CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1999
DateRun:	03/01/1999
Experimenters:	Jason Marshall
ClientType:	Environmental Service Firm
ProjectNumber:	Project #1
Substrates:	Aluminum
PartType:	Coupon
Contaminants:	Greases, Dirt, Oxides
Cleaning Methods:	Low Pressure Spray
Analytical Methods:	
Purpose:	Information request for aluminum cleaning
Experimental Procedure:	SUBSTRATE MATERIAL: Aluminum air conditioning coils QUESTION ASKED: Looking for a cleaner to remove aluminum oxide, dirt and grime from air conditioning units using a spray wash system.
Results:	RESPONSE/ANSWER: The Massachusetts Toxics Use Reduction Institute (TURI) has made the results of the tests conducted at the Institute's Surface Cleaning Laboratory (SCL) into a searchable database/ spreadsheet format. This should make alternative cleaner selection faster and easier. Here are the results of your query, based on the information supplied: Table 1 consists of products tested successfully at the lab. Table 2 is a listing of cleaners that are safe for aluminum substrates and spray wash system based on vendor supplied data.

Table 1. Effective Testing of Products

SCL #	Substrate	Contaminant	Process	Cleaner	PRODUCT NAME
97-436-05-4	AL	WAX	SPRAY	STEAM	Steam
94-466-01-8	AL	OIL	SPRAY	WR GRACE	SOY GOLD 2000
95-467-01-8	AL	OIL	SPRAY	WR GRACE	SOY GOLD 2000
98-676-08-2	AL	SOLVENT	SPRAY	AG ENVIRONMENTAL	SOY GOLD 2000
98-676-08-2	AL	SOLVENT	SPRAY	AG ENVIRONMENTAL	SOY GOLD 2000
98-676-08-2	AL	PAINT	SPRAY	AG ENVIRONMENTAL	SOY GOLD 2000
98-676-08-2	AL	PAINT	SPRAY	AG ENVIRONMENTAL	SOY GOLD 2000
98-676-08-2	AL	SLUDGE	SPRAY	AG ENVIRONMENTAL	SOY GOLD 2000
98-676-08-2	AL	SLUDGE	SPRAY	AG ENVIRONMENTAL	SOY GOLD 2000
98-676-09-4	AL	SOLVENT	SPRAY	AG ENVIRONMENTAL	SOY GOLD 2000
98-676-09-4	AL	PAINT	SPRAY	AG ENVIRONMENTAL	DARACLEAN 283
98-676-09-4	AL	SLUDGE	SPRAY	AG ENVIRONMENTAL	DARACLEAN 282 GF

Table 2. Possible Cleaners.

Company Name	Product Trade Name	Classification
Alconox	Detergent - 8	Alkaline aqueous
Alconox	Alcojet	Alkaline powder
Ardrox Inc	6333	Alkaline aqueous
Buckeye International	Shopmaster	Alkaline Aqueous
		Terpene

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Bush Boake Allen Inc	BBA Solvent K312	
Calgon Corporation	AK 6215	Alkaline Aqueous
Calgon Corporation	Geo-Guard 2215	Alkaline Aqueous
Calgon Corporation	Geo-Guard 2825	Alkaline Aqueous
Calgon Corporation	RT 806	Alkaline Powder
Chemstation	Greenstuff II	Alkaline Aqueous
Chemstation	Greenstuff Neutral	Aqueous
Chrisal USA	Super CMF 240	Alkaline Aqueous
Church & Dwight Co Inc	Armakleen E 2001	Alkaline Aqueous
CSA Inc	Bio-Safe 1023	Alkylene carbon Compound
CSA Inc	Bio-Safe 1024	Alkylene carbon Compound
Delta Omega Technologies Ltd	DOT 111/113	Alkaline Aqueous
EMKAY	Safety Wash	Alkaline Aqueous
EMKAY	Safety Wash CRC	Alkaline Aqueous
EMKAY	Safety Wash Clear	Alkaline Aqueous
Environmental Technology	RB Degreaser / Cleaner	Alkaline Aqueous
Envirosolutions	BIO-T 300 B	Semi-Aqueous Terpene
Envirosolutions	BIO-T Max	Semi-Aqueous Terpene
Fine Organic Corporation	FO2085 M	Alkaline Aqueous
Gemtek Products	SC 1000	Non-ionic Surfactant System
General Chemical Corporation	Aquaclean 4874	Alkaline Aqueous
Heat Bath Corporation	Multi Kleen LX 1573	Alkaline Aqueous
Hotsy Corporation	Tubmate All Purpose Detergent	Alkaline Powder
Hurri Kleen Corp	Hot Immersion Degreaser	Alkaline Aqueous
Hurri Kleen Corp	Special Formula	Alkaline Aqueous
International Biosystems Inc	BIO-Z	Acidic Microbial
LPS Laboratories Inc	LPS Precision Clean	Alkaline Aqueous
Mirachem Corporation	Mirachem 500	Alkaline Aqueous
Oakite Products	InproClean 2300	Alkaline Powder

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Occidental Chemical Corp	Oxsol 100	Chlorobenzotrifluoride
Permatex Industrial Corporation	Natural Blue	Alkaline Aqueous
Quaker Chemical Corporation	Formula 625 XL	Alkaline Aqueous
Sky Products Co	Cleaner #10	Alkaline Aqueous
Star Cleaning Miracle Inc	Star Cleaning Miracle #50	Alkaline Aqueous
Sunshine Makers Inc	Simple Green	Alkaline Aqueous
TEXO Corporation	Texolite 1734 XL	Alkaline Aqueous
T-Square	HTF 321	Semi-Aqueous Terpene
T-Square	HTF 50	Semi-Aqueous Terpene
T-Square	HTF 10 B	Alkaline Aqueous-Terpene
Turco Products Inc	Turco 5948 DPM	Alkaline Aqueous
Turco Products Inc	Turco Liquid Sprayeze LT	Alkaline Aqueous
US Polychem	Polyspray Jet 790 XS	Alkaline Aqueous
US Polychem	Polyspray Jet 790 P	Alkaline Aqueous
US Polychem	Polyspray Jet 790 P	Alkaline Aqueous
WR Grace	Daraclean 200	Alkaline Aqueous
WR Grace	Daraclean 212	Alkaline Aqueous
WR Grace	Daraclean 232	Alkaline Aqueous
WR Grace	Daraclean 235	Alkaline Aqueous
WR Grace	Daraclean 282	Alkaline Aqueous
WR Grace	Daraclean 282 GF	Alkaline Aqueous
WR Grace	Daraguard 412	Oil Rejector
WR Grace	Daraclean 283	Alkaline Aqueous

Summary:

Conclusion: