

Report Date: April 13, 2020

Report #: 24721A-13-04-2020

Client: Plant Therapy
510 2nd Ave S
Twin Falls, ID, USA
83301

Test: ASTM D4488-A5 Particulate and Oily Soil/Vinyl Tiles Test Method

Samples:

Sample Name	LC#	Test Dilution
Defender Multi-Surface Concentrate	20-0116	2 oz. + 14 oz. water

Procedure:

A synthetic oily soil is prepared of an oil phase and a particulate phase. 50 mg of particulate soil is placed on a white vinyl tile over a space of 2 x 4 in. This is done with a template to insure a constant application area. Five drops of the oily blend is applied to double thickness paper towel and rubbed in a circular motion over the particulate soil. The panels are allowed to air dry for 24 hours. Reflectance readings are taken before and after soiling and after cleaning. Cleaning is done by soaking a sponge in 50mL of test solution and allowing the test area to be immersed in 20mL of test solution for 60 sec and then scrubbed for 10 cycles with a Gardner Straight-line Washability Apparatus.

Cleaning Efficiency is evaluated using reflectance measurements

$$\% \text{ Cleaning Efficiency} = (R_c - R_s) / (R_o - R_s) \times 100$$

Where R_c = cleaned reflectance
R_o = original reflectance
R_s = soiled reflectance

Results:

Sample	% Cleaning Efficiency*	Standard Deviation
Defender Multi-Surface Concentrate	94.12	1.31

**3 replicates for each product were tested*

Tested by: 
Katherine Hatherley, Lab Technician

Approved by: 
Joe McCarthy, Lab Services Manager

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