

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2010
 DateRun: 05/05/2010
 Experimenters: Jason Marshall
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #1
 Substrates: Textile
 PartType: Coupon
 Contaminants: Dirt
 Cleaning Methods: Mechanical Agitation
 Analytical Methods: Gloss-Color Meter
 Purpose: To evaluate carpet resoiling characteristics of supplied cleaning product for GS 37 certification

Experimental Procedure: Carpet pieces that were previously soiled and cleaned with the supplied product and Liquid Formula 90 (industry standard product) were resoiled by placing the carpet sections into the 1-gallon can, making sure the carpet lined the inner wall of the can. Nalgene® tubing cut into 1/8" pieces were poured into the bucket and 2 grams of the AATCC soil was distributed along the width of the can. The can was lidded and placed into a harness attached to a crank shaft. The crank was turned at an average rate of 42 rpm by hand for 5 minutes in one direction, followed by 5 minutes of rotation in the opposite direction. At the end of the 10-minute soiling regime, the carpet was placed onto a carpet template and vacuumed with a Eureka SuperBroom (Brush-Up, Motor-Driven/Brush-Roll) vacuum for 5 strokes in the forward direction followed by the same number of strokes in the backward direction. The carpet pieces were evaluated again using a BYK specro-guide gloss color meter was used to measure L-values from the surface of the carpet.

Results: The two dilutions of PC 120 both dilutions had better resoiling characteristics as shown by the higher light meter readings and the lower difference in final L value and extraction L values. The PC 220 at the 1:64 dilution had similar results to the industry comparative product. All products and dilutions worked better than water alone. The table list the L-value reading for each section of carpet before resoiling and after vacuuming.

| Cleaner | Part | Extraction | Ave E | Resoil | Ave R | Difference |
|--------------------------|------|------------|-------|--------|-------|------------|
| Chemspec Liquid 90 1:640 | A | 72.65 | 72.05 | 54.49 | 55.72 | 16.33 |
| | B | 74.73 | 59.17 | | | |
| | C | 68.77 | 53.51 | | | |
| MD Steston PC 120 1:64 | A | 75.67 | 72.3 | 57.43 | 59.22 | 13.08 |
| | B | 71.95 | 57.38 | | | |
| | C | 69.27 | 62.84 | | | |
| MD Steston PC 120 1:128 | A | 72.14 | 69.78 | 58.34 | 56.49 | 13.29 |
| | B | 65.96 | 53.3 | | | |
| | C | 71.24 | 57.82 | | | |
| MD Steston PC 220 1:64 | A | 73.95 | 73.92 | 59.53 | 56.57 | 17.35 |
| | B | 73.09 | 52.2 | | | |
| | C | 74.71 | 57.98 | | | |

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|-------------------------------|---|-------|-------|-------|-------|-------|
| MD Steston PC 220 1:128 | A | 74.41 | 70.08 | 47.76 | 51.7 | 18.39 |
| | B | 66.37 | 50.63 | | | |
| | C | 69.47 | 56.7 | | | |
| | | | | | | |
| Water | A | 70.85 | 70 | 59.79 | 51.17 | 18.83 |
| | B | 71.26 | 44.31 | | | |
| | C | 67.88 | 49.4 | | | |

Summary:

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|-----------------------|--------------------------------------|---------------|--------------------|-------------------------------------|----------------------|
| Substrates: | Textile | | | | |
| Contaminants: | Dirt | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Chemspec | Liquid Formula 90 | 0.16 | | <input checked="" type="checkbox"/> | |
| Next-Gen Supply Group | PC 120 Peroxide Multisurface Cleaner | 1.56 | | <input checked="" type="checkbox"/> | |
| Next-Gen Supply Group | PC 120 Peroxide Multisurface Cleaner | 0.78 | | <input checked="" type="checkbox"/> | |
| Next-Gen Supply Group | PC 220 Peroxide Multipurpose Cleaner | 1.56 | | <input checked="" type="checkbox"/> | |
| Next-Gen Supply Group | PC 220 Peroxide Multipurpose Cleaner | 0.78 | | <input type="checkbox"/> | |
| Water | Water | 100 | | <input type="checkbox"/> | |

Conclusion:

The PC 120 at 1:64 and 1:28 and the PC 220 were better than or comparable to the conventional non-green product for resoiling.