

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2006																																								
DateRun:	06/05/2006																																								
Experimenters:	Jason Marshall																																								
ClientType:	General																																								
ProjectNumber:	Project #1																																								
Substrates:	Steel																																								
PartType:	Coupon																																								
Contaminants:	Paints																																								
Cleaning Methods:	Ultrasonics																																								
Analytical Methods:	Gravimetric																																								
Purpose:	To perform a follow up evaluation of product tested on other supplied contaminants.																																								
Experimental Procedure:	<p>The one product was used at full strength and heated to 150 F in a Branson 3510 ultrasonic tank.</p> <p>Three contaminants were applied to separate sets of coupons. The first set was coated with RPM Wood Finishes Group - MS2664 Catalyst White (108-10-1, 28182-81-2, 822-06-0) and 9-6LP9258 White Primer Topcoat (13463-67-7, 110-43-0, 123-86-4, 108-10-1, 108-38-3) in the ratio of 3 parts to 1. The second paint mix from RPM Wood Finishes Group - MS2664 Catalyst White (108-10-1, 28182-81-2, 822-06-0) and MS2669 Primer (108-10-1, 28182-81-2, 822-06-0) in the same 3 to 1 ratio. The third paint mix was from Westfield Coatings Company - ARC Fast Dry Catalyst (123-86-4, 110-43-0, 108-65-6) and Fast Dry (108-10-1) in a 2 to 1 ratio.</p> <p>Each paint mix was applied to three preweighed steel coupons and allowed to dry. Three painted coupons were immersed in the cleaning product and cleaned for 10 minutes using a 40 kHz ultrasonic tank. After the cleaning, coupons were rinsed in a tap water bath for 15 seconds at 120 F and air dried for 30 seconds at room temperature. Once dry, the coupons were weighed a final time and removal efficiencies were calculated.</p>																																								
Results:	<p>The Actisolv was very effective on the three paint mixes. The table lists the amount of paint mix applied, the amount remaining and the calculated efficiency for each coupon cleaned.</p> <table border="1"> <thead> <tr> <th>Cleaner</th> <th>Initial wt</th> <th>Final wt</th> <th>% Removed</th> </tr> </thead> <tbody> <tr> <td>PRM Primer Mix</td> <td>0.0467</td> <td>0.0007</td> <td>98.50</td> </tr> <tr> <td></td> <td>0.0598</td> <td>0.0009</td> <td>98.49</td> </tr> <tr> <td></td> <td>0.0480</td> <td>0.0029</td> <td>93.96</td> </tr> <tr> <td>PRM Topcoat Mix</td> <td>0.0584</td> <td>0.0004</td> <td>99.32</td> </tr> <tr> <td></td> <td>0.0464</td> <td>0.0013</td> <td>97.20</td> </tr> <tr> <td></td> <td>0.0523</td> <td>0.0007</td> <td>98.66</td> </tr> <tr> <td>Wesfield</td> <td>0.0446</td> <td>0.0008</td> <td>98.21</td> </tr> <tr> <td></td> <td>0.0889</td> <td>0.0015</td> <td>98.31</td> </tr> <tr> <td></td> <td>0.0783</td> <td>0.0010</td> <td>98.72</td> </tr> </tbody> </table>	Cleaner	Initial wt	Final wt	% Removed	PRM Primer Mix	0.0467	0.0007	98.50		0.0598	0.0009	98.49		0.0480	0.0029	93.96	PRM Topcoat Mix	0.0584	0.0004	99.32		0.0464	0.0013	97.20		0.0523	0.0007	98.66	Wesfield	0.0446	0.0008	98.21		0.0889	0.0015	98.31		0.0783	0.0010	98.72
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Conclusion:	<p>The Actisolv was very effective in removing the three paint mixes with out the need to rub the paint off. The product caused the paint to lift off the surface and was easily blown off using compressed air.</p>																																								