

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1999
 DateRun: 08/12/1999
 Experimenters: Jason Marshall, Nicole Vayo
 ClientType: Cleaner Manufacturer
 ProjectNumber: Project #1
 Substrates: Stainless Steel
 PartType: Coupon
 Contaminants: Adhesive, Cutting/Tapping Fluids, Inks, Lubricating/Lapping Oils, Oil
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric

Purpose: To evaluate client supplied cleaning solution on all listed contaminants and one substrate.

Experimental Procedure: The cleaning solution was used at full strength in a 600 mL beaker. The solution was heated to 130oF. Coupons were cleaned for five minutes. Rinsing was performed for two minutes using tap water at 120oF and air dried for about two hours also at room temperature. After drying is complete, final weights are recorded and efficiencies are calculated.

SUBSTRATE MATERIAL: Stainless Steel (202-316B-80)

CONTAMINANTS: Table 1 lists the contaminants and the related CAS#s for this trial.

Table 1. Contaminants Cleaned

Contaminant CAS #

Oil 64741-89-5

Ink 67-63-0, 108-88-3, 9004-70-0, 141-78-6, 64-17-5, 109-60-4

Adhesive 9010-98-4, 65997-13-9, 68083-03-4, 67-56-1, 1314-13-2, 119-47-1, 108-88-3, 8052-10-6

Results: The Engine Degreaser was very successful in removing the adhesive and the oil from the stainless steel coupons. It was ineffective on the ink. Table 2 lists the calculated efficiencies.

Table 2. Cleaning Efficiencies

Contaminant	Engine Degreaser
Adhesive	85
Ink	3
Oil	99

Summary:

Substrates:		Stainless Steel			
Contaminants:		Adhesive, Cutting/Tapping Fluids, Inks, Lubricating/Lapping Oils, Oil			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Safe Science Inc	Safe Science Engine Degreaser (Industrial)	100	85.00	<input checked="" type="checkbox"/>	adhesive
Safe Science Inc	Safe Science Engine Degreaser (Industrial)	100	3.00	<input type="checkbox"/>	ink
Safe Science Inc	Safe Science Engine Degreaser (Industrial)	100	99.00	<input checked="" type="checkbox"/>	oil

Conclusion: The Engine Degreaser proved very effective on the oil and moderately successful on the adhesive tested. Further evaluation on other contaminants will take place.