

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2011  
DateRun: 10/13/2011  
Experimenters: Heidi Wilcox, Johnny Le  
ClientType: Microelectronics Mfr  
ProjectNumber: Project #2  
Substrates: Electronics  
PartType: Part  
Contaminants: Solder  
Cleaning Methods: Ultrasonics  
Analytical Methods: Visual

Purpose: Further evaluation on reduced odor cleaning products

Experimental Procedure: Here is the last batch of parts. I still have the others you sent me for follow up testing. I have had to order a few more samples of products for your guys. They should come in while I am away at my conference and I will clean your parts with them when they come in. Because we are doing cold cleaning we need to stick with the < 1 mm Hg so that makes things hard, thus why I asked about heat.

Anyway let me know what you think about these parts. I also included the Citrisafe in the mix so we can compare.

Results:

|                       |      |
|-----------------------|------|
| SWR One               | 5%   |
| Today and Beyond 2005 | 5%   |
| DS 108                | 100% |
| Citri Safe            | 100% |
| Ionox HC2             | 100% |

All testing was done at room temperature, ultrasonics, for 10 minutes. They were then rinsed under tap water and blown dry with compressed air.

Summary:

|                         |                      |               |                    |                                     |                      |
|-------------------------|----------------------|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>      | Electronics          |               |                    |                                     |                      |
| <b>Contaminants:</b>    | Solder               |               |                    |                                     |                      |
| <b>Company Name:</b>    | <b>Product Name:</b> | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |
| SWR Corporation         | SWR One              | 5             |                    | <input type="checkbox"/>            |                      |
| Today & Beyond          | Beyond 2005          | 5             |                    | <input type="checkbox"/>            |                      |
| Dysol                   | DS 108 Wipe Solvent  | 100           |                    | <input type="checkbox"/>            |                      |
| Inland Technologies Inc | Citrasafe            | 100           |                    | <input checked="" type="checkbox"/> |                      |
| Kyzen Corporation       | Ionox HC 2           | 100           |                    | <input type="checkbox"/>            |                      |

Conclusion: