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*Contamination Prevention and Control*

**TEST REPORT**

**Project 122412-1B**

**Microbial Removal Efficiency of TechTrak Flooring  
(Contact Plate Method)**

Prepared For:

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## Request

Microbial Removal Efficiency testing of TechTrak polymer flooring and a competitive product using the Swab Method

## Sample Description

The following products were submitted for analysis:

- A) Tech Trak Polymer Flooring (blue)
- B) Dycem Polymer Flooring (red)

## Equipment and Materials

- a) One 42 sq.cm round test coupon cut from a Hypalon boot sole
- b) Prosat wipers presaturated with 70% isopropanol (Contec Catalog # PS911EB)
- c) 100-mm Petri dishes containing tryptic soy agar (Teknova Catalog # T0144)
- d) 0.45um filter membranes, sterile (Millipore Catalog # HABG047S6)
- e) Butterfield Buffer, 225 ml (3M Catalog # QDBFD225)
- f) Sterile Swabs (Puritan Catalog # 25-806 2WC)

## Test Method

The test coupon was cleaned with a 70% isopropyl alcohol saturated wiper, allowed to dry, then placed on a dirty floor in Location 1. The test coupon was stepped on to simulate one step on the dirty floor. The dirty side of the test coupon was then swabbed and the tip of the swab cut off and placed in a bag of Butterfield Buffer. The bag was shaken for one minute and a 30 ml aliquot was filtered through a 0.45um membrane filter. The filter was placed onto the surface of the agar in the Petri dish. The Petri dish was incubated at 30-35 degrees C for three days, then at 20-25 degrees C for 7 days.. The colony count was designated as "Dirty 1". This test was repeated two additional times in Locations 2 and 3.

The test coupon was cleaned with a 70% isopropyl alcohol saturated wiper, allowed to dry, then placed on a dirty floor in Location 1. The test coupon was stepped on with a cleanroom boot to simulate one step on the dirty floor. The dirty side of the test coupon was then placed onto three sections of the Tech Trak flooring and stepped on to simulate three steps. The test coupon was then swabbed and the tip of the swab cut off and placed in a bag of Butterfield Buffer. The bag was shaken for one minute and a 60 ml aliquot was filtered through a 0.45um membrane filter. The filter was placed on the surface of the agar in the Petri dish. The Petri dish was incubated at 30-35 degrees C for three days, then at 20-25 degrees C for 7 days. The colony count was designated as "Tech Trak Clean 1". This test was repeated two additional times in Locations 2 and 3.



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The test coupon was cleaned with a 70% isopropyl alcohol saturated wiper, allowed to dry, then placed on a dirty floor in Location 1. The test coupon was stepped on with a cleanroom boot to simulate one step on the dirty floor. The dirty side of the test coupon was then placed onto three sections of the Dycem flooring and stepped on to simulate three steps. The test coupon was then swabbed and the tip of the swab cut off and placed in a bag of Butterfield Buffer. The bag was shaken for one minute and a 60 ml aliquot was filtered through a 0.45um membrane filter. The filter was then placed on the surface of the agar in the Petri dish. The Petri dish was incubated at 30-35 degrees C for three days, then at 20-25 degrees C for 7 days. The colony count was designated as "Dycem Clean 1". This test was repeated two additional times in Locations 2 and 3.

Microbial removal efficiency was calculated for each product by comparing the triplicate dirty counts to the triplicate clean counts.

#### Test Results

<u>Sample Description</u>	<u># of Steps</u>	<u>Microbial Removal Efficiency</u>
Tech Trak Flooring	3	94.4%
Dycem Flooring	3	92.9%

#### Reference

Project 122412-1C