



Corrections and Clarifications Report

July 2021

The following Green Seal Standards underwent non-substantive changes on the publication date of this report: July 30, 2021.

- GS-8, Edition 5.5, Cleaning Products for Household Use
- GS-11, Edition 3.2, Paints, Coatings, Stains, and Sealers
- GS-37, Edition 7.6, Cleaning Products for Industrial and Institutional Use
- GS-41, Edition 2.3, Hand Cleaners and Hand Sanitizers for Industrial and Institutional Use
- GS-42, Edition 2.3, Commercial and Institutional Cleaning Services
- GS-44, Edition 4.2, Soaps, Cleansers, Hand Sanitizers and Shower Products
- GS-48, Edition 1.5, Laundry Care Products for Household Use
- GS-50, Edition 1.2, Personal Care Products and Cosmetics
- GS-51, Edition 1.6, Laundry Care Products for Industrial and Institutional Use
- GS-52, Edition 2.5, Specialty Cleaners for Household Use
- GS-53, Edition 2.6, Specialty Cleaners for Industrial and Institutional Use

Introduction

Corrections and Clarifications Reports (CCRs) are Green Seal's public record of all non-substantive changes made to Green Seal standards. CCRs are not proposed for public comment due to their low impact on the standards. Substantive changes, which may raise or lower the bar of health and environmental leadership, are still required to undergo Green Seal's rigorous stakeholder engagement process, which includes a 30-day public comment period.

Edition Numbers of Standards

Although the text of a standard is clarified or corrected, the edition number remains the same.

Release Schedule of CCRs

Reports are released on a quarterly basis and can be accessed on Green Seal's website.¹

Our Stakeholder-Based Process

Although non-substantive changes are not published for public comment, Green Seal remains open to all input from our stakeholders on all issues regarding the standards. We encourage any interested party or individual to submit comments on Green Seal standards via Green Seal's website, email, or phone.

Clarifications

Green Seal periodically notes issues with the text of a standard. In certain cases, a requirement is worded in a way that leads to misinterpretations. In these cases, Green Seal improves the text of the standard via clarifications to ensure clear and consistent interpretations.

Corrections

Green Seal standards undergo scheduled quality reviews during which errors may be noted. Examples of errors include typos, grammatical errors, misplaced text, omissions in information, and inconsistencies within a standard.

Information about the Red-lined Text within CCRs

CCRs use formatting that is consistent with Green Seal's Standard Revision Proposals to depict the differences between the previous edition of a standard and the current edition.

- **Text Boxes** are used to highlight the excerpts of standard content.
- **Red font** is used to show that text has been added to a standard.
- Text with ~~strikethrough lines~~ show that text has deleted from a standard.

¹Green Seal Standards Documents Library, www.greenseal.org/green-seal-standards/library#section26

Table of Contents

Standard for Cleaning Products, Household Use, GS-8	4
1. Testing Methods, Microorganisms Annex, Clarification	4
Standard for Paints, Coatings, Stains, and Sealers, GS-11	5
1. VOC Limits, Product Categories, Clarification	5
Standard for Cleaning Products, I&I Use, GS-37	6
1. Testing Methods, Microorganisms Annex, Clarification	6
Standard for Hand Cleaners and Hand Sanitizers, GS-41	7
1. Healthcare Hand Sanitizers, Scope Expansion, Clarification	7
Standard for Commercial and Institutional Cleaning Services, GS-42	8
1. Foam Hand Soap, Environmentally Preferable Cleaning Products and Supplies, Correction	8
Standard for Soaps, Cleansers, Hand Sanitizers and Shower Products, GS-44	9
1. Hand Cleaners, Appendix 1, Correction	9
2. Healthcare Hand Sanitizers, Scope Expansion, Clarification	9
Standard for Laundry Care Products, Household Use, GS-48	10
1. Testing Methods, Microorganisms Annex, Clarification	10
Standard for Personal Care Products and Cosmetics, GS-50	11
1. Manufacturing Sustainability Requirements, Good Manufacturing Practices, Correction	11
2. Antiperspirants, Spray Packaging, Correction	11
Standard for Laundry Care Products, I&I Use, GS-51	13
1. Testing Methods, Microorganisms Annex, Clarification	13
Standard for Specialty Cleaning Products, Household Use, GS-52	14
1. Testing Methods, Microorganisms Annex, Clarification	14
2. Septic Tank Cleaners, Scope Expansion, Clarification	14
Standard for Specialty Cleaning Products, I&I Use, GS-53	16
1. Testing Methods, Microorganisms Annex, Clarification	16
2. Microbial-Based Drain Cleaners, Concentrates and Dosing, Correction	16
3. Septic Tank Cleaners, Scope Expansion, Clarification	17

Standard for Cleaning Products, Household Use, GS-8

1. Testing Methods, Microorganisms Annex, Clarification

The current testing requirements for products that contain microorganisms require that manufacturers demonstrate the microbial strains used in their products are susceptible to disinfectants or antimicrobial agents. This testing must be carried out in accordance with the methods noted in the standard, but the strains used within the product itself should undergo testing as opposed to the default strains noted in the test methods. Green Seal has clarified this criterion by adding in new phrases.

ANNEX D – MICROORGANISMS (Normative)

E. Effective Prevention Measures and Treatment. All *microorganisms* shall be demonstrated to be susceptible to the following prevention and treatment measures:

- An *antimicrobial agent*, as demonstrated by testing the microbial strain **in the product** against an acceptable substance (i.e., an EPA general disinfectant, Center for Disease Control low-level disinfectant, or a registered *antimicrobial agent* by Health Canada). **The test method should be modeled on in accordance with the EPA/Office of Pesticide Programs Standard Operating Procedure (SOP) or the AOAC International Use Dilution Method for Testing Disinfectants, SOP Number: MB-05-04, but replace the pathogenic strains specified in these SOPs with the microbial strain(s) in the product.**

Standard for Paints, Coatings, Stains, and Sealers, GS-11

1. VOC Limits, Product Categories, Clarification

The table below in the GS-11 Standard, Edition 3.2, incorrectly specifies an “Exception” for the allowable VOC content level for Reflective Wall Coatings. The exception suggests that the content levels in the table are different and higher than those VOC content levels established in the California Air Resources Board (CARB) Suggested Control Measure for Architectural Coatings (2007). CARB does not set a category for Reflective Wall Coatings, however, based on the functional use of these products, Green Seal has interpreted this category to be equivalent to the category for Roof Coatings, which is also set at a limit of 50 g/L of VOCs in the 2007 edition. Therefore, in GS-11, Edition 3.2, Reflective Wall Coatings should not be included in this table, as an exception would not be needed. This entry in the July Corrections and Clarifications Report is intended as a public record of this issue.

The VOC Content Exceptions table is slated for deletion via an ongoing revision of this standard. The deletion of the table, and all exceptions to CARB VOC content limits, will go into effect in the upcoming issuance of GS-11, Edition 4.0, which is estimated to occur in August 2021.

3.4 Volatile Organic Compounds (VOCs). The VOC content of the product shall not exceed the current content limits for its product category as set by CARB Suggested Control Measure for Architectural Coatings (2007),¹⁸ unless specified otherwise in this standard.

...

Exception: For the following product types, the VOC limits listed in the table below will be used instead of the applicable CARB limits:

Product Type	VOC level (g/L)
<i>Reflective Wall Coating</i>	50
<i>Reflective Roof Coating</i>	100
<i>Varnishes</i>	350
<i>Conjugated Oil Varnish</i>	450
<i>Lacquer</i>	550
<i>Clear Brushing Lacquer</i>	680

Exception: For *low-solids coatings*, the CARB VOC limit for *low-solids coatings* shall apply, instead of the VOC limit that would otherwise apply for the product category (as mandated by CARB).

Exception: Products labeled as *industrial maintenance coatings* shall meet the VOC limits for their relevant product category.

Exception: Products sold in containers equal to or smaller than 1 liter are not exempted from the VOC content limit for their product category (even though exempted by CARB).

For other product categories not regulated by CARB, the VOC level shall not exceed a limit set by CARB for a similar product category.

Standard for Cleaning Products, I&I Use, GS-37

1. Testing Methods, Microorganisms Annex, Clarification

The current testing requirements for products that contain microorganisms require that manufacturers demonstrate the microbial strains used in their products are susceptible to disinfectants or antimicrobial agents. This testing must be carried out in accordance with the methods noted in the standard, but the strains used within the product itself should undergo testing as opposed to the default strains noted in the test methods. Green Seal has clarified this criterion by adding in new phrases.

ANNEX E – MICROORGANISMS (Normative)

E. Effective Prevention Measures and Treatment. All *microorganisms* shall be demonstrated to be susceptible to the following prevention and treatment measures:

- An *antimicrobial agent*, as demonstrated by testing the microbial strain **in the product** against an acceptable substance (i.e., an EPA general disinfectant, Center for Disease Control low-level disinfectant, or a registered *antimicrobial agent* by Health Canada). **The test method should be modeled on in accordance with the EPA/Office of Pesticide Programs Standard Operating Procedure (SOP) or the AOAC International Use Dilution Method for Testing Disinfectants, SOP Number: MB-05-04, but replace the pathogenic strains specified in these SOPs with the microbial strain(s) in the product.**

Standard for Hand Cleaners and Hand Sanitizers, GS-41

1. Healthcare Hand Sanitizers, Scope Expansion, Clarification

In the Foreword section of Green Seal standards, there is a statement that product types not explicitly noted as eligible for certification in the standard may be eligible for certification if they are “substantially similar” to products explicitly mentioned in the standard Scope.

“Products, services, or organizations that are substantially similar to those covered by this standard in terms of function and life cycle considerations may be evaluated against the intent of the requirements of this standard, accounting for relevant differences between the intended scope of the Standard and the actual product, service, or organization to be evaluated.”

After a market review, Green Seal has determined that the function and life cycle considerations of hand sanitizers regulated as healthcare antiseptics by the US Food and Drug Administration (FDA) are substantially similar to products already covered in the scope of the GS-41 standard.

Alcohol-based hand sanitizers marketed for use to consumers and those marketed for use in healthcare settings have extremely similar, if not identical formulations, and are intended to perform the same function: slow or stop the growth of pathogenic microorganisms. As a result, Appendix 1 of the standard has been updated to remove the exclusion on this product category.

APPENDIX 1 – Scope (Informative)

Products Excluded from GS-41

- General-purpose, restroom, glass and carpet cleaners for industrial and institutional use (included in GS-37)
- General-purpose, bathroom, glass, and carpet cleaner products marketed specifically for *household use* (included in GS-8)
- Hand cleaning products for household use (covered in GS-44)
- Hand cleaning products in food preparation operations or medical facilities.
- *Hand sanitizers* formulated with benzalkonium chloride as the active ingredient
- ~~*Hand sanitizers* regulated as healthcare antiseptic rubs~~
- *Hand sanitizers* sold within aerosol cans
- Shampoo, conditioner and related shower products for baby, child, adult, and professional use (GS-44)
- Personal care (GS-50)

Standard for Commercial and Institutional Cleaning Services, GS-42

1. Foam Hand Soap, Environmentally Preferable Cleaning Products and Supplies, Correction

The section on Environmentally Preferable Cleaning Products and Supplies incorrectly did not include a reference to “foam hand soap” as an acceptable product option. Foam hand soaps are currently accepted as environmentally preferable products. Language has been added to this criterion to clarify.

4.1 Environmentally Preferable Cleaning Products and Supplies.

4.1.1 For the following categories of cleaning products and supplies, the *cleaning service* shall use only *environmentally preferable products*:

- general-purpose cleaners, floor cleaners, bathroom cleaners, glass cleaners, and carpet cleaners.
- floor finishes and floor strippers.
- liquid hand soap **and foam hand soap**.
- toilet tissue and facial tissue.
- paper towels and napkins.

Standard for Soaps, Cleansers, Hand Sanitizers and Shower Products, GS-44

1. Hand Cleaners, Appendix 1, Correction

Language was added to Appendix 1 to clarify hand cleaning products meant for industrial and institutional use are not included in the scope of the GS-44 standard.

2. Healthcare Hand Sanitizers, Scope Expansion, Clarification

In the Foreword section of Green Seal standards, there is a statement that product types not explicitly noted as eligible for certification in the standard may be eligible for certification if they are “substantially similar” to products explicitly mentioned in the standard Scope.

“Products, services, or organizations that are substantially similar to those covered by this standard in terms of function and life cycle considerations may be evaluated against the intent of the requirements of this standard, accounting for relevant differences between the intended scope of the Standard and the actual product, service, or organization to be evaluated.”

After a market review, Green Seal has determined that the function and life cycle considerations of hand sanitizers regulated as healthcare antiseptics by the US Food and Drug Administration (FDA) are substantially similar to products already covered in the scope of the GS-44 standard.

Alcohol-based hand sanitizers marketed for use to consumers and those marketed for use in healthcare settings have extremely similar, if not identical formulations, and are intended to perform the same function: slow or stop the growth of pathogenic microorganisms. As a result, Appendix 1 of the standard has been updated to remove the exclusion on this product category.

APPENDIX 1 – Scope (Informative)

Products excluded from GS-44, Continued

- Hair dye, color, and bleach
- Hair relaxant
- Hand cleaning products for industrial and institutional use (covered in GS-41)
- Hand sanitizers formulated with benzalkonium chloride as the active ingredient
- ~~Hand sanitizers regulated as healthcare antiseptics~~
- Hand sanitizers sold within aerosol cans
- Insect repellents (included in GS-50)
- Leave-on hair conditioner (included in GS-50)
- Lip products (included in GS-50)
- Makeup and bronzers (e.g., foundation, concealer, bronzer, mascara, eyeliner, eye shadow, blush) (included in GS-50)
- Massage oil (included in GS-50)
- Nail polish remover
- Skin care products (e.g., lotions) (included in GS-50)
- Sunless tanning products (included in GS-50)
- Sunscreen (included in GS-50)

Standard for Laundry Care Products, Household Use, GS-48

1. Testing Methods, Microorganisms Annex, Clarification

The current testing requirements for products that contain microorganisms require that manufacturers demonstrate the microbial strains used in their products are susceptible to disinfectants or antimicrobial agents. This testing must be carried out in accordance with the methods noted in the standard, but the strains used within the product itself should undergo testing as opposed to the default strains noted in the test methods. Green Seal has clarified this criterion by adding in new phrases.

ANNEX D – MICROORGANISMS (Normative)

E. Effective Prevention Measures and Treatment. All *microorganisms* shall be demonstrated to be susceptible to the following prevention and treatment measures:

- An *antimicrobial agent*, as demonstrated by testing the microbial strain **in the product** against an acceptable substance (i.e., an EPA general disinfectant, Center for Disease Control low-level disinfectant, or a registered *antimicrobial agent* by Health Canada). **The test method should be modeled on in accordance with the EPA/Office of Pesticide Programs Standard Operating Procedure (SOP) or the AOAC International Use Dilution Method for Testing Disinfectants, SOP Number: MB-05-04, but replace the pathogenic strains specified in these SOPs with the microbial strain(s) in the product.**

Standard for Personal Care Products and Cosmetics, GS-50

1. Manufacturing Sustainability Requirements, Good Manufacturing Practices, Correction

In 2017, Green Seal revised several standards (GS-48, GS-51, GS-52, and GS-53) to remove requirements that manufacturers must meet Good Manufacturing Practices (GMP) regulations as implemented by the US Food and Drug Administration (FDA) in an effort to require adequate quality control procedures.

Although the US FDA's GMP regulations are appropriate for food processing facilities and for pharmaceutical manufacturing sites, they are not relevant or critical to Green Seal's certification objectives for manufacturing processes of cleaning products. Additionally, Green Seal's certification process, including its on-site auditors, have an existing and more relevant method for verifying the implementation of quality control procedures. To harmonize our standards and remove administrative requirements that have been determined to not directly result in intended health and environmental protections, this criterion has been removed from the standard.

4.0 MANUFACTURING SUSTAINABILITY REQUIREMENTS

~~4.1 Good Manufacturing Practices. Good Manufacturing Practices shall be followed including, but not limited to, practices for the building and facility, equipment, personnel, raw materials, production, laboratory, labeling, records, and complaints.~~

ANNEX A – DEFINITIONS (NORMATIVE)

~~Good Manufacturing Practices. Incorporation of quality practices and procedures, such as those included in the FDA's Inspection Operations Manual, to minimize the risk of adulterated or misbranded products.~~

2. Antiperspirants, Spray Packaging, Correction

During the development of the GS-50 standard in 2010, it was understood that the primary functional ingredients in antiperspirants were aluminum-based, e.g., aluminum chloride, aluminum chlorohydrate, and aluminum zirconium salts. Preliminary studies of aluminum, reviewed by Green Seal during the development of this standard, noted a potential risk pathway of dermal or nasal-olfactory absorption and subsequent transport and uptake into the brain with antiperspirant use.¹ The toxicity of this exposure pathway and its potential effects on the brain was uncertain. Titanium dioxide – a common ingredient in cosmetic and personal care products – was also noted to be a possible carcinogen when inhaled.² As a result, antiperspirants and deodorants sold in spray packaging, in which aluminum could be inhaled when sprayed, were not eligible for certification, and products containing titanium dioxide were restricted to packaging types that were not spray pumps or aerosols.

¹ Exley, C. 1998. Does antiperspirant use increase the risk of aluminium-related disease, including Alzheimer's disease? *Mol Med Today*. 4(3):107-109.

² Carbon Black, Titanium Dioxide, and Talc: IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 93. <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Carbon-Black-Titanium-Dioxide-And-Talc-2010>

Since 2010, the availability of antiperspirants not formulated with aluminum or titanium dioxide has increased. The language in the criteria for Pump Spray Packaging has been corrected to create a feasible pathway for antiperspirants and deodorants not formulated with aluminum or titanium dioxide to achieve certification if sold in spray packaging.

5.5 Pump Spray Packaging. *Pump spray packages* are prohibited for *antiperspirants, deodorants, sunless tanning products, and sunscreen products.*

Exemption: *Antiperspirants and deodorants that are not formulated with aluminum compounds or titanium dioxide* may be sold in pump spray packages.*

* CAS Number 13463-67-7

Standard for Laundry Care Products, I&I Use, GS-51

1. Testing Methods, Microorganisms Annex, Clarification

The current testing requirements for products that contain microorganisms require that manufacturers demonstrate the microbial strains used in their products are susceptible to disinfectants or antimicrobial agents. This testing must be carried out in accordance with the methods noted in the standard, but the strains used within the product itself should undergo testing as opposed to the default strains noted in the test methods. Green Seal has clarified this criterion by adding in new phrases.

ANNEX F – MICROORGANISMS (Normative)

E. Effective Prevention Measures and Treatment. All *microorganisms* shall be demonstrated to be susceptible to the following prevention and treatment measures:

- An *antimicrobial agent*, as demonstrated by testing the microbial strain **in the product** against an acceptable substance (i.e., an EPA general disinfectant, Center for Disease Control low-level disinfectant, or a registered *antimicrobial agent* by Health Canada). **The test method should be modeled on in accordance with the EPA/Office of Pesticide Programs Standard Operating Procedure (SOP) or the AOAC International Use Dilution Method for Testing Disinfectants, SOP Number: MB-05-04, but replace the pathogenic strains specified in these SOPs with the microbial strain(s) in the product.**

Standard for Specialty Cleaning Products, Household Use, GS-52

1. Testing Methods, Microorganisms Annex, Clarification

The current testing requirements for products that contain microorganisms require that manufacturers demonstrate the microbial strains used in their products are susceptible to disinfectants or antimicrobial agents. This testing must be carried out in accordance with the methods noted in the standard, but the strains used within the product itself should undergo testing as opposed to the default strains noted in the test methods. Green Seal has clarified this criterion by adding in new phrases.

ANNEX D – MICROORGANISMS (Normative)

E. Effective Prevention Measures and Treatment. All *microorganisms* shall be demonstrated to be susceptible to the following prevention and treatment measures:

- An *antimicrobial agent*, as demonstrated by testing the microbial strain **in the product** against an acceptable substance (i.e., an EPA general disinfectant, Center for Disease Control low-level disinfectant, or a registered *antimicrobial agent* by Health Canada). **The test method should be modeled on ~~in accordance with~~ the EPA/Office of Pesticide Programs Standard Operating Procedure (SOP) or the AOAC International Use Dilution Method for Testing Disinfectants, SOP Number: MB-05-04, but replace the pathogenic strains specified in these SOPs with the microbial strain(s) in the product.**

2. Septic Tank Cleaners, Scope Expansion, Clarification

In the Foreword section of Green Seal standards, there is a statement that product types not explicitly noted as eligible for certification in the standard may be eligible for certification if they are “substantially similar” to products explicitly mentioned in the standard Scope.

“Products, services, or organizations that are substantially similar to those covered by this standard in terms of function and life cycle considerations may be evaluated against the intent of the requirements of this standard, accounting for relevant differences between the intended scope of the Standard and the actual product, service, or organization to be evaluated.”

After a market review, Green Seal has determined that the function and life cycle considerations of septic tank treatment products are substantially similar to products already covered in the scope of the GS-52 standard: septic tank treatment products function to accelerate the breakdown or degradation of organic wastes and/or reduce and eliminate odors. The Scope and Appendix 1 of the standard has been updated to include this product category.

1.0 SCOPE

This standard establishes environmental, health, and social requirements for *specialty cleaning products* intended for *household use*. For the purposes of this standard, this includes, but is not limited to: boat cleaning products; boat wax, polish, sealant, or glaze products; deck, siding, and outdoor furniture cleaning products; dish cleaning products (automatic and hand); furniture polish products; graffiti remover products; metal cleaning products; motor vehicle cleaning products; motor vehicle wax, polish, sealant, or glaze products; motor vehicle dressing products;

*waterless motor vehicle cleaning products; tire and wheel cleaning products; motor vehicle windshield washing fluid; odor remover products; optical lens cleaning products; oven cleaning products; drain additive/cleaning products; septic tank treatment products; chewing gum remover; upholstery cleaning products; antimicrobial pesticide products (e.g., products covered by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)), and other household cleaning products sold for specialty uses . This standard includes specialty cleaning products that contain *enzymes* or *microorganisms*. This standard does not apply to products that contain *enzymes* or *microorganisms* that are sold in *spray packaging*. This standard does not apply to products intended for industrial and institutional use, printing press cleaning products, laundry care products, *air fresheners*, or products that serve as sporicides, sterilizers, or used to sterilize *critical* and *semicritical medical devices* and equipment. See Appendix 1 for an example list of products included in this standard.*

APPENDIX 1 – Scope (Informative)

Household Products Included in GS-52

- Adhesive remover products
- *Boat cleaning products* (e.g., hull or bilge)
- *Boat wax, polish, sealant, or glaze products*
- *Chewing gum remover product*
- *Deck, siding, and outdoor furniture cleaning products*
- *Dish cleaning products* (e.g., *hand dish, automatic dish, rinse agent* products)
- *Antimicrobial pesticide products* (e.g., disinfectant and sanitizer products)
- *Drain additive/cleaning products*
- Dusting aid products
- Electronic cleaning products
- Fruit and vegetable wash products
- *Furniture polish products*
- *Graffiti remover products*
- Grout cleaning products
- Leather cleaning products
- *Metal cleaning products*
- Mold and mildew stain remover products
- *Motor vehicle cleaning products*
- *Motor vehicle dressing products*
- *Motor vehicle windshield washing fluid products*
- *Motor vehicle wax, polish, sealant, or glaze products*
- *Odor remover products*
- *Optical lens cleaning products*
- *Oven cleaning product*
- Pressurized gas dusting products
- Products that contain *enzymes* or *microorganisms* and are packaged in trigger bottles or squeeze bottles
- Rust stain remover products
- **Septic tank treatment products**
- Stone cleaning products
- *Tire and wheel cleaning products*
- *Upholstery cleaning products*
- *Waterless motor vehicle cleaning products*

Standard for Specialty Cleaning Products, I&I Use, GS-53

1. Testing Methods, Microorganisms Annex, Clarification

The current testing requirements for products that contain microorganisms require that manufacturers demonstrate the microbial strains used in their products are susceptible to disinfectants or antimicrobial agents. This testing must be carried out in accordance with the methods noted in the standard, but the strains used within the product itself should undergo testing as opposed to the default strains noted in the test methods. Green Seal has clarified this criterion by adding in new phrases.

ANNEX E – MICROORGANISMS (NORMATIVE)

E. Effective Prevention Measures and Treatment. All *microorganisms* shall be demonstrated to be susceptible to the following prevention and treatment measures:

- An *antimicrobial agent*, as demonstrated by testing the microbial strain **in the product** against an acceptable substance (i.e., an EPA general disinfectant, Center for Disease Control low-level disinfectant, or a registered *antimicrobial agent* by Health Canada). **The test method should be modeled on in accordance with the EPA/Office of Pesticide Programs Standard Operating Procedure (SOP) or the AOAC International Use Dilution Method for Testing Disinfectants, SOP Number: MB-05-04, but replace the pathogenic strains specified in these SOPs with the microbial strain(s) in the product.**

2. Microbial-Based Drain Cleaners, Concentrates and Dosing, Correction

The GS-53 Standard explicitly sets certification requirements for drain cleaning products, as defined in the Standard Scope (Section 1.0): “This standard establishes environmental, health, and social requirements for specialty cleaning products intended for industrial and institutional use. For the purposes of this standard, this includes, but is not limited to... *drain additive/cleaning products*...”

Prior to July 30, 2021, drain additive/cleaning products formulated with microorganisms were required to be concentrated at no less than a 1:16 dilution, or a 6.25% concentration. Based on a review of the existing market, Green Seal has noted this requirement is not a reflection of leadership in this product category. Microbial-based drain cleaners are considered a healthier, green chemistry alternative to conventional cleaning ingredients such as solvents and surfactants that pose health risks including acting as skin irritants and allergens,¹ and reproductive toxins². Due to the lack of conventional cleaning chemicals that often require dilution, microbial-based drain cleaners are mainly sold as “ready-to-use” (RTU).

To ensure that Green Seal sets feasible requirements for these products so they can be both functionally effective and not hazardous to product users, Green Seal has corrected this issue by adding the product category “microbial-based drain cleaning products” to the list of products that are eligible to be certified when sold as RTU products.

3.23 Concentrates and Dosing. The following products may be sold in a ready-to-use form:

¹ Contact allergens and irritants in household washing and cleaning products. <https://doi.org/10.1111/j.1600-0536.2009.01647.x>

² ECHA Classification and Labeling Inventory Database. <https://echa.europa.eu/information-on-chemicals/cl-inventory-database>

- *Adhesive remover products*
- *Antimicrobial pesticide products*
- *Boat wax, polish, sealant or glaze products*
- *Chewing gum remover products*
- *Crème/cream cleansers*
- *Dishwasher cleaning products*
- *Electronic cleaning products*
- *Furniture polish products*
- *Graffiti remover products*
- *Leather cleaning products*
- *Metal cleaning products*
- **Microbial-based drain cleaning products**
- *Motor vehicle dressing products*
- *Motor vehicle wax, polish, sealant, or glaze products for hand detailing*
- *Optical lens cleaning products*
- *Oven cleaning products*
- *Printing press cleaning products*
- *Pressurized gas duster products*
- *Rust stain remover products*
- *Upholstery cleaning products solely labeled as spot or stain removers*
- *Waterless motor vehicle cleaning products*

3. Septic Tank Cleaners, Scope Expansion, Clarification

In the Foreword section of Green Seal standards, there is a statement that product types not explicitly noted as eligible for certification in the standard may be eligible for certification if they are “substantially similar” to products explicitly mentioned in the standard Scope.

“Products, services, or organizations that are substantially similar to those covered by this standard in terms of function and life cycle considerations may be evaluated against the intent of the requirements of this standard, accounting for relevant differences between the intended scope of the Standard and the actual product, service, or organization to be evaluated.”

After a market review, Green Seal has determined that the function and life cycle considerations of septic tank treatment products are substantially similar to products already covered in the scope of the GS-53 standard: septic tank treatment products function to accelerate the breakdown or degradation of organic wastes and/or reduce and eliminate odors. The Scope and Appendix 1 of the standard has been updated to include this product category.

2.0 SCOPE

This standard establishes environmental, health, and social requirements for *specialty cleaning products* intended for *industrial and institutional use*. For the purposes of this standard, this includes, but is not limited to: *boat cleaning products; boat wax, polish, sealant or glaze products; deck, siding, and outdoor furniture cleaning products; dish cleaning products (automatic and hand); furniture polish products; graffiti remover products; metal cleaning products; motor vehicle cleaning products; motor vehicle wax, polish, sealant, or glaze products; motor vehicle dressing products; waterless motor vehicle cleaning products; tire and wheel cleaning products; motor vehicle windshield washing fluid; odor remover products; optical lens cleaning products; oven cleaning products; drain additive/cleaning products; septic tank*

treatment products; *upholstery cleaning products; printing press cleaning products; chewing gum remover products; adhesive remover products; rust stain remover products; dishwasher cleaning products; electronic cleaning products; leather cleaning products; pressurized gas duster products; dusting aid products; antimicrobial pesticide products* (e.g., products covered by the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)) and other *industrial and institutional use* products sold for specialty uses. This standard includes specialty cleaning products that contain *enzymes* or *microorganisms*. This standard does not apply to products that contain *enzymes* or *microorganisms* that are sold in *spray packaging*. This standard does not apply to products intended for household use, laundry care products, *air fresheners*, or products that serve as sporicides, sterilizers, or used to sterilize *critical and semicritical medical devices* and equipment. See Appendix 1 for an example list of products included in this standard.

APPENDIX 1 – Scope (Informative)

Industrial and Institutional Products Included in GS-53

- *Adhesive remover products*
- *Boat cleaning products* (e.g., hull or bilge)
- *Boat wax, polish, sealant, or glaze products*
- *Chewing gum remover product*
- *Deck, siding and outdoor furniture cleaning products*
- *Dish cleaning products* (e.g., *hand dish, automatic dish, rinse agent* products)
- *Antimicrobial pesticide products* (e.g., *disinfectant and sanitizer* products)
- *Drain additive/cleaning products*
- *Dusting aid products*
- *Electronic cleaning products*
- *Fruit and vegetable wash products*
- *Furniture polish products*
- *Graffiti remover products*
- *Grout cleaning products*
- *Leather cleaning product*
- *Metal cleaning products*
- *Mold and mildew stain remover products*
- *Motor vehicle cleaning products*
- *Motor vehicle dressing products*
- *Motor vehicle windshield washing fluid products*
- *Motor vehicle wax, polish, sealant or glaze products*
- *Odor remover products*
- *Optical lens cleaning products*
- *Oven cleaning products*
- *Pressurized gas dusting products*
- *Printing press cleaning products*
- Products that contain *enzymes* or *microorganisms* and are packaged in trigger bottles or squeeze bottles
- *Rust stain remover products*
- **Septic tank treatment products**
- Specialty products containing *microorganisms* (e.g., boat, mold and mildew, oven, etc.)
- Specialty products containing *enzymes* (e.g., boat, mold and mildew, oven, etc.)
- *Stone cleaning products*
- *Tire and wheel cleaning products*

- *Upholstery cleaning product*
- *Waterless motor vehicle cleaning products*