CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002

DateRun: 08/26/2002

Experimenters: Jason Marshall

ClientType: General

ProjectNumber: Project #1

Substrates: Aluminum, Stainless Steel, Steel

PartType: Coupon

Contaminants: Greases, Oil

Cleaning Methods:

Analytical Methods:

Purpose: To generate list of water based alternatives to TCE and TCA for cleaning metals.

Experimental Procedure: Client requested lab to email how to manufacture eco-friendly water based cleaner. Lab suggested looking at products that already exist based on the following:
1) Wanted to remove Oil, Grease and foreign dust/particles
2) Parts are of both ferrous and non ferrous (aluminium, copper & brass)
3) We have both Ultrasonic and Pressure Washing Machine.

Results: Results from Laboratory Database of Testing

Oil Removal from Steels, Aluminum, Copper or Brass using Ultrasonics or Spray Washing

Company Name	Product Name	Classification	Total
AW Chesterton	KPC 820 N	Alkaline Aqueous	1
Bio Chem Systems	Green Stuff (6325)	Alkaline Aqueous	10
Brulin Corporation	Formula 815 GD	Alkaline Aqueous	8
Calgon Corporation	AK 6215	Alkaline Aqueous	5
Church & Dwight	Armakleen M Auto	Alkaline Aqueous	2
Fine Organic Corp	FO 2085 M	Alkaline Aqueous	1
Heatbath Corporation	Uni Kleen 10	Powder Detergent	1
MacDermid	ND 17	Alkaline Aqueous	2
MacDermid	ND LF Supreme	Alkaline Aqueous	1
Magnaflux	Daraclean 212	Neutral Aqueous	1
Magnaflux	Daraclean 232	Alkaline Aqueous	2
Magnaflux	Daraclean 235	Neutral Aqueous	2
Magnaflux	Daraclean 282	Alkaline Aqueous	5
Magnaflux	Daraclean 282 GF	Alkaline Aqueous	12
Magnaflux	Daraclean 283	Alkaline Aqueous	12
Man Gill Chemical	Gillite 0650 Cl	Alkaline Aqueous	1
Matchless Metal Polish	MC 580	Alkaline Aqueous	2
Oakite Products	Inproclean 3800	Alkaline Aqueous	14
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Oakite Products	Inproclean 4000 T	Terpene-Organic	
Sky Products Co., Inc.	Cleaner #10	Alkaline Aqueous	2
Today & Beyond	Beyond-2001	Alkaline Aqueous	10
U.S. Polychem Corp.	Polychem A 2000 XS	Alkaline Aqueous	2
U.S. Polychem Corp.	Polyspray Jet 790 P	Alkaline Aqueous	2
Valtech Corporation	Valtron SP 2200	Alkaline Aqueous	1
Warren Chemical Co	Sea Wash 700 New	Neutral Aqueous	1
Warren Chemical Co	Sea Wash Neutral	Neutral Aqueous	1

Grease Removal from Steels, Aluminum, Copper or Brass using Ultrasonics or Spray Washing

Company Name	Product Name	Classification	Total
Alconox, Inc.	Alcojet	Powder Detergent-Alkaline	2
Bio Chem Systems	Green Stuff (6325)	Alkaline Aqueous	1
Brulin Corporation	EXP 1400	Alkaline Aqueous	1
Brulin Corporation	Formula 815 GD	Alkaline Aqueous	3
Gemtek Products	SC Aircraft & Metal Cleaner	Alkaline Aqueous	1
International Products	Micro 90	Alkaline Aqueous	1
International Products	Surface Cleanse 930	Neutral Aqueous	1
Magnaflux	Daraclean 282 GF	Alkaline Aqueous	2
Matchless Metal Polish	MC 132	Alkaline Aqueous	2
Oakite Products	Inproclean 3800	Alkaline Aqueous	2
Simple Green	Crystal Simple Green	Alkaline Aqueous	1
Texo Corporation	Texolite 1734 XL	Alkaline Aqueous	1
Today & Beyond	Beyond-2001	Alkaline Aqueous	2
Today & Beyond	Beyond-2005	Alkaline Aqueous	1
Tomah Products	Tomadyne Mix	Neutral Aqueous	1
U.S. Polychem Corp.	Polychem A 2000 XS	Alkaline Aqueous	1
United Laboratories	United 450 All Clear	Enzymatic/ Microbial	2
Valtech Corporation	Valtron SP 2250-2LF	Alkaline Aqueous	4
Watson Technical	Watson Formula 7300	Alkaline Aqueous	2

Summary:

Conclusion: