

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2015
 DateRun: 06/11/2015
 Experimenters: Jason Marshall, Alicia Melvin, Luis Raudales
 ClientType: Chemical Company
 ProjectNumber: Project #1
 Substrates: Aluminum, Stainless Steel, Wood
 PartType: Coupon
 Contaminants: Coatings, Paints
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Visual

Purpose: To evaluate Methyl 408 and Ethyl 408 on their removal effectiveness of paints and coating

Experimental Procedure: Various substrates were coated with lead paint, urethane, varnish, water-based paint, solvent-based paint and powder coated paint. Each paint stripper was applied to the surface and observations were made over time to see the extent of removal. In some cases, coating was scraped off using a handheld paint scraper, Final observations were made and compared to methylene chloride and NMP based paint strippers.

Results: Methyl 408 and Ethyl 408 are not efficient at removing paint from wood substrates. If left out overnight on urethane, a sticky layer coats the entire wood and makes an accurate gravimetric measurement impossible. However, on varnishes, when left on for 150 minutes (+), it shows signs of decent removal of varnishes without the sticky layer. Both of these chemicals are better suited for metal paint stripping for solvent, water base, and varnishes. Methylene Chloride barely removed the powder coated paint on the metal tested. More testing on powder coated paints would be needed.

Cleaning Category	Paint Stripping							
	Soil type	Lead	Urethane	Urethane	Varnish	Water base	Solvent base	powder coated
Substrate	Wood	Wood	Stainless	Stainless	Wood	Aluminum	Aluminum	Aluminum
Methyl 408	NE	NE	ME	ME	SE	ME	VE	NE
Ethyl 408	NE	NE	VE	ME	SE	VE	VE	NE

NE - Not effective
 SE - Slightly effective
 ME - Mostly effective
 VE - Very effective

Summary:

Substrates:	Aluminum, Stainless Steel, Wood				
Contaminants:	Coatings, Paints				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Xf Technologies	Methyl 408	100		<input checked="" type="checkbox"/>	
Xf Technologies	Ethyl 408	100		<input checked="" type="checkbox"/>	

Conclusion: Both chemicals are better at removal of paint after longer periods of contact on the substrates.