

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009

DateRun: 12/16/2009

Experimenters: Heidi Wilcox

ClientType: Ceramic Coating Company

ProjectNumber: Project #2

Substrates: Aluminum, Steel

PartType: Part

Contaminants: Waxes, Dirt, Oil

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To clean company supplied parts with the 5 most effective cleaners found during lab trials

Experimental Procedure: Five products were selected from previous trial based on effectiveness. Two products were diluted to 5% using DI water and the other four were used at full strength. Each cleaner was put onto a clean Kimberly Clark lint free Wypeall rag/paper towel with a disposable 68 ml Nalgene dropper, which produced approximately a 3 to 4 inch in diameter circle of wetness. The customer supplied parts, approximately 8 inch by 4 inch steel and aluminum parts, were wiped on both sides and all edges and then let sit to dry.

Results: All five products worked in under 4 minutes of cleaning. The table lists the observations for each ring cleaned at the various time intervals. On each towel, except the Activeion cleaned part, there was black residue. Order of observations from worst to best: Not clean<Almost clean<Nearly clean<Clean

Summary:

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|----------------------------------|---|---------------|--------------------|-------------------------------------|--------------------------------|
| Substrates: | Aluminum, Steel | | | | |
| Contaminants: | Waxes, Dirt, Oil | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Buckeye International | Shopmaster RC | 10 | | <input checked="" type="checkbox"/> | Some grit was felt, no residue |
| Gemtek Products | SC Aircraft & Metal Cleaner Super Concentrate | 5 | | <input checked="" type="checkbox"/> | Some grit was felt, no residue |
| Bio Chem Systems | Solsafe 245 | 100 | | <input checked="" type="checkbox"/> | Some grit was felt, no residue |
| Alconox Inc | Detergent 8 | 5 | | <input checked="" type="checkbox"/> | Some grit was felt, no residue |
| Activeion Cleaning Solutions LLC | Activeion Pro | 100 | | <input checked="" type="checkbox"/> | Some grit was felt, no residue |

Conclusion: The cleaned parts along with samples of the five products will be brought to the client for inspection and painting in their manufacturing process.