

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 08/08/2008

Experimenters: Heidi Wilcox, Shweta Bansal

ClientType: Cleaner Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics, Plastic

PartType: Part

Contaminants: Dirt, Films

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To compare client supplied cleaner to another general purpose floor cleaner following two weeks of cleaning.

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 RCM product foamed and had odor. The OrTec product didn't.

|                           |                          |  |
|---------------------------|--------------------------|--|
| Lab Floor - resin coating |                          |  |
| Cleaner                   | Observation              |  |
| OrTEC Cleaner             | Before                   | After  |
| Solution                  | Clear                    | Dark grey with solid bits of dirt                |
| Odor                      | None                     | None   |
| Foam                      | None                     | None   |
| Mop head                  | Blue, new                | Visible dirt on spot used to clean floor         |
| Floor                     | Dirty, spots of ink,     | Not much cleaning seen. Most of dirt on floor is |
|                           | various soils            | ink and other tough soils                        |
|                           |                          |  |
| RCM Tribase               | Before                   | After  |
| Solution                  | Clear                    | grey with solid bits of dirt                     |
| Odor                      | Faint, citrus like smell | Same   |
| Foam                      | Some on top              | More after dunked and rung mop                   |
| Mop head                  | Blue, new                | Visible dirt on spot used to clean floor         |
| Floor (Lab)               | Dirty, spots of ink,     | Not much cleaning seen. Most of dirt on floor is |
|                           | various soils.           | ink and other tough soils                        |

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|                                      |                             |  |
|--------------------------------------|-----------------------------|--|
|                                      |                             |  |
| Bathroom<br>Floor –<br>ceramic tiles |                             |  |
| Cleaner                              | Observation                 |  |
| OrTEC<br>Cleaner                     | Before                      | After  |
| Solution                             | Clear                       | Slightly dirty   |
| Odor                                 | None                        | None   |
| Foam                                 | None                        | None   |
| Mop head                             | Blue, new                   | Visible dirt on<br>spot used to<br>clean floor             |
| Floor                                | Floor<br>generally<br>dingy | No difference<br>seen visually.                            |
|                                      | and grout<br>dirty          | Particles & hair<br>picked up & seen<br>in solution,       |
|                                      |                             | which beads on<br>floor. Grout still<br>dirty              |
| RCM Tribase                          | Before                      | After  |
| Solution                             | Clear                       | Slightly dirty   |
| Odor                                 | Faint, citrus<br>like smell | Same   |
| Foam                                 | Some on top                 | More after<br>dunked and rung<br>mop                       |
| Mop head                             | Blue, new                   | Visible dirt on<br>spot used to<br>clean floor             |
|                                      | Floor<br>generally<br>dingy | Not much<br>difference.<br>Particles and hair<br>picked up |
|                                      | and grout<br>dirty          | and seen in<br>solution. Grout<br>still dirty.             |
|                                      |                             |  |
| Hallway<br>floors – Vinyl<br>tiles   |                             |  |
| Cleaner                              | Observation                 |  |
| OrTEC<br>Cleaner                     | Before                      | After  |
| Solution                             | Clear                       | Slightly dirty   |
| Odor                                 | None                        | None   |
| Foam                                 | None                        | None   |
| Mop head                             | Blue, new                   | No visible dirt on<br>the mop head.                        |
|                                      |                             | Not much on floor<br>to start                              |
| Floor                                | Some spots<br>on floor      | Cleaner. Solution<br>beads on floor.                       |
|                                      |                             |  |
| RCM Tribase                          | Before                      | After  |
| Solution                             | Clear                       | Slightly dirty   |
| Odor                                 | Faint, citrus<br>like smell | Same   |
| Foam                                 | Some on top                 | More after<br>dunked and rung<br>mop                       |
| Mop head                             | Blue, new                   | No visible dirt on<br>the mop head.                        |

## CLEANING LABORATORY EVALUATION SUMMARY

|       |                      |                            |
|-------|----------------------|----------------------------|
|       |                      | Not much on floor to start |
| Floor | Some spots on floor. | Cleaner, less spots.       |

Summary:

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

Conclusion:

Over the three weeks of testing the cleaners have removed surface dirt at best. Neither is removing the hard dirt on the lab floor and the grout in the bathroom is not becoming any cleaner. A fourth week of testing may be done if necessary, but it is not believed to show any significant changes from the previous three weeks. Standardized lab testing is recommended in order to show a cleaning efficiency comparison between the Ortec product and some industry standards.