

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 26
 DateRun: 10/29/2025
 Experimenters: Tatyanna Moreland Junior, Alexander Symko
 ClientType: Adhesive Manufacturer
 ProjectNumber: Project #1
 Substrates: Aluminum
 PartType: Part
 Contaminants: Adhesive
 Cleaning Methods: Immersion/Soak
 Analytical Methods: HSPiP
 Purpose: Determining the HSP sphere for Flexcon's 7244 Solvent Acrylic Adhesive

Experimental Procedure: 24 scintillation vials were filled with 24 different solvents from TURI's HSP matrix. The 7244 Solvent Acrylic Adhesive was spread onto wax paper and allowed to air dry for 3-4 hours. After it was dry, but not hardened, balls of topcoat 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.

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

Substrates:		Aluminum			
Contaminants:		Adhesive			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
EM Science	Toluene	99%	0.00	<input type="checkbox"/>	
Fisher Scientific	Diethyl carbonate	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Xylene	99%	0.00	<input type="checkbox"/>	
No Specific Vendor	Benzyl Alcohol	99%	0.00	<input checked="" type="checkbox"/>	

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Alfa Aesar	Ethylene Glycol	99%	0.00	<input type="checkbox"/>	
Alfa Aesar	Methyl Acetate	99%	0.00	<input checked="" type="checkbox"/>	
TCI America	Undecane	99%	0.00	<input type="checkbox"/>	
Fisher Scientific	Ethyl Lactate	99%	0.00	<input checked="" type="checkbox"/>	
J.T. Baker	Acetone	99%	0.00	<input checked="" type="checkbox"/>	
Alfa Aesar	Ethyl Acetate	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Methanol (CAS: 67-56-1)	99%	0.00	<input type="checkbox"/>	
Fisher Scientific	Ethanol	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	1,3-Dioxolane (CAS:646-06-0)	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Diethyl carbonate	99%	99.00	<input checked="" type="checkbox"/>	
Fisher Scientific	1-Propanol	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Isopropanol (CAS:67-63-0)	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Propylene carbonate 99.5% (CAS: 108-32-7)	99%	0.00	<input type="checkbox"/>	
Alfa Aesar	Thiophene	99%	0.00	<input type="checkbox"/>	
Alfa Aesar	1-Methoxy 2-Propanol	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Dimethyl Sulfoxide - DMSO (CAS: 67-68-5)	99%	0.00	<input type="checkbox"/>	
Alfa Aesar	1-Butanol 99.4%+	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Dimethyl glutarate (CAS:1119-40-0)	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	Anisole (CAS: 100-66-3)	99%	0.00	<input checked="" type="checkbox"/>	
Fisher Scientific	2-Butoxyethyl Acetate	99%	0.00	<input checked="" type="checkbox"/>	

Conclusion:

Based on the results of this test, Dimethyl Carbonate, Benzyl Alcohol, Methyl Acetate, Ethyl Lactate, Acetone, Ethyl Acetate, Ethanol, 1,3-Dioxolane, Diethyl Carbonate, 1-propanol, isopropanol, 1-methoxy-2-propanol, 1-butanol, dimethyl glutarate, anisole, and 2-butoxyethyl-acetate. The other 8 solvents were not successful in dissolving the soil.