

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 07/25/2008

Experimenters: Heidi Wilcox, Shweta Bansal

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics, Plastic

PartType: Part

Contaminants: Dirt, Films

Cleaning Methods: Mechanical Agitation

Analytical Methods: Photography, Visual

Purpose: To compare client supplied cleaner to another general purpose floor cleaner

Experimental Procedure: One ounce of each cleaner was used per gallon of water. The dilution water was cold out of the tap. A Rubbermaid general use-wring mop was used for cleaning. Separate mop heads were used for each cleaner on each floor surface. There was a total of 6 mop heads for the experiment. Pictures were taken of the solutions before and after cleaning. In addition, the floor surface being cleaned was photographed before and after cleaning. Each surface was mopped with solution for a minute, then wrung out in the solution and the floor was cleaned for another minute. There was no rinsing, and the surface was allowed to air dry. Observations were made about foaming, odor, solution color before and after cleaning, mop soiling and floor surface cleanliness.

Results: Both products performed about the same, taking some dirt off all the floor surfaces. The Tribase product foamed and had odor the OrTec product did not. Observations are recorded in the table.

Composite Resin Flooring

| | OTEC Cleaner | | Tribase | | |
|-----------------------|-----------------|----------------------|---------------------|--|--------------------------------|
| | Before | After | | Before | After |
| Solution | Clear | Dark grey with solid | Clear | grey with solid bits of dirt | |
| | | | bits of dirt | | |
| Odor | None | None | | Faint, citrus | Same |
| | | | | like smell | |
| Foam | None | None | | Some on top | More after dunked and rung mop |
| Mop head | Blue, new | Visible dirt on spot | Blue, new | Visible dirt on spot used to clean floor | |
| | | | used to clean floor | | |
| Floor (Lab) | Dirty, spots | No difference seen | Dirty, spots | Cleaner, less spots. | |
| | of ink, various | visually. Particles | of ink, various | | |
| | soils | & hair picked up. | soils | | |
| | | | Solution beads on | | |
| | | | floor | | |
| | | | | | |
| Ceramic Tile Flooring | | | | | |
| | OTEC Cleaner | | Tribase | | |

CLEANING LABORATORY EVALUATION SUMMARY

| | | | | | |
|---------------------|-------------------------------------|----------------------|----------------------|--|--------------------------------|
| | Before | After | | Before | After |
| Solution | Clear | Slightly dirty | Clear | Slightly dirty | |
| Odor | None | None | | Faint, citrus | Same |
| | | | | like smell | |
| Foam | None | None | | Some on top | More after dunked and rung mop |
| Mop head | Blue, new | Visible dirt on spot | Blue, new | Visible dirt on spot used to clean floor | |
| | | | used to clean floor | | |
| Floor | Floor generally | Not difference seen | Floor dingy | Not much difference. | |
| (bathroom) | dingy and grout | visually - Particles | grout | Particles and hair picked up | |
| | dirty | & hair picked up & | dirty | and seen in solution. | |
| | | | seen in solution | | |
| | | | which beads on floor | | |
| | | | | | |
| Vinyl Tile Flooring | | | | | |
| | OTEC Cleaner | | Tribase | | |
| | Before | After | | Before | After |
| Solution | Clear | Slightly dirty | Clear | Slightly dirty | |
| Odor | None | None | | Faint, citrus | Same |
| | | | | like smell | |
| Foam | None | None | | Some on top | More after dunked and rung mop |
| Mop head | Blue, new | No visible | Blue, new | No visible dirt on the mop head. | |
| | | | dirt on the | | Not much on floor to start |
| | | | mop head. | | |
| | | | Not much on floor | | |
| | | | to start | | |
| Floor | A couple of dirt Cleaner, no spots. | Dirty, spots | Cleaner, less spots. | | |
| (hallway) | spots on floor | Solution beads on | of ink, various | | |

CLEANING LABORATORY EVALUATION SUMMARY

| | | | | | |
|--|--|--|--------|--|-------|
| | | | floor. | | Soils |
|--|--|--|--------|--|-------|

Summary:

| | | | | | |
|--------------------------|------------------------------|-------------------|--------------------|-------------------------------------|----------------------|
| Substrates: | | Ceramics, Plastic | | | |
| Contaminants: | | Dirt, Films | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Ortec Ltd Co | Eco Clean | 0.78 | | <input checked="" type="checkbox"/> | |
| Spartan Chemical Company | Tribase Multipurpose Cleaner | 0.78 | | <input checked="" type="checkbox"/> | |

Conclusion:

Both cleaners over all seem to be doing some cleaning of the floors. The cleaning process will be performed for 3 more weeks to see if there is any noticeable difference in the floors over time.