CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 36

DateRun: 11/21/2025

Experimenters: Alexander Symko

ClientType: Adhesive Manufacturer

ProjectNumber: Project #1

Substrates:

PartType: Coupon

Contaminants: Coatings

Cleaning Methods: Immersion/Soak

Analytical Methods: HSPiP

Purpose: Determine the HSP coordinates of Flexcon's 1565 Copolyester Acrylic topcoat

Experimental Procedure: 24 scintillation vials were filled with 24 different solvents from TURI's HSP matrix. The 1565 copolyester acrylic topcoat was spread onto wax paper and allowed to air dry for 3-4 hours. After it was dry, but not hardened, balls of adhesive were scraped into each of the 24 scintillation vials and allowed to soak. For the first hour, visual observations were taken every 10 minutes, then following the first hour observations were taken every half hour up until 3 hours. The vials were then allowed to sit overnight before final observations were taken. A "0" denotes that less than 80% of the target soil was dissolved. While a rating of "1" denotes greater than 80% dissolution of the target soil.

Results:

Matrix #	Final Score
1 - Toluene	1
2 – Dimethyl Carbonate	1
3 - Xylenes	1
4 – Benzyl Alcohol	1
5 – Ethylene glycol	0
6 – Methyl Acetate	1
7 - Undecane	0
8 – Ethyl Lactate	0
9 – Acetone	1
10 – Ethyl Acetate	1
11 – Methanol	0
12 – Ethanol	0
13 – 1,3-dioxolane	1
14 – Diethyl Carbonate	1
15 – 1-propanol	0
16 – Isopropanol	0
17- Propylene Carbonate	0
18 – Thiophene	1
19 – 1-Methoxy-2-Propanol	0
20 – Dimethyl Sulfoxide	0
21 – 1-Butanol	0
22 – Dimethyl glutarate	1
23 – Anisole	1
24 – 2-Butoxyethyl-Acetate	1

Where 1 = more than 80% dissolution, 0 = Less than 80% dissolution

Summary:

Substrates:					
Contaminants:	Coatings				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
EM Science	Toluene	100%	0.00	☑	
Alfa Aesar	Dimethyl Carbonate 99%	100%	0.00	☑	
Fisher Scientific	Xylene	100%	0.00	☑	
	Benzyl Alcohol	100%	0.00		

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No Specific Vendor				☑	
Alfa Aesar	Ethylene Glycol	100%	0.00	☐	
Alfa Aesar	Methyl Acetate	100%	0.00	☑	
TCI America	Undecane	100%	0.00	☐	
Fisher Scientific	Ethyl Lactate	100%	0.00	☐	
J.T. Baker	Acetone	100%	0.00	☑	
Alfa Aesar	Ethyl Acetate	100%	0.00	☑	
Fisher Scientific	Methanol (CAS: 67-56-1)	100%	0.00	☐	
Fisher Scientific	Ethanol	100%	0.00	☐	
Fisher Scientific	1,3-Dioxolane (CAS:646-06-0)	100%	0.00	☑	
Fisher Scientific	Diethyl carbonate	100%	0.00	☑	
Fisher Scientific	1-Propanol	100%	0.00	☐	
Fisher Scientific	Isopropanol (CAS:67-63-0)	100%	0.00	☐	
Fisher Scientific	Propylene carbonate 99.5% (CAS: 108-32-7)	100%	0.00	☐	
Alfa Aesar	Thiophene	100%	0.00	☑	
Alfa Aesar	1-Methoxy 2-Propanol	100%	0.00	☐	
Fisher Scientific	Dimethyl Sulfoxide - DMSO (CAS: 67-68-5)	100%	0.00	☐	
Alfa Aesar	1-Butanol 99.4%+	100%	0.00	☐	
Fisher Scientific	Dimethyl glutarate (CAS:1119-40-0)	100%	0.00	☑	
Fisher Scientific	Anisole (CAS: 100-66-3)	100%	0.00	☑	
Fisher Scientific	2-Butoxyethyl Acetate	100%	0.00	☑	

Conclusion: Based on the results of this panel, Toluene, Dimethyl Carbonate, Xylene, Benzyl Alcohol, Methyl Acetate, Acetone, Ethyl Acetate, 1,3-dioxolane, Diethyl Carbonate, Thiophene, Dimethyl Glutarate, Anisole, and 2-Butoxyethyl-acetate were successful in dissolving the target soil. The other 11 solvents were not successful in dissolving the target soil.