CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 05/05/2004

Experimenters: Jason Marshall

ClientType: Textile Mfr

ProjectNumber: Project #1

Substrates: Steel

PartType: Coupon

Contaminants: Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To evaluate products on supplied knitting oil

Experimental Procedure: Seven products were selected based on the previous two trials. Each product was used at full strength in a 250 ml beaker. Twenty-one preweighed steel copper coupons were coated with the Chevron Knit Oil ISO 32 using a hand held swab. Coupons were weighed a second time to determine the amount of soil added to each coupon. Three coupons were cleaned in each solution for 5 minutes using stir-bar agitation. After cleaning parts were dried using air-blow off. Coupons were then weighed a final time and efficiencies were calculated.

Results: All seven products removed over 87% of the knit oil. Soy Gold 2000 and United 2002 both left residue behind after the air blow off. This residue was not oil but rather the cleaning product itself. The table below lists the amount of soil added, the amount remaining and the efficiency for each coupon.

Cleaner	Initial wt	Final wt	% Removed
Soy Gold 2000	0.1717	0.0106	93.83
	0.1799	0.0102	94.33
	0.1511	0.0142	90.60
278 Super Solv	0.1607	0.0084	94.77
	0.1230	0.0021	98.29
	0.3058	0.0113	96.30
Custom Clean NCC 2778	0.0831	0.0047	94.34
	0.1578	0.0016	98.99
	0.0870	0.0046	94.71
Solsafe 245	0.1680	0.0022	98.69
	0.1664	0.0018	98.92
	0.1825	0.0004	99.78
DS 108	0.0799	0.0019	97.62
	0.1597	0.0022	98.62
	0.0898	-0.0007	100.78
D Greeze 500 LO	0.1148	0.0004	99.65
	0.1637	0.0017	98.96
	0.2288	0.0061	97.33
United 2002 Harvest Gold	0.0920	0.0127	86.20
	0.0769	0.0086	88.82
	0.1519	0.0207	86.37

Summary:

Substrates:	Steel
Contaminants:	Oil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
AG Environmental Products	Soy Gold 2000	100	92.92	☑	Residue
AW Chesterton	278 Super Solv	100	96.46	☑	
BetzDearborne Laboratories Inc	Custom Clean N CC 2278	100	96.01	☑	
Bio Chem Systems	Solsafe 245	100	99.13	☑	

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Dysol	DS 108 Wipe Solvent	100	99.01	☑	
Transene Company, Inc.	D Greeze 500 LO	100	98.65	☑	
United Laboratories International	United 2002 Harvest Gold	100	87.13	☑	Residue

Conclusion: Products will be tested on the supplied soiled wire.