

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002

DateRun: 01/15/2002

Experimenters: Purav Dave

ClientType: Lab

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Oil

Cleaning Methods: Ultrasonics

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.  
 Degasing: Cleaners were kept in ultrasonic crest for 5 min. at 120 F.  
 Cleaning : 2 min. in ultrasonic crest at 120 F.  
 Rinsing :1/2 min immersion cleaning at 120 F in water.  
 Drying :1 min. with heat gun at 500 F.

Results:

Summary:

|                      |   |                 |                    |                                     |                      |  |
|----------------------|---|-----------------|--------------------|-------------------------------------|----------------------|--|
| <b>Substrates:</b>   |   | Stainless Steel |                    |                                     |                      |  |
| <b>Contaminants:</b> |   | Oil             |                    |                                     |                      |  |
| <b>Company Name:</b> | <b>Product Name:</b>                                | <b>Conc.:</b>   | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |  |
| Simple Green         | Crystal Simple Green Industrial Cleaner & Degreaser | 5               | 98.26              | <input checked="" type="checkbox"/> |                      |  |
| Calgon Corporation   | Geo Guard 2000                                      | 5               | 89.44              | <input checked="" type="checkbox"/> |                      |  |
| Calgon Corporation   | GP Xtra   | 5               | 100.37             | <input checked="" type="checkbox"/> |                      |  |
| PCI of America       | Hurrisafe 9450                                      | 5               | 96.11              | <input checked="" type="checkbox"/> |                      |  |
| Brulin Corporation   | Nature Sol 100                                      | 5               | 100.06             | <input checked="" type="checkbox"/> |                      |  |
| AW Chesterton        | 181 Low Alkaline Cleaner                            | 5               | 96.38              | <input checked="" type="checkbox"/> |                      |  |

Conclusion: All cleaners were effective.