

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 04/30/2008

Experimenters: Heidi Wilcox

ClientType: Electronics Manufacturer

ProjectNumber: Project #1

Substrates: Aluminum, Copper, Stainless Steel

PartType: Part

Contaminants: Cutting/Tapping Fluids

Cleaning Methods: Manual Wipe

Analytical Methods: Visual

Purpose: To evaluate selected products on supplied parts using simulated cleaning process

Experimental Procedure: Five additional products previously used in testing to clean the two client supplied soils were chosen to clean client supplied parts with. All five cleaners had a removal efficiency under 99% but over 80% for both the Trimsol and the Hard Cut.

The parts were taken out of the client supplied bags, sectioned in to 4 groups so all 8 types of parts would be cleaned in each cleaner. Each cleaner was put in a bowl and a metal mesh basket was used to dunk and swirl the parts in the solutions. The parts were then put on a tray and when done were bagged for transport to the client. There was no rinse or drying involved. The process was done to as closely replicate the process used on site as possible.

Results: All cleaners showed evidence of removing fines and cutting fluids based on visual observations of used cleaning fluids.

Summary:

<b>Substrates:</b>	Aluminum, Copper, Stainless Steel				
<b>Contaminants:</b>	Cutting/Tapping Fluids				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Newport Biodiesel	Biodiesel	100		<input checked="" type="checkbox"/>	
AG Environmental Products	Soy Clear 1500	100		<input checked="" type="checkbox"/>	
Kyzen Corporation	Ionox HC 2	100		<input checked="" type="checkbox"/>	
Kyzen Corporation	Metalnox M6310 (For Comparison Only)	100		<input checked="" type="checkbox"/>	
Buckeye International	Shopmaster RC	100		<input checked="" type="checkbox"/>	

Conclusion: Parts were sent back to client for their inspection using microscope following their QA/QC procedures.