

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003  
 DateRun: 08/27/2003  
 Experimenters: Jason Marshall  
 ClientType: Printing Company  
 ProjectNumber: Project #1  
 Substrates: Textile  
 PartType: Part  
 Contaminants: Paints, Dirt  
 Cleaning Methods: Manual Wipe  
 Analytical Methods: Visual

Purpose: To evaluate additional cleaning products on supplied T-shirts

Experimental Procedure: Two products from the previous trials were selected based on their past performance in paint removal. Two additional products were selected based on their compatibility with the t-shirt and possible ink removal. A fifth product was selected based on the vendor information. Each product was used at full strength and allowed to soak on the surface for 10 minutes at room temperature. After soaking, the t-shirt was rubbed manually with a paper towel in attempt to remove the paint and dirt. Observations were made after the t-shirt air dried.

Results: Of the five products, only one, H2Orange2, appeared to be effective in removing the dirt lines from the t-shirt. A second product from the same company removed only a small amount of the dirt marks. The H2Orange2 product did remove a thin strip of paint that was below the main body of the desired image on the shirt. The Graffiti Remover removed paint from the main painted area on the shirt. The other products had no effect on the cured paint. The table below lists the observations made during the trial.

| Cleaner          | Observation                                |
|------------------|--|
| Bio T Max        | No paint removal nor dirt removal          |
| D-Limonene       | No paint removal nor dirt removal          |
| Grout Safe       | No paint removal but little dirt removal   |
| H2Orange2        | Little paint removal but some dirt removal |
| Graffiti Remover | Paint removal but no dirt removal          |

Summary:

| <b>Substrates:</b>       |                  | Textile      |             |                                     |               |  |
|--------------------------|------------------|--------------|-------------|-------------------------------------|---------------|--|
| <b>Contaminants:</b>     |                  | Paints, Dirt |             |                                     |               |  |
| Company Name:            | Product Name:    | Conc.:       | Efficiency: | Effective:                          | Observations: |  |
| Bio Chem Systems         | Bio T Max        | 100          |             | <input type="checkbox"/>            |               |  |
| Florida Chemical Company | D-Limonene       | 100          |             | <input type="checkbox"/>            |               |  |
| Envirox LLC              | Grout Safe       | 100          |             | <input type="checkbox"/>            |               |  |
| Envirox LLC              | H2Orange2        | 100          |             | <input checked="" type="checkbox"/> | Dirt          |  |
| Finger Lakes Chemical    | Graffiti remover | 100          |             | <input checked="" type="checkbox"/> | Paint         |  |

Conclusion: Envirox LLC H2Orange2 was effective in removing a dirt stain from the shirt as well as a some paint not in the main paint design area. The Finger Lakes Chemical Graffiti Remover was very effective in removing the cured paint, but had little to no success on the dirt.