CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	33
DateRun:	06/25/2024
Experimenters:	Alexander Symko, Rachael Rososky
ClientType:	Manufacturing
ProjectNumber:	Project #1
Substrates:	Laminate
PartType:	Coupon
Contaminants:	Adhesive
Cleaning Methods:	Immersion/Soak
Analytical Methods:	HSPiP
Purpose:	Utilizing HSPiP target matrix to determine the solubility of hot-melt adhesive
Experimental Procedure:	A bead of jowatherm 288.60 hot-melt adhesive were placed in 24 individual scintillation vials. These vials were then placed on rollers and monitored for 3 hours. Ever hour visual observations were taken to examine whether or not the adhesive was being dissolved. A "1" rating is for soil that is mostly (greater than 80%) or completely dissolved. While a "0" rating is for soil that is not dissolved or somewhat (less than 80%) dissolved.

Results:

HSPiP Matrix

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

Summary:

Conclusion: None of the selected solvents were able to mostly or completely dissolve the adhesive. Given the goals of the cleaning procedure utilized by conklin, an adjustment of experimental goals is necessary.