CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1999
DateRun:	07/11/1999
Experimenters:	Jason Marshall
ClientType:	Consultant
ProjectNumber:	Project #1
Substrates:	Ceramics, Alumina
PartType:	Part
Contaminants:	Alcohol
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric
Purpose:	To evaluate the one cleaner not available for the first trials.
Experimental Procedure:	The seventh cleaner selected based on vendor information and the lab's Effective Test Conditions Database was tested. The cleaning solution was made into 2% solutions using DI water in 600 mL beakers. Three coupons were weighed prior to cleaning. These coupons were cleaned in the solution for five minutes using stir-bar agitation. Parts were rinsed for two minutes in DI water at room temperature. The parts were dried in a convection oven at 212 F for 15 minutes. After allowing parts to cool to room temperature, final weights were recorded. If weights did not change, the cleaner would be retested at a 5% solution with new coupons. If weights went down, the cleaner would be used in the next phase of testing. SUBSTRATE MATERIAL: Ceramic-Alumina parts CONTAMINANTS: DuPont Evanol (Vinyl Alcohol Polymers & Copolymers CAS#s: 9002-89-5, 25213-24-5, 54626-91-4; Methanol Bulk/Packaged CAS #: 67-56-1; Sodium Acetate CAS#: 127-09-3)
Results:	The product tested at the 2% concentration caused the weights of the parts to be decreased. Table 2 lists the weight loss from cleaning. No 5% testing was needed.

Table 2. Weight Changes

Cleaner	Initial wt	Final wt	Weight Loss
Gemtek			
	6.0685	6.0419	-0.0266
	6.066	6.0359	-0.0301
	6.0243	5.9902	-0.0341

Summary:

Substrates:	Ceramics, Alumina				
Contaminants:	Alcohol				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	100	0.00	☑	

Conclusion: The solution tested decreased the weight of the parts. Further evaluation will proceed with all selected cleaners.