

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009
 DateRun: 01/30/2009
 Experimenters: Jason Marshall, Junhee Cho
 ClientType: Light Manufacturer
 ProjectNumber: Project #1
 Substrates: Plastic
 PartType: Coupon
 Contaminants: Carbon Deposits
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Visual

Purpose: To replace ineffective aqueous product for carbon black removal from plastic holding racks.

Experimental Procedure: Nine products were selected from the lab's on-line database, www.cleansolutions.org, based on past testing results matching client supplied information. All of these products were diluted to 5% using DI water in 400 ml beakers and heated to 130 F on a hot plate.

Plastic coupons were coated with the carbon black contaminant using a handheld swab. Three coupons were immersed into each solution and cleaned for 5 minutes using stir-bar agitation. Rinsing was performed for 15 seconds using tap water heated to 120 F and followed by 30 seconds of air blow off with dry compressed air at room temperature. Final observations were made, and products were ranked visually for performance.

Results: Not a lot of the carbon black was removed from the surface using immersion cleaning. The Detergent 8 resulted in the most removal as determined by the soil deposits left in the beaker after immersion cleaning.

Product	Rank
Sea Wash 77	2
Daraclean 238	5
SC-100	4
Heavy Duty Degreaser	6
EnviroCare Tough Job Cleaner	7
Spartan - Tribase	3
EnviroOne - Multi-use cleaner	8
Detergent 8	1
Safe-Tee Injection Mold Cleaner	9

Summary:

Substrates:		Plastic			
Contaminants:		Carbon Deposits			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Warren Chemical Company	Sea Wash 77	5		<input checked="" type="checkbox"/>	
Magnaflux	Daraclean 238	5		<input checked="" type="checkbox"/>	
Gemtek Products	SC 1000 Aqueous Cleaner Concentrate	5		<input checked="" type="checkbox"/>	
The Clean Environment Co	Natural N-14 Heavy Duty Degreaser and Cleaner	5		<input type="checkbox"/>	
Rochester Midland Corporation	EnviroCare Tough Job	5		<input type="checkbox"/>	
Spartan Chemical Company	Tribase Multipurpose Cleaner	5		<input checked="" type="checkbox"/>	
Enviro-One	Multi Use Green Conc.	5		<input type="checkbox"/>	
Alconox Inc	Detergent 8	5		<input checked="" type="checkbox"/>	

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Safe-Tee Chemical	Safe Tee Injection Mold Cleaner	5		<input type="checkbox"/>	
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Conclusion:

Additional testing will be conducted using spray cleaning products.