Len-Tex Corporation Testing Protocol: Application of Various Liquid Industrial Disinfectants to Vinyl Wallcoverings

Purpose:

The purpose of this test is to assess the durability of Len-Tex's vinyl and mylar-backed vinyl wallcoverings after repeated application of various industrial disinfectants with different chemistries.

NOTE: Due to the unpredictability of the use (and misuse) of these disinfectants, this test is not meant to simulate any specific scenario within a given environment. This test is also NOT an approval of any industrial cleaner.

Materials:

Standard plastic spray bottles containing the industrial disinfectant (prepared according to manufacturer's instruction) were used.

One 10inx10in piece of vinyl and mylar backed vinyl for each industrial disinfectant (14 total).

One clean, dry fabric cloth for each industrial disinfectant for wiping required to complete the test (7 total).

Blue painter's tape to separate the vinyl samples into 2 sides: a control and experimental side.

Gardner Abrasion Testing Machine to complete the required cycles with a sponge, saturated in the F793-93 solution.

Testing Environment:

The testing environment and conditions were monitored and kept consistent throughout the entirety of the testing period. The room was kept at a constant 70 degrees Fahrenheit temperature, and had both artificial (overhead lighting) and natural (large window) lighting.

Methods:

To prepare the samples:

1. Use blue painter's tape to separate the wallcovering samples in half to establish a control side and a testing side. Apply the tape in the middle of the sample (at the 5 in mark) and allow the excess tape to rest on the control side. Label the back of each sample with the industrial disinfectant name.
2. Lay each sample flat on a horizontal surface before industrial disinfectant application.

To apply the industrial disinfectants:

1. Spray the industrial cleaner on the entire test side of the wallcovering sample until visibly wet.
2. Let the sample sit with the industrial cleaner on it for the designated contact time indicated per the manufacturer's instructions.
3. After the contact time has passed, wipe each sample's test side with a clean, dry cloth 10 times (each wipe in one direction counts).

4. If the manufacturer's instructions specify to rise with water, do so. Allow samples to air dry.
5. Repeat this process 6 times per day for a 2-day period.

Gardner Abrasion Testing:

1. After the 2-day testing period has been completed, place each sample's test side in the Gardner Abrasion Testing Machine. Use a sponge saturated with the F793-93 solution for 200 cycles (400 swipes total).
2. Apply double sided tape to the back of each sample to ensure it will stay in place throughout the duration of the 200 cycles.
3. Once 200 cycles have passed, wipe the excess solution off of the sample, remove tape from the back of the vinyl and set aside to begin the development period.
4. Reapply the F793-93 solution to the test sponge between each test to ensure saturation.

Development Time:

5. Once the Gardner Abrasion Testing is completed, samples need to sit for a 2 week (14 day) develop time to allow for any changes to take place.
6. Assess samples for any changes and/or damage (discoloration, scratches, etc.).