Corrections and Clarifications Report

July 2022

The following Green Seal standards underwent non-substantive changes on July 29, 2022.

- GS-37, Edition 7.8, Cleaning Products for Industrial and Institutional Use
- GS-40, Edition 2.5, Floor-Care Products for Industrial and Institutional Use
- GS-48, Edition 1.7, Laundry Care Products for Household Use
- GS-50, Edition 1.3, Personal Care and Cosmetic Products
- GS-51, Edition 1.8, Laundry Care Products for Industrial and Institutional Use
- GS-52, Edition 2.7, Specialty Cleaning Products for Household Use
- GS-53, Edition 2.8, Specialty Cleaning Products 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 do not undergo a public comment process due to their low impact on the standards. Substantive changes, which may raise or lower the bar of health and environmental leadership, are required to undergo Green Seal’s rigorous stakeholder engagement process, including a 30-day public comment period.

Publication Schedule of CCRs
Corrections and Clarifications Reports are released on a quarterly basis on the last Friday of the month (currently, January, April, July, and October). These reports are available on Green Seal’s website.

Edition Numbers of Standards
Although the text of a standard is clarified or corrected, the edition number of a standard (e.g., GS-8 Standard, Edition 5.5) remains the same after a Corrections and Clarifications Report.

Our Stakeholder-Based Process
Although non-substantive changes are not published for public comment, Green Seal remains open to input from our stakeholders on all issues regarding the text of standards. We encourage any interested party or individual to submit feedback on Green Seal standards via Green Seal’s website contact form, email, or phone.

Clarifications
Green Seal periodically identifies problems with the text of a standard. In certain cases, a requirement may be worded in a way that leads to misinterpretations. In these cases, Green Seal clarifies the text of the standard via text deletions or text additions. The intent and reasoning behind clarifications is summarized in Corrections and Clarifications Reports.

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. The background of the error and the explanation for the correction is summarized in Corrections and Clarifications Reports.

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.

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Corrections and Clarifications Report
July 2022

Standard for Cleaning Products, Industrial and Institutional Use, GS-37

1. Inhalation Toxicity, Criteria Number, Correction

During the last issuance of the revised standard in June 2022, the sub-criteria numbers for inhalation toxicity were not updated. This has been corrected.

Updates to the Text

| 3.11 Inhalation Toxicity. The product shall meet either 3.11.1 or 3.11.2. |
| --- | --- |
| 3.11.1 Chronic Inhalation Toxicity. The product as used shall meet the inhalation criteria and as tested according to the method used for the GREenguard Children and Schools Certification for Cleaners and Cleaning Maintenance Products and Systems, which includes office, school, and restroom models (also called the GREenguard Standard Method for Measuring and Evaluating Chemical Emissions from Cleaners and Cleaning Maintenance Systems Using Dynamic Environmental Chambers). |

Final Text

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| 3.11.2 Chamber Testing. A product as used shall meet the inhalation criteria and as tested according to the method used for the GREenguard Children and Schools Certification for Cleaners and Cleaning Maintenance Products and Systems, which includes office, school, and restroom models (also called the GREenguard Standard Method for Measuring and Evaluating Chemical Emissions from Cleaners and Cleaning Maintenance Systems Using Dynamic Environmental Chambers). |

| 3.11.1 Chronic Inhalation Toxicity. The product as used shall not contain ingredients with a vapor pressure above 1 mm mercury (1 atm pressure and 20-25°C) that are classified as producing significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor according to OECD Harmonized Integrated Classification System for Human Health and Environmental Hazards of Chemical Substances and Mixtures. For the purposes of this standard, significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor shall be established by a No-Observed Adverse Effect Level (NOAEL), based on a test duration of 90 days at 6 hours per day; values from other exposure regimes shall be estimated (extrapolated) per the principles of Haber’s rule. In lieu of a NOAEL, the Lowest-Observed Adverse Effect Level (LOAEL) can be used with a ten-fold safety factor (i.e., LOAEL/10). |

| 3.11.2 Chamber Testing. A product as used shall meet the inhalation criteria and as tested according to the method used for the GREenguard Children and Schools Certification for Cleaners and Cleaning Maintenance Products and Systems, which includes office, school, and restroom models (also called the GREenguard Standard Method for Measuring and Evaluating Chemical Emissions from Cleaners and Cleaning Maintenance Systems Using Dynamic Environmental Chambers). |
restroom models (also called the GREENGUARD Standard Method for Measuring and Evaluating Chemical Emissions from Cleaners and Cleaning Maintenance Systems Using Dynamic Environmental Chambers).
Standard for Floor-Care Products, Industrial & Institutional Use, GS-40

1. Skin and Eye Damage, Editorial, Correction

The word ‘studies’ was incorrectly omitted from the criterion for Skin and Eye Damage. This typo has been corrected.

**Updates to Text**

| 3.3  | **Skin and Eye Damage.** The *undiluted product* shall not cause *skin corrosion* or cause *serious eye damage*. *Dispensing-system concentrates* shall be tested as used. For purposes of demonstrating compliance with this requirement, data may be evaluated for each of the product’s *ingredients*. If the *ingredients* at their concentrations in the *undiluted product* are not shown to cause *skin corrosion* or *serious eye damage*, then the product will not be considered to cause *skin corrosion* or *serious eye damage*. Results from peer-reviewed *studies* or standard in vitro or in vivo test methods may be accepted. Testing is not required for any *ingredient* for which sufficient information exists. |

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**Final Text**

| 3.3  | **Skin and Eye Damage.** The *undiluted product* shall not cause *skin corrosion* or cause *serious eye damage*. *Dispensing-system concentrates* shall be tested as used. For purposes of demonstrating compliance with this requirement, data may be evaluated for each of the product’s *ingredients*. If the *ingredients* at their concentrations in the *undiluted product* are not shown to cause *skin corrosion* or *serious eye damage*, then the product will not be considered to cause *skin corrosion* or *serious eye damage*. Results from peer-reviewed *studies* or standard in vitro or in vivo test methods may be accepted. Testing is not required for any *ingredient* for which sufficient information exists. |
Standard for Laundry Care Products, Household Use, GS-48

1. Product Label Requirements, Footnotes, Correction

A footnote reference was incorrectly repeated in the User Information and Product Label Requirements section. Also, the sequential numbering of the footnotes was off by one. The duplicate footnote reference was deleted, and the numbering of the footnotes was updated.

Updates to Text

<table>
<thead>
<tr>
<th>6.0 USER INFORMATION AND PRODUCT LABEL REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1.2.1 Water Hardness Dosing. For products that are used with wash water,¹²³ the product label shall clearly and prominently provide recommended dosing requirements for the expected water hardness levels.</td>
</tr>
<tr>
<td>6.1.3 Use Directions. The product label shall clearly and prominently provide directions for use and any appropriate precautions or recommendations for the use of personal protective equipment.</td>
</tr>
<tr>
<td>6.1.3.1 Cold Water Wash Directions. For products that are used with wash water,¹²³ the product label shall clearly and prominently provide directions for using cold water wash temperatures or lower temperatures when possible; an exception shall be made for antimicrobial pesticide products, which should state the temperature needed for antimicrobial activity.</td>
</tr>
<tr>
<td>6.1.3.2 Full Loads. For products that are used with wash water,¹³ the product label shall clearly and prominently provide the recommendation to run full loads of laundry.¹³¹⁴</td>
</tr>
</tbody>
</table>

¹³ Products that are used with wash water include laundry detergent, softening, bleaching, sour, and laundry prewash products.

¹³¹⁴ If this recommendation is followed, it will reduce the environmental impact from doing laundry.

Final Text

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</table>
6.1.3.2 Full Loads. For products that are used with wash water, the product label shall clearly and prominently provide the recommendation to run full loads of laundry.

13 Products that are used with wash water include laundry detergent, softening, bleaching, sour, and laundry prewash products.

14 If this recommendation is followed, it will reduce the environmental impact from doing laundry.

2. Social Responsibility, Criteria Number, Correction

There were typos in the sub-criteria numbering for the Social Responsibility requirements. This has been corrected.

Updates to the Text

4.1 *Social Responsibility. Documentation shall be provided that the production of the product meets the following social responsibility requirements:

4.1.1 Freedom of Association and Collective Bargaining. Workers shall have the right to join or form trade unions of their own choosing and their right to bargain collectively shall be recognized and respected. An exception shall be made for inmate workers.

4.1.2 Freedom of Labor. There shall not be forced or bonded labor or use of child labor.

4.1.3 Freedom from Discrimination. There shall not be discrimination in terms of race, color, sex, religion, age, disability, gender, marital status, sexual orientation, union membership, political opinion, national extraction, or social origin such that it affects the opportunity or treatment in employment. There shall be no support or tolerance of corporal punishment, physical or verbal coercion, sexual or other harassment, intimidation, or exploitation.

4.1.4 Occupational Health and Safety. A safe and hygienic workplace environment shall be provided with access to potable water. Adequate steps shall be taken to minimize the hazards of the workplace and workers shall receive health and safety training to prevent accidents and injury.

4.1.5 Conditions of Employment. Workers shall work under fair conditions of employment. Wages, working hours and overtime shall meet a minimum the national legal or industry benchmark standard and regular employment shall be provided.

Final Text

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4.1.4 Occupational Health and Safety. A safe and hygienic workplace environment shall be provided with access to potable water. Adequate steps shall be taken to minimize the hazards of the workplace and workers shall receive health and safety training to prevent accidents and injury.

4.1.5 Conditions of Employment. Workers shall work under fair conditions of employment. Wages, working hours and overtime shall meet at a minimum the national legal or industry benchmark standard and regular employment shall be provided.
Standard for Personal Care and Cosmetic Products, GS-50

1. Volatile Organic Compound Content, Criteria Number, Correction

During the last issuance of the revised standard in June 2022, the sub-criteria number for High and Medium Volatility Organic Compound Content was not updated. This has been corrected.

**Updates to the Text**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>3.1.4.2 High and Medium Volatility Organic Compound Content. Antiperspirant and deodorant undiluted products shall meet the CARB Regulation for Reducing Volatile Organic Compound Emissions from Antiperspirants and Deodorants, specifically those regulations pertaining to high and medium VOCs and including the exceptions provided in the regulations.</td>
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</table>
Standard for Laundry Care Products, Industrial and Institutional Use, GS-51

1. Product Label Requirements, Footnotes, Correction

The sequential numbering of the footnotes was off in the User Information and Product Label Requirements section. The numbering of the footnotes was updated.

Updates to the Text

6.0 USER INFORMATION AND PRODUCT LABEL REQUIREMENTS

6.2.2 Dosing Directions. For products that are used with wash water, the product label shall clearly and prominently provide directions for dosing normal loads, small loads or those with light soils, and large loads or those with heavy soils (e.g., state amount of product in common and measurable terms such as milliliters, ounces, teaspoons, pumps, or capfuls).

6.2.2.1 Water Hardness Dosing. For products that are used with wash water, the product label shall clearly and prominently provide recommended dosing requirements for expected water hardness levels.

6.2.3 Use Directions. The product label shall clearly and prominently provide directions for use, and any appropriate precautions or recommendations for the use of personal protective equipment. A product certified from a multi-component system shall include a statement on the label that the manufacturer recommends the product be used with a multi-component system.

6.2.3.1 Cold Water Wash Directions. For products that are used with wash water, the product label shall clearly and prominently provide directions for using cold water wash temperatures or lower temperatures when possible; an exception shall be made for antimicrobial pesticide products, which should state the temperature needed for antimicrobial activity.

6.2.3.2 Full Loads. For products that are used with wash water, the product label shall clearly and prominently provide the recommendation to run full loads of laundry.

Final Text

6.0 USER INFORMATION AND PRODUCT LABEL REQUIREMENTS

6.2.2 Dosing Directions. For products that are used with wash water, the product label shall clearly and prominently provide directions for dosing normal loads, small loads or those with light soils, and large loads or those with heavy soils (e.g., state amount of product in common and measurable terms such as milliliters, ounces, teaspoons, pumps, or capfuls).

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6.2.3 Use Directions. The product label shall clearly and prominently provide directions for use, and any appropriate precautions or recommendations for the use of personal protective equipment. A product certified from a multi-component system shall include a statement on the label that the manufacturer recommends the product be used with a multi-component system.
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For products that are used with wash water, the product label shall clearly and prominently provide directions for using cold water wash temperatures or lower temperatures when possible; an exception shall be made for antimicrobial pesticide products, which should state the temperature needed for antimicrobial activity.

### 6.2.3.2 Full Loads

For products that are used with wash water, the product label shall clearly and prominently provide the recommendation to run full loads of laundry.
Standard for Specialty Cleaning Products, Household Use, GS-52

1. Device-Generated Disinfectants, Antimicrobial Pesticide Products, Clarification

As a policy, Green Seal has certified disinfectant solutions that are device-generated on-site and regulated by the U.S. Environmental Protection Agency that also meet all applicable standard criteria. Language has been added to the standard to clarify that these solutions are within scope of the criterion for antimicrobial pesticide products.

Additionally, in the foreword of Green Seal’s standards, there is language that any certified product must comply with all applicable laws and regulations:

“Any conformity assessment to this standard requires compliance with all applicable laws and regulations for the manufacturing and marketing of the products.”

As a result, repetitive language has been removed from the criteria that states the product must have no pending compliance and enforcement actions.

Updates to the Text

2.3 Antimicrobial Pesticide Products. Any product that makes an antimicrobial, disinfecting, or sanitizing claim shall be a registered antimicrobial pesticide product, or an on-site, device-generated solution with no unresolved efficacy failures and no unresolved compliance or enforcement actions, or a minimum risk pesticide-based product. Minimum risk pesticide-based products shall demonstrate that they meet the efficacy requirements for the target organism in accordance with appropriate FIFRA Efficacy Test Protocols.

Products that are manufactured and sold outside of the US shall demonstrate that they meet appropriate efficacy requirements for the target organism(s).

Final Text

2.3 Antimicrobial Pesticide Products. Any product that makes an antimicrobial, disinfecting, or sanitizing claim shall be a registered antimicrobial pesticide product, or an on-site, device-generated solution, or a minimum risk pesticide-based product. Minimum risk pesticide-based products shall demonstrate that they meet the efficacy requirements for the target organism in accordance with appropriate FIFRA Efficacy Test Protocols.

Products that are manufactured and sold outside of the US shall demonstrate that they meet appropriate efficacy requirements for the target organism(s).

2. Inhalation Toxicity, Criteria Number, Correction

During the last issuance of the revised standard in June 2022, the sub-criteria numbers for inhalation toxicity were not updated. This has been corrected.

Updates to the Text

3.143.1 Chronic Inhalation Toxicity. The *product as used* shall not contain *components* at 0.01% or more with a vapor pressure above 1 mm mercury at 1 atm pressure and 20°C that are classified as producing significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor according to Organization for Economic Co-operation and Development (OECD) Harmonized Integrated Classification System for Human Health and Environmental Hazards of Chemical Substances and Mixtures. For the purposes of this standard, significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor shall be established by a No-Observed Adverse Effect Level (NOAEL), based on a test duration of 90 days at 6 hours per day; values from other exposure regimes shall be estimated (extrapolated) per the principles of Haber’s rule. In lieu of a NOAEL, the Lowest-Observed Adverse Effect Level (LOAEL) can be used with a ten-fold safety factor (i.e., LOAEL/10).

3.143.2 Chamber Testing. A *product as used* shall be tested according to the method used for the GREENGUARD Children and Schools Certification for Cleaners and Cleaning Maintenance Products and Systems (also called the GREENGUARD Standard Method for Measuring and Evaluating Chemical Emissions from Cleaners and Cleaning Maintenance Systems Using Dynamic Environmental Chambers) and meet the inhalation toxicity criteria in the method (noted in the table referencing Green Seal Standard GS-37).

Final Text


3.14.1 Chronic Inhalation Toxicity. The *product as used* shall not contain *components* at 0.01% or more with a vapor pressure above 1 mm mercury at 1 atm pressure and 20°C that are classified as producing significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor according to Organization for Economic Co-operation and Development (OECD) Harmonized Integrated Classification System for Human Health and Environmental Hazards of Chemical Substances and Mixtures. For the purposes of this standard, significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor shall be established by a No-Observed Adverse Effect Level (NOAEL), based on a test duration of 90 days at 6 hours per day; values from other exposure regimes shall be estimated (extrapolated) per the principles of Haber’s rule. In lieu of a NOAEL, the Lowest-Observed Adverse Effect Level (LOAEL) can be used with a ten-fold safety factor (i.e., LOAEL/10).

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Standard for Specialty Cleaning Products, Industrial & Institutional Use, GS-53

1. Device-Generated Disinfectants, Antimicrobial Pesticide Products, Clarification

As a policy, Green Seal has certified disinfectant solutions that are device-generated on-site and regulated by the U.S. Environmental Protection Agency that also meet all applicable standard criteria. Language has been added to the standard to clarify that these solutions are within scope of the criterion for antimicrobial pesticide products.

Additionally, in the foreword of Green Seal’s standards, there is language that any certified product must comply with all applicable laws and regulations:

“Any conformity assessment to this standard requires compliance with all applicable laws and regulations for the manufacturing and marketing of the products.”

As a result, repetitive language has been removed from the criteria that states the product must have no pending compliance and enforcement actions.

Updates to the Text

2.3 Antimicrobial Pesticide Products. Any product that makes an antimicrobial, disinfecting, or sanitizing claim shall be a registered antimicrobial pesticide product, or an on-site, device-generated solution with no unresolved efficacy failures and no unresolved compliance or enforcement actions, or a minimum risk pesticide-based product. Minimum risk pesticide-based products shall demonstrate that they meet the efficacy requirements for the target organism in accordance with appropriate FIFRA Efficacy Test Protocols.

Products that are manufactured and sold outside of the US shall demonstrate that they meet appropriate efficacy requirements for the target organism(s).

Final Text

2.3 Antimicrobial Pesticide Products. Any product that makes an antimicrobial, disinfecting, or sanitizing claim shall be a registered antimicrobial pesticide product, or an on-site, device-generated solution, or a minimum risk pesticide-based product. Minimum risk pesticide-based products shall demonstrate that they meet the efficacy requirements for the target organism in accordance with appropriate FIFRA Efficacy Test Protocols.

Products that are manufactured and sold outside of the US shall demonstrate that they meet appropriate efficacy requirements for the target organism(s).

2. Inhalation Toxicity, Criteria Number, Correction

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Updates to the Text

### 3.143 Chronic Inhalation Toxicity

**The product as used shall not contain components** at 0.01% or more with a vapor pressure above 1 mm mercury at 1 atm pressure and 20° C that are classified as producing significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor according to Organization for Economic Co-operation and Development (OECD) Harmonized Integrated Classification System for Human Health and Environmental Hazards of Chemical Substances and Mixtures. For the purposes of this standard, significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor shall be established by a No-Observed Adverse Effect Level (NOAEL), based on a test duration of 90 days at 6 hours per day; values from other exposure regimes shall be estimated (extrapolated) per the principles of Haber’s rule. In lieu of a NOAEL, the Lowest-Observed Adverse Effect Level (LOAEL) can be used with a ten-fold safety factor (i.e., LOAEL/10).

### 3.14.2 Chamber Testing

**A product as used shall be tested according to the method used for** the GREENGUARD Children and Schools Certification for Cleaners and Cleaning Maintenance Products and Systems (also called the GREENGUARD Standard Method for Measuring and Evaluating Chemical Emissions from Cleaners and Cleaning Maintenance Systems Using Dynamic Environmental Chambers) and meet the inhalation toxicity criteria in the method (noted in the table referencing Green Seal Standard GS-37).

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**Final Text**

### 3.14 *Inhalation Toxicity*

**The product shall meet either 3.14.1 or 3.14.2.**

### 3.14.1 Chronic Inhalation Toxicity

**The product as used shall not contain components** at 0.01% or more with a vapor pressure above 1 mm mercury at 1 atm pressure and 20° C that are classified as producing significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor according to Organization for Economic Co-operation and Development (OECD) Harmonized Integrated Classification System for Human Health and Environmental Hazards of Chemical Substances and Mixtures. For the purposes of this standard, significant toxic effects in mammals from repeated inhalation exposure at or below 1.0 mg/L as a vapor shall be established by a No-Observed Adverse Effect Level (NOAEL), based on a test duration of 90 days at 6 hours per day; values from other exposure regimes shall be estimated (extrapolated) per the principles of Haber’s rule. In lieu of a NOAEL, the Lowest-Observed Adverse Effect Level (LOAEL) can be used with a ten-fold safety factor (i.e., LOAEL/10).

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