

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996  
DateRun: 01/04/1996  
Experimenters: Jay Jankauskas  
ClientType: Silversmith  
ProjectNumber: Project #1  
Substrates: Brass  
PartType: Coupon  
Contaminants: None  
Cleaning Methods: Immersion/Soak  
Analytical Methods: Visual

Purpose: Perform a material compatability test

Experimental Procedure: The purpose of this trial is perform a material compatibility test for Silversmith. The compatibility of the WR Grace Daraclean 211, Calgon 2215, and the U.S. Polychem #790 Poly Spray Jet with brass parts. Each solution was made up at a 20% concentration. Two brass coupons were submerged in each beaker for 2 hours at temperatures of 130, 140, 150 and 160 F. After one hour, the coupons were visually analyzed for any etching or discoloration that might have taken place.

Results:		WR Grace	Calgon	U.S. Polychem
	Temperature	Daraclean 211	Geo-Guard 2215	790 Poly Spray Jet
	130	pass	pass	pass
	140	pass	pass	pass
	150	pass	pass	pass
	160	pass	pass	pass

Summary:	<b>Substrates:</b>	Brass				
	<b>Contaminants:</b>	None				
	<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
	Magnaflux	Daraclean 211	20		<input checked="" type="checkbox"/>	
	Calgon Corporation	Geo Guard 2215	20		<input checked="" type="checkbox"/>	
	US Polychem Corporation	Polyspray Jet 790 XS	20		<input checked="" type="checkbox"/>	

Conclusion: All cleaners were brass compatible when immersed in excessive cleaner chemistries for an excessive amount of time. The cleaning stage should not pose a problem with the brass, but the rinse stage must be kept at a low temperature to avoid etching and spotting. Both brass and silver parts from Silversmith will be tested in the Miele spray washing system as soon as the new program card is received from Miele.