

CLEANING LABORATORY EVALUATION SUMMARY

| SCL #: | 2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|--------------------|----------------------|-------------------------------------|-------------------------------|--------|--------|----------------------|-------|-------|--------|--------|-------|----------------------|----------------------|---------------|--------------------|-------------------|----------------------|----------------|-----------|--------|--------|-------------------------------------|-------------------------------|--|--------|--------|-------|
| DateRun: | 08/01/2003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Experimenters: | Jason Marshall, Heidi Wilcox | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ClientType: | State Agency | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ProjectNumber: | Project #2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Substrates: | Glass/Quartz, Chrome | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PartType: | Coupon | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contaminants: | Soaps | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cleaning Methods: | Manual Wipe | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analytical Methods: | Gravimetric | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purpose: | To reevaluate selected cleaner for glass cleaning at vendor recommended dilution ratio. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Experimental Procedure: | <p>The supplied cleaning product was diluted to vendor recommended concentration for glass cleaning. The products was diluted with DI water. Three preweighed chrome and three glass coupons were coated with SSL Soil 2 (Glass soap scum: Colgate Regular shaving cream 5.3%, Arid Extra Extra Spray Deodorant 3.5%, Suave Naturals Flexible Hold hair spray 3.7%, Aleeda Texurizing hair gel 25.6% Colgate Total toothpaste 10.4%, Water 51.5%) by pump spraying the mix. The soil was allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added.</p> <p>Three coupons were placed into a Gardner Straight Line Washability unit. A Professional Painter's Rag was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 5 cycles (~9 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded. Efficiencies were calculated and recorded.</p> <p>Product Dilution Ratio Ramsey Free Fall 256:1</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Results: | <p>The product was successful in removing the soil from the glass substrates. The table below lists the amount of soil applied and removed from the coupons.</p> <p>Table 1. Soil Removal</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>Ramsey</td> <td>0.0690</td> <td>0.0031</td> <td>95.51</td> </tr> <tr> <td>Glass</td> <td>0.0581</td> <td>0.0009</td> <td>98.45</td> </tr> <tr> <td></td> <td>0.0658</td> <td>0.0022</td> <td>96.66</td> </tr> <tr> <td>Ramsey</td> <td>0.0711</td> <td>0.0011</td> <td>98.45</td> </tr> <tr> <td>Chrome</td> <td>0.0924</td> <td>0.0054</td> <td>94.16</td> </tr> <tr> <td></td> <td>0.0881</td> <td>0.0016</td> <td>98.18</td> </tr> </tbody> </table> | Cleaner | Initial wt | Final wt | % Removed | Ramsey | 0.0690 | 0.0031 | 95.51 | Glass | 0.0581 | 0.0009 | 98.45 | | 0.0658 | 0.0022 | 96.66 | Ramsey | 0.0711 | 0.0011 | 98.45 | Chrome | 0.0924 | 0.0054 | 94.16 | | 0.0881 | 0.0016 | 98.18 |
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| Summary: | <table border="1"> <tr> <td>Substrates:</td> <td colspan="5">Glass/Quartz, Chrome</td> </tr> <tr> <td>Contaminants:</td> <td colspan="5">Soaps</td> </tr> <tr> <td>Company Name:</td> <td>Product Name:</td> <td>Conc.:</td> <td>Efficiency:</td> <td>Effective:</td> <td>Observations:</td> </tr> <tr> <td>Ramsey Company</td> <td>Free Fall</td> <td>0</td> <td>96.90</td> <td><input checked="" type="checkbox"/></td> <td>Glass - 96.87, Chrome - 96.93</td> </tr> </table> | Substrates: | Glass/Quartz, Chrome | | | | | Contaminants: | Soaps | | | | | Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: | Ramsey Company | Free Fall | 0 | 96.90 | <input checked="" type="checkbox"/> | Glass - 96.87, Chrome - 96.93 | | | | |
| Substrates: | Glass/Quartz, Chrome | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contaminants: | Soaps | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: | | | | | | | | | | | | | | | | | | | | | | | | |
| Ramsey Company | Free Fall | 0 | 96.90 | <input checked="" type="checkbox"/> | Glass - 96.87, Chrome - 96.93 | | | | | | | | | | | | | | | | | | | | | | | | |
| Conclusion: | The product was successful at the vendor recommended dilution ratio. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |