, also undercutting was present due to failure of the original alkyd.									
Resistance to UV/Condensation, BS3900: Part F16: 1997	<p>No signs of cracking, flaking, blistering or loss of substrate adhesion were evident after 1000 or 2000 hours, however, significant chalking was evident after 1000 hours exposure. Changes in colour (CMC(2:1) colour difference equation) and gloss are detailed below:</p> <table border="1"> <thead> <tr> <th>Exposure Period</th> <th>Colour Change <math>\Delta E</math></th> <th>Change in gloss 60° Head</th> </tr> </thead> <tbody> <tr> <td>1000 hours</td> <td>9.36</td> <td>-63 G.U. (65 to 2)</td> </tr> <tr> <td>2000 hours</td> <td>7.42</td> <td>-64 G.U. (65 to 1)</td> </tr> </tbody> </table>	Exposure Period	Colour Change $\Delta E$	Change in gloss 60° Head	1000 hours	9.36	-63 G.U. (65 to 2)	2000 hours	7.42	-64 G.U. (65 to 1)
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