

# SageWay Solutions, LLC Project 20093 Stone Cleaners Soil Removal, ASTM D4488-A5 Surface Attack

Living Clean (MGS2)
Weiman
Method



April 22, 2020

Gregory van Buskirk SageWay Solutions, LLC 65 Panorama Ct Danville, CA 94506

Dear Gregory:

You sent us a sample of **Stone Cleaner** identified as **Living Clean (MGS2)** for Soil Removal Evaluations and Surface Attack. You asked us to evaluate it against **Weiman** and **Method**. A summary of our findings is below.

The samples are comparable in Soil Removals.

Method showed more Surface Attack than Weiman & Living Clean. Surface attack seen was slight to moderate for the Method sample.

Sample	% Soil Removals	% of Best	Surface Attack Score	
Living Clean (MGS2)	67.2	Best	0.5	
Weiman	65.1	97%	1.0	
Method	64.8	97%	2.0	
Sig. Dif.	3.8			

(Lower scores on surface attack, show less attack. See page 5.)

Descriptions of the test methods and sample information are attached.

Sincerely,

Tod Losey

Sterling Laboratories



# **Sample Information**

#### Stone Cleaners

 Living Clean, Marble/Granite/Stone Formula - Free & Clear, Production Code: SWS-20020329-MGS2, 29 March 2020, Sample For Sterling Laboratories, Received 4-1-20 from SageWay Solutions

2. <u>Weiman</u>, Granite & Stone, Citrus,

Daily Clean & Shine, Quartz, Granite, Marble Streak-free Formula Cleans & Enhances Beauty, 24 fl. oz. (710 mL) Trigger-Spray Bottle, Lot #: 80240, UPC #: 0 4159800109 3 Purchased 2-20-20 from Lowes, Toledo, OH

3. <u>Method</u>, Daily Granite Cleaner, Cleans + Polishes, Apple Orchard,

Surface Safe, Non-Toxic, Plant Based, Shines Granite, Marble + Stone, 28 fl. oz. (828 mL) Trigger-Spray Bottle,

(Lot #: 193109807:09), UPC#: 8 1793900065 6, Purchased 2-20-20 from Lowes, Toledo, OH



# **Photographs of Samples**

All Purpose Cleaners





**Living Clean** 

Weiman



Method



### **TEST METHOD**

# Stone Cleaners Soil Removal

#### **Soiled Panels**

We applied soil from ASTM D4488-A5 (General Purpose) to Armstrong Vinyl Composite Tile, Pattern 51899, cut into 4"x4" squares.

All of the tiles were allowed to age at room temperature overnight.

We measured the reflectance of each of the groups before and after soiling using a Photovolt 577-A Reflectometer with a green tri-stimulus filter.

#### **Sample Dilutions**

All were used as received.

#### **Soil Removal**

We mounted a soiled panel in the tray of a Gardner Straight-Line Washability Apparatus. We applied 2 mL of solution to a soiled panel, allowed it to soak for 30-seconds, then scrubbed it with a water-dampened sponge for 10 cycles. After rinsing and drying we again measured the reflectance of each test piece as before. Three (3) panels were cleaned with each test product.

From the reflectance of each test piece before and after soiling and after cleaning, we calculated the percent soil removal, averaged them for each set of replicates, and calculated the statistically significant difference between the averages at the 95% level of confidence. We then totaled the results (Overall Soil Removal Total) for the soils for each of the products. If two totals differ by less than 10%, they are said to be comparable.



# **TEST METHOD**

# Stone Cleaners Surface Attack

Samples were applied to the substrates (0.5mL) and held in place with a 1" square of paper towel. The samples were allowed to set overnight, uncovered at room temperature. We rinsed the surfaces after soaking. Using the scoring scale below we grade the test areas and made comments on any changes we saw.

Substrate _	Living Clean (MGS2)		Weiman		Method	
	Score	Comment	Score	Comment	Score	Comment
Corian	0.5	Surface Darkening	1.0	Surface Darkening	1.5	Surface Darkening
Granite	0	No Attack	0	No Attack	0	No Attack
Marble	0	No Attack	0	No Attack	0.5	Slight Dulling/ Etching
Quartz Countertop	0	No Attack	0	No Attack	0	No Attack
Totals	0.5		1.0		2.0	

0 = None	No visual attack. Surface appears to be unchanged compared to non-tested area		
1 = Minor Attack	Slight surface altering. Test area is slightly different from non-tested area		
2 = Moderate Attack	Definite surface altering. Surface is definitely different from surrounding non-tested area		
3 = Considerable Attack	Surface is altered to the point of potential physical damage		
4 = Severe Attack	Surface is either being broken down or has changed drastically from initial color & structure		