

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2026
DateRun: 08/26/2026
Experimenters: Amelia Wagner
ClientType: Lab
ProjectNumber: Project #17
Substrates:
PartType: Coupon
Contaminants: Greases
Cleaning Methods: Immersion/Soak
Analytical Methods: HSPiP

Purpose: Determining the HSP sphere for Boeing's soils: Aeroshell 33 Grease

Experimental Procedure: Twenty-four scintillation vials were filled with 24 different solvents from TURI's HSP matrix. A small sample of the grease soil was put into each of the 24 vials, where the soil made up about 1% of the total contents of each vial. 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 90% of the target soil was dissolved. While a rating of "1" denotes greater than 90% dissolution of the target soil.

Results:

Solvent	Final Disolution
Toluene	0
Dimethyl Carbonate	0
Xylenes	0
Benzyl Alcohol	0
Ethylene Glycol	0
Methyl Acetate	0
Undecane	0
Ethyl Lactate	0
Acetone	0
Ethyl Acetate	0
Methanol	0
Ethanol	0
1,3-Dioxolane	0
Diethyl Carbonate	0
1-Propanol	0
Isopropanol	0
Propylene Carbonate	0
Thiophene	0
1-Methoxy-2-Propanol	0
Dimethyl Sulfoxide	0
1-Butanol	0
Dimethyl Glutarate	0
Anisole	0
2-Butoxyethyl-Acetate	0

Summary:

Conclusion: None of the 24 solvents were able to dissolve the soil to the required level within the observation period. Because of this, a sphere was not able to be generated and the HSP values of the soil remain unknown.