CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2016
DateRun:	07/28/2016
Experimenters:	Rhoda Gindi, Thalia BracamonteMoreno
ClientType:	
ProjectNumber:	Project #1
Substrates:	Textile
PartType:	Coupon
Contaminants:	Adhesive, Greases, Dirt
Cleaning Methods:	Manual Wipe
Analytical Methods:	Visual, Wipe
Purpose:	To evaluate the efficiency of various cleaners in removing grease, ink, and adhesive from rayon and cotton fabric by a manual wipe test.
Experimental Procedure:	Five cleaners were tested at room temperature to evaluate the removal of grease, adhesive, and dirt from rayon and cotton fabric. Each cleaner had four fabrics for each of the contaminants. For the adhesive contaminant, both sides of the fabric were contaminated for individual observation. A microfiber cloth was used with each cleaner to wipe off the contaminant for two intervals of 30 seconds. Each fabric was observed visually.
Results:	Sion was partially effective at removing the adhesive on the front of the fabric. The Solstice 2A cleaner was effective on the grease, although it left a stain. The Fluosolv CX cleaner was partially effective at removing the adhesive on the front of the fabric and was effective at removing the grease, although it left a stain. The Fluosolv CX cleaner was effective at removing grease, although it left a stain.

Cleaner	Time	Adhesive (front)	Adhesive (back)	Grease	Ink
Sion	(30 sec)	Adhesive partially rubbed off.	Thick layer of adhesive still present.	Some grease smudged off.	No ink came off.
	(60 sec)	Adhesive mostly came off, thin layer still present.	Thick layer of adhesive still present.	Grease stained fabric and is still present.	No ink came off.
Solstice PF	(30 sec)	Thick layer still present. No adhesive appeared to come off.	Thick layer of adhesive still present.	Grease smudged off and partially came off.	No ink came off.
	(60 sec)	No adhesive came off.	Thick layer of adhesive still present.	Most grease came off, partially stained fabric.	No ink came off.
Solstice 2A	(30 sec)	Some adhesive came off edges.	Some adhesive came off.	Some grease came off, stained fabric.	No ink came off.
	(60 sec)	Small amount of adhesive came off of edges.	Layer of adhesive still present.	Most grease came off, stained fabric.	No ink came off.

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Fluosolv CX	(30 sec)	Adhesive layer clumped up and came off.	Most adhesive still present.	Most grease came off, stained fabric.	No ink came off.
	(60 sec)	Very thin layer of adhesive still remained.	Most adhesive still present.	Most grease came off, stained fabric.	No ink came off.
Fluosolv NC	(30 sec)	No adhesive came off.	No adhesive came off.	Grease came off, stained fabric.	No ink came off.
	(60 sec)	No adhesive came off.	No adhesive came off.	Grease came off, stained fabric.	No ink came off.

Summary:

Substrates:	Textile
Contaminants:	Adhesive, Greases, Dirt

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
DuPont	Vertrel Sion	100	0.00	☑	
Honeywell	Solstice PF with N2	100	0.00	☐	
Honeywell	Solstice PF-2A with N2	100	0.00	☐	
NuGeneration Technologies, LLC	FluoSolv CX	100	0.00	☑	
NuGeneration Technologies, LLC	FluoSolv NC 786	100	0.00	☐	

Conclusion:

Sion and Fluosolv CX were effective on removing the adhesive on the front of the fabric. Solstice 2A, Fluosolv CX, and Fluosolv NC were effective on removing the grease from the fabric, but left the fabric stained. No cleaners were effective on removing the adhesive on the back of the fabric, or on removing the ink from the fabric. Currently this company is using TCE as their cleaner, and our experimental procedure was performed with the TCE provided, resulting in TCE performing as inefficient as the cleaners used in this experiment.