CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998

DateRun: 01/22/1998

Experimenters: Carole LeBlanc, Jason Marshall

ClientType: Opto-mechanical manufacturer

ProjectNumber: Project #1

Substrates: Glass/Quartz

PartType: Coupon

Contaminants:

Cleaning Methods:

Analytical Methods:

Purpose: Ways to clean materials sensitive to water

Experimental Procedure: This is a call to any and all who may enlighten us as to the best way(s) to clean materials that are sensitive to water. At Hughes ELCAN, we manufacture many opto-mechanical devices which use a variety of different materials. We are looking for a system that will clean lenses with stain sensitive approaching 51, 52, 53. A few of these are listed in the chart below:

Description Acidic Classification
FK 51 51
SK 10 52
SK 15 52
SK 16 52
BaSF 50 53
KZFSN4 53
QUESTION #: 1
SUBSTRATE MATERIAL: Glass

Results: RESPONSE/ANSWER: In 1998, the Massachusetts Toxics Use Reduction Institute (TURI) will publish the results of the tests conducted at the Institutes Surface Cleaning Laboratory (SCL) in a searchable database/ spreadsheet format. This should make alternative cleaner selection faster and easier. Here are the results of your query, based on the information supplied:

The best we can offer are SCL's test results on the substrate of optical lenses (all proprietary manufacturing information is deleted from the database). They are as follows:

SCL #	Substrate	Contaminant	Mechanism	Cleaner
95-409-01-2*	GLASS	WAX	ULTRASONICS	OAKITE
95-409-02-2	GLASS	WAX	IMMERSION	ALCONOX
95-409-03-2	GLASS	WAX	ULTRASONICS	ALCONOX
95-409-03-2	GLASS	WAX	ULTRASONICS	OAKITE
96-435-01-8	GLASS	ROSIN	IMMERSION	OCCIDENTAL CHEMICAL
97-550-01-3	GLASS	GREASE	SPRAY	ALCONOX
97-550-01-3	GLASS	OXIDES	ULTRASONICS	ALCONOX
97-551-01-2	GLASS	PITCH	ULTRASONICS	INTERNATIONAL PRODUCTS
97-551-01-2	GLASS	PITCH	ULTRASONICS	LPS
97-551-01-2	GLASS	PITCH	ULTRASONICS	MACDERMID
97-551-01-2	GLASS	PITCH	ULTRASONICS	OAKITE
97-551-01-2	GLASS	POLISH	ULTRASONICS	INTERNATIONAL PRODUCTS
97-551-01-2	GLASS	POLISH	ULTRASONICS	LPS
97-551-01-2	GLASS	POLISH	ULTRASONICS	MACDERMID
97-551-01-2	GLASS	POLISH	ULTRASONICS	OAKITE

Summary:

Conclusion: Cleaning projects vary from case-to-case. The database does not have a searchable category for 'water-sensitive materials'. To obtain more detailed information about any of the listed trials, have the SCL # ready when contacting the lab at (978)934-3133.

ADDENDUM: This question and response have been submitted to Precision Cleaning Magazine for publication in the February issue.