

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2023
 DateRun: 10/05/2023
 Experimenters: Alexander Symko, Amelia Wagner
 ClientType: University
 ProjectNumber: Project #2
 Substrates: Fiberglass
 PartType: Coupon
 Contaminants: None
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric, Visual
 Purpose: Compatibility testing for previously identified effective solvents on the fiberglass composite material supplied by the client.

Experimental Procedure: Four small pieces of the fiberglass composite material were used for compatibility testing. Each piece had its initial weight recorded. Each piece was placed in a vial of 10ml of a one of the previously identified solvents (1-propanol, Thiophene, 1-Butanol, Dowanol PnBGE). The vials were placed on an automated roller to subject the vials to slight agitation. The pieces were left to soak overnight. The next day, the pieces were removed from the vials in order to record their final weights. They were also visually analyzed to see if any of the solvents cause shape, hardness, or other property changes.

Results:

Solvent	Initial wt	Final wt	Visual Observations
1-propanol	0.0995	0.995	No Change
Thiophene	0.1438	0.1438	No Change
1-Butanol	0.14	0.1402	No Change
Dowanol PnBGE	0.177	0.1771	No Change

Summary:

Conclusion: All of the tested solvents are compatible with the fiberglass composite material.