CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1999

DateRun: 08/11/1999

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	☑	adhesive
Safe Science Inc	Safe Science Engine Degreaser (Industrial)	100	3.00	☐	ink
Safe Science Inc	Safe Science Engine Degreaser (Industrial)	100	99.00	☑	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.