

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002

DateRun: 02/11/2002

Experimenters: Jason Marshall

ClientType: Electromagnetic Manufacturer

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Adhesive, Mold Releases, Oxides, Latex binder

Cleaning Methods:

Analytical Methods:

Purpose: Identify alternative cleaning products for removing latex adhesive, silicone slurry and silicone oxide from stainless steel parts

Experimental Procedure: Database search was run for lab testing and vendor recommended products.

Results: Lab Evaluated Products for Latex binder cleaning from stainless steel

| Company Name: | Product Name: | Classification | Substrate: | Trials |
|-----------------------|---------------------------------|---------------------------|-----------------|--------|
| Alconox, Inc. | Alcojet | Powder Alkaline Detergent | Stainless Steel | 1 |
| AW Chesterton | 181 Low Alkaline Cleaner | Alkaline Aqueous | Stainless Steel | 1 |
| Brulin Corporation | Formula 815 GD | Alkaline Aqueous | Stainless Steel | 2 |
| Buckeye International | Shopmaster | Alkaline Aqueous | Stainless Steel | 2 |
| Buckeye International | Shopmaster LPH | Alkaline Aqueous | Stainless Steel | 1 |
| Calgon Corporation | GP Xtra | Alkaline Aqueous | Stainless Steel | 1 |
| Oakite Products | Inproclean 3800 | Alkaline Aqueous | Stainless Steel | 2 |
| Simple Green | Crystal Simple Green Industrial | Alkaline Aqueous | Stainless Steel | 1 |
| Smart Sonic | 440-R SMT Detergent | Alkaline Aqueous | Stainless Steel | 1 |
| Today & Beyond | Beyond-2004 | Alkaline Aqueous | Stainless Steel | 1 |
| U.S. Polychem Corp. | Polyspray Jet 790 P | Alkaline Aqueous | Stainless Steel | 1 |
| Water | Water | Neutral Aqueous | Stainless Steel | 2 |

| Vendor Search Parameters | | |
|--------------------------|-----------------------|-----------------------|
| Contaminant Description | Equipment Description | Substrate Description |
| Adhesive | Low Pressure Spray | Stainless Steel |
| Adhesive | Ultrasonics | Stainless Steel |
| Mold Releases/Silicones | Low Pressure Spray | Stainless Steel |
| Mold Releases/Silicones | Ultrasonics | Stainless Steel |

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| | | |
| Vendor Search Results | | |
| Company Name | Product Name | Classification |
| Albemarle Corp | Abzol Cleaners | Organic |
| Buckeye International | Shopmaster | Alkaline Aqueous |
| Buckeye International | Shopmaster FF | Alkaline Aqueous |
| Buckeye International | Shopmaster LPH | Alkaline Aqueous |
| Chrisal USA, Inc. | Super CMF 240 | Alkaline Aqueous |
| Envirosolutions, Inc. | SOLSAFE 245 | Petroleum Distillate |
| Gemtek Products | SC Supersolve | Organic |
| Hotsy Cleaning Systems | Hotsy Detergents Tub & Pressure Wash | Alkaline Aqueous |
| Safe Science | Safe Science Concrete/ Graffiti (Industrial) | Alkaline Aqueous |
| Solvent Kleene, Inc. | D-Greeze 1000 | Petroleum Distillate |
| Solvent Kleene, Inc. | D-Greeze 500 LO | Organic |
| Today & Beyond | Beyond-2001 | Alkaline Aqueous |
| Today & Beyond | Beyond-2002 | Alkaline Aqueous |
| Today & Beyond | Beyond-2003 | Alkaline Aqueous |
| Today & Beyond | Beyond-2004 | Alkaline Aqueous |
| Today & Beyond | Beyond-2005 | Alkaline Aqueous |
| Today & Beyond | Beyond-2006 | Alkaline Aqueous |
| U.S. Polychem Corp. | Hydropurge 36 | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem 2000 P | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem A 2000 XS | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem Acra Strip 600 | Neutral Aqueous |
| U.S. Polychem Corp. | Polychem Acra Strip 600 | Semi-Aqueous |
| U.S. Polychem Corp. | Polychem DEOX 007 | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem Hydropurge 21 | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem Hydropurge 36 XS | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem Hydropurge XS-790 | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem PW-147 | Alkaline Aqueous |
| U.S. Polychem Corp. | Polychem RCC-25 | Petroleum Distillate |
| U.S. Polychem Corp. | Polychem RCC-25 | Terpene |

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|---------------------|----------------------|------------------|
| U.S. Polychem Corp. | Polyspray Jet 790 C | Caustic |
| U.S. Polychem Corp. | Polyspray Jet 790 P | Alkaline Aqueous |
| U.S. Polychem Corp. | Polyspray Jet 790 XS | Alkaline Aqueous |
| U.S. Polychem Corp. | Polyspray Jet ST-21 | Alkaline Aqueous |
| W.R. Grace & Co. | Daraclean 203 | Caustic |
| W.R. Grace & Co. | Daraclean 235 | Neutral Aqueous |
| W.R. Grace & Co. | Daraclean 257 | Alkaline Aqueous |

Summary:

Conclusion:

Cleaning projects vary from case-to-case. To identify a specific cleaning agent, testing with any of the above listed products should be performed. If you would like the SSL to perform this testing, please contact the lab at (978)934-3133 to arrange delivery of parts and samples of specific contaminants.