The following Green Seal standards underwent non-substantive changes on the publication date of this report: January 29, 2021.

- GS-11, Edition 3.2, Paints, Coatings, Stains, and Sealers
- 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, and Shower Products
- GS-50, Edition 1.2, Personal Care and Cosmetic Products
- GS-51, Edition, 1.6, Laundry Care Products for Household 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 **strike-through lines** show that text has deleted from a standard.

¹Green Seal Standards Documents Library, [https://greenseal.org/green-seal-standards/library#section26](https://greenseal.org/green-seal-standards/library#section26)
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Standard for Paints, Coatings, Stains, Sealers, GS-11

1. VOC Content Limits, Product Categories, Clarifications

The following clarifications have been included in Appendix 2 for clarity and readability.

<table>
<thead>
<tr>
<th>Coating Category</th>
<th>VOC Limits g/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Coatings</td>
<td>50</td>
</tr>
<tr>
<td>Nonflat Coatings</td>
<td>100</td>
</tr>
<tr>
<td>Nonflat - High Gloss Coatings</td>
<td>150</td>
</tr>
<tr>
<td>Basement Specialty Coatings</td>
<td>400</td>
</tr>
<tr>
<td>Concrete/Masonry Sealers</td>
<td>100</td>
</tr>
<tr>
<td>Fire Resistive Coatings (GS-11: Includes intumescent coatings)</td>
<td>350</td>
</tr>
<tr>
<td>Floor Coatings (GS-11: Floor paints)</td>
<td>100</td>
</tr>
<tr>
<td>Low-Solids Coatings a</td>
<td>120</td>
</tr>
<tr>
<td>Primers, Sealers, and Undercoaters</td>
<td>100</td>
</tr>
<tr>
<td>Roof Coatings</td>
<td>50</td>
</tr>
<tr>
<td>Rust Preventative Coatings (GS-11: Anti-corrosive coatings)</td>
<td>250</td>
</tr>
<tr>
<td>Shellacs, Clear</td>
<td>730</td>
</tr>
<tr>
<td>Shellacs, Opaque</td>
<td>550</td>
</tr>
<tr>
<td>Stains</td>
<td>250</td>
</tr>
<tr>
<td>Wood Coatings (GS-11: Includes sealers and water-proofing sealers labeled for use on wood or metal substrates)</td>
<td>275</td>
</tr>
</tbody>
</table>

*a LOW-SOLIDS COATINGS. As per CARB, the VOC content of Low-Solids Coatings (120 grams or less of solids per liter) is calculated differently, as VOC Actual, and shall meet the VOC limit specified here, rather than the VOC limit specified for its product category.

Standard for Hand Cleaners for Institutional and Industrial Use, GS-41

1. VOC Content, Industrial Hand Cleaners, Correction

The GS-41 Standard requires limits to the content of volatile organic compounds (VOCs) as set by the California Air Resources Board (CARB). This criterion in GS-41 included an out of date reference to CARB VOC limits for industrial heavy duty hand cleaners. This CARB limit has been 1% since 2013 – which is the same limit that Green Seal currently sets for institutional hand cleaners, a product type for which CARB has not yet set VOC content limits. For the reason that both product types – industrial heavy duty hand cleaners and institutional hand cleaners are required to have a maximum of 1% VOCs by weight, the additional call-out box for industrial heavy duty hand cleaners is no longer necessary.

The product category box has been deleted and the text of the criterion has been clarified.

Additionally, the exemption clause for hand sanitizer products has been shifted to the end of this criterion for better readability.

3.8 Volatile Organic Compound (VOC) Content. VOCs include all organic compounds that have a vapor pressure of greater than 0.1 mm mercury at 1 atm pressure and 20º C. “VOC content” means the total weight of VOCs in a product expressed as a percentage of the product weight.

For industrial heavy duty hand cleaners, the VOC content shall not exceed the lower of the following options:
- Current regulatory limits of the Air Resources Board for the State of California (CARB) for its product category.

For institutional hand cleaners, VOCs shall not exceed the lower of the following options:
- 1% by weight.
- The current CARB regulatory limit set by the California Air Resources Board (CARB) for its product category.

The VOC content shall be determined in one of the following ways:
- By summing the percent by weight contribution from all volatile organic ingredients.
- According to the California Air Resources Board Method 310 (or equivalent), modified to include all fragrances and all volatile organic ingredients.

Current CARB regulatory limits for VOCs,

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Effective Date</th>
<th>Limit (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial heavy duty hand cleaners or soap</td>
<td>1/1/2005 (12/31/2013)</td>
<td>8 (1)</td>
</tr>
</tbody>
</table>

Hand sanitizers are exempt from this requirement.
2. Phosphate Prohibition, Clarification

3.4 Prohibited Ingredients. The product shall not contain the following ingredients:
- Inorganic phosphates
- Nitrilotriacetic acid
- Ethylene diaminetetra-acetic acid
- Alkylphenol ethoxylates
- Halogenated organic solvents
- Butoxy-ethanol

3. Annex B, Hand Sanitizer Additional Requirements List, Corrections

Three requirement categories were included Annex B but were unintentionally omitted from the list of Additional Requirements (Section D). The list has been corrected.

Annex B – HAND SANITIZERS (Normative)

D. Additional Health and Environmental Requirements:

i. Acute Toxicity
ii. Carcinogen Releasers
iii. Mutagens and Reproductive Toxins
iv. Mutagen and Reproductive Toxin Releasers
v. Ingredients that Cause Asthma
vi. Skin Corrosion and Serious Eye Damage
vii. Skin Irritation
viii. Skin Sensitization
ix. Ozone Depleting Compounds
x. Bioaccumulating Compounds

4. Annex B, Hand Sanitizer Requirements, Bioaccumulating Compounds

Bioaccumulation was proposed as a requirement for hand sanitizers and published for public comment in 2020 during the hand sanitizer criteria development. The bioaccumulation requirement was unintentionally omitted from the standard and has now been included as a requirement for institutional and industrial hand sanitizer products.

(x) Bioaccumulating Compounds. The product as used shall not contain any ingredients that bioaccumulate or that form degradation products that bioaccumulate. A chemical is considered to bioaccumulate when it has a BCF greater than 100 (or log BCF >2) as determined by ASTM E-1022-94(2007) Standard Guide for Conducting Bioconcentration test with Fishes and Saltwater Bivalve Mollusks or OECD 305 Bioconcentration: Flow-through Fish Test. If the chemical meets the requirement for biodegradability, 3.12, it may be considered to not bioaccumulate. Testing is not required for any ingredient for which sufficient information exists. If no test results are available, a chemical with a log octanol/water partition coefficient log Kow > 3 may be considered to bioaccumulate.
5. Appendix 1, Products Excluded from GS-41, Correction

The term “commercial” is incorrect and has been deleted from Appendix 1.

- Shampoo, conditioner and related shower products for baby, child, adult, commercial, and professional use (GS-44)
Commercial and Institutional Cleaning Services, GS-42

1. Cleaning Operations, Cleaning Cloths, Clarification

Section of Standard: Operations, Cleaning Cloths and Microfiber Cloths (2.3.2)

Green Seal has clarified the headers of Section 2.3.2.

<table>
<thead>
<tr>
<th>2.3.2 Cleaning Cloths and Microfiber Cloths.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.3.2.1</strong> Whenever appropriate,¹ reusable cleaning cloths or microfiber technology shall be used instead of paper products.</td>
</tr>
<tr>
<td><strong>2.3.2.2</strong> Within two hours of use, all cleaning towels, cloths, and materials shall be disposed of, rinsed, or placed in a sealed container.</td>
</tr>
</tbody>
</table>

2. Cleaning Operations, Powered Equipment: Operations, Clarifications

Green Seal has clarified certain phrases for the requirements of this section.

<table>
<thead>
<tr>
<th>2.3.3.2 Vacuum bags or canisters shall be:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- inspected at least every two hours.</td>
</tr>
<tr>
<td>- changed or replaced or emptied when half full or when indicated by a bag sensor.</td>
</tr>
</tbody>
</table>

| 2.3.3.4 Propane-powered equipment may not be used indoors only when the building is unoccupied. The maximum air circulation and exchange shall be provided |

¹ Note: The superscript indicates a clarification.
Standard for Soaps, Cleaners, Hand Sanitizers, and Shower Products, GS-44

1. Correction to Internal References for Exemptions

<table>
<thead>
<tr>
<th>Ingredient-Specific Exemption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol shall be exempt from the carcinogens prohibition (3.2)</td>
</tr>
<tr>
<td>Triethanolamine shall be exempt from the asthmagens prohibition (3.7) (3.6)</td>
</tr>
</tbody>
</table>

2. Correction of Internal Reference to Labeling Requirements

3.15 **Fragrances.** All *fragrance components* shall be disclosed to the certifying body. Any *fragrances* used shall have been produced and handled following the code of practice of the International Fragrance Association. The product shall declare any *fragrances* on the product label in the ingredient line (see 6.2 and 6.5). (see 5.2 and 5.5).
Natural and Biobased Claims, Multi-Standard Corrections

1. Corrections for GS-50, GS-51, GS-53

Multi-Standard, Correction to Criterion for Natural and Biobased Claims
Standards and the criteria listed below have been corrected to include the phrase “excluding water” in the text of the second bullet. Previous editions of these standards correctly included this phrase.

GS-50, Criterion 6.5.
GS-51, Criterion 6.5.

**Natural and Biobased Claims.** Only the following natural and biobased, or related, claims are allowed when the product meets the following criteria:
- “100 percent Natural”, “All Natural”, “100 percent Biobased”, or “All Biobased” shall only contain natural or biobased components, respectively, excluding water, and with no petroleum, silicone, or synthetic components.
- "Natural" or “Biobased” products shall contain 95% natural, naturally-derived, or biobased components, respectively, excluding water.
- Claims on specific product components being “natural” or “biobased” may be permitted if it is a natural or biobased component.

2. GS-52 Standard, Correction to Criterion for Natural and Biobased Claims
The GS-52 Standard, criterion 6.6, has been corrected. The phrase “with no petroleum, silicone, or synthetic components,” is relevant only to the first bullet in this section and was therefore deleted from the second bullet.

**6.6 Natural and Biobased Claims.** Only the following natural and biobased, or related, claims are allowed when the product meets the following criteria:
- “100 percent Natural”, “All Natural”, “100 percent Biobased”, or “All Biobased” shall only contain natural or biobased components, respectively, excluding water, and with no petroleum, silicone, or synthetic components.
- "Natural" or “Biobased” products shall contain 95% natural, naturally-derived, or biobased components, respectively, excluding water, and with no petroleum, silicone, or synthetic components.
- Claims on specific product components being “natural” or “biobased” may be permitted if it is a natural or biobased component.

As corrected, the wording of the criterion for Natural and Biobased Claims is now consistent across GS-48, GS-50, GS-51, GS-52, GS-53. The wording of this criterion in the GS-44 Standard remains inconsistent and may be revised or corrected in the future, as determined appropriate.