



June 10, 2021

**Bioneat, Inc.
Project 21099A
All Purpose Cleaners
Soil Removal**

Bioneat
Method



June 10, 2021

Bob Trackman
Bioneat, Inc.
101 S. East 10th Street
Ft Lauderdale, FL 33316

Dear Bob,

You sent us a sample of **All Purpose Cleaner** identified as **Bioneat**. We tested it for soil removal, using ASTM D4488-A5 (General Purpose) Soil against **Method** All-Purpose Cleaner. A summary of the testing is below.

Method performed Best in Soil Removal.

Bioneat and Method are comparable in Soil Removal.

Samples	% Soil Removals	% of Best
Method	24.2	Best
Bioneat	21.8	90.1%
Sig. Dif.	3.9	

Descriptions of the test method and sample information are attached.

Sincerely,

Tod Losey
Sterling Laboratories



Sample Information

All Purpose Cleaners

1. **Bioneat**, All Purpose Cleaner,
USDA Certified Biobased Product / Product 100%,
Made With Natural, Organic And Biobased Ingredients,
Non-Toxic, 100% Biodegradable, Non Caustic, Hypoallergenic, Non Hazardous,
Lot #: None Found, UPC #: Non Found,
Received 6-1-21 from Bioneat

2. **Seventh Generation**, All Purpose Cleaner, Free & Clear,
0% Fragrances Or Dyes,
23 fl. oz. (680 mL) Trigger-Spray Bottle,
Lot #: 09090AM22 19:21, UPC #: 7 3291344713 8,
Purchased 10-8-20 from Amazon.com

3. **Method**, All-Purpose, Pink Grapefruit,
Naturally Derived Surface Cleaner, Cuts Grease + Grime
With Non-Toxic Plant-Based Powergreen Technology,
28 fl. oz. (828 mL) Trigger-Sprayer,
Lot #: 2022093 1909, UPC #: 8 1793900010 6,
Purchased 10-8-20 from Amazon.com

4. **Mrs. Meyer's**, Clean Day, Multi-Surface Everyday Cleaner, Lemon Verbena Scent,
Removes Dirt, Freshens Surfaces,
16 fl. oz. (473 mL) Trigger-Sprayer,
Lot #: X213, UPC #: 8 0812412441 7,
Purchased 10-6-20 from Target, Toledo, OH

Photographs of Samples Tested

All Purpose Cleaners



Bioneat



Seventh Generation



Method



Mrs. Meyer's



TEST METHOD

All Purpose Cleaners

ASTM D4488-A5, General Purpose

White, Vinyl Composite tile was soiled with ASTM D4488-A5, General Purpose Soil and allowed to age at room temperature for 24 hours. We then measured the reflectance using a Konica Minolta CR410 Colorimeter. (D65/2°, Y - Color Scale)

Sample Dilutions

- All samples were tested as received. (Full Strength)

Gardner Runs: (3 replicates / sample)

We applied 2 mL of sample onto soiled area, allowed it to soak for 30 seconds and then scrubbed it 10 cycles with a water-dampened sponge using a Gardner In-Line abrasion apparatus. Samples were rinsed under the tap and allowed to air dry before measuring again.

Soil Removal Calculations

The percent (%) soil removal (SR) was computed by $\%SR = 100(A-B)/(C-B)$ where A is the reflectance of the tile after cleaning, B is the reflectance before cleaning, and C is the reflectance of the unsoiled tile. We generated the significant difference at the 95% confidence level for each of the soil groups. Samples within 10% are said to be comparable.