GREEN SEAL®

Green Seal is a nonprofit organization whose mission is to transform the economy for a healthier, greener world. Green Seal sets leadership standards that aim to reduce, to the extent technologically and economically feasible, the environmental and health impacts throughout the lifecycle of products and services. The standards may be used for conformity assessment, purchaser specifications, and public education.

Green Seal offers certification of products and services in conformance with its standards. For additional information on Green Seal or any of its programs, contact:

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FOREWORD

Green Seal believes that innovations and breakthroughs in product manufacturing are necessary to transform the economy for a healthier, greener world. Green Seal’s Standard for Product Environmental Innovation establishes a process for evaluating products, comparing them to conventional products of the same function, and verifying that they reduce significant human health and environmental impacts in an innovative way.

Under this standard, Green Seal provides a framework for the certification of environmental innovations. This certification demonstrates that an independent third party has verified the innovative aspect(s) of a product and verified that the innovation results in a significant reduction of human health and environmental impacts compared to products of the same functional class, achieving innovations not previously demonstrated within a product category. Certification neither constitutes the development of a product category standard or benchmark, nor does it require competitors within a product category to use the same innovation strategies in their approach to claiming innovation.

Normative references (e.g., other standards) in this standard intend to refer to the most recent edition of the normative reference.

Edition. This version is the Second Edition.

Disclaimer of Liability. Green Seal®, as the developer of this standard, shall not incur any obligations or liability for any loss or damages, including, without limitation, indirect, consequential, special, or incidental damages arising out of or in connection with the interpretation or adoption of, reliance upon, or any other use of this standard by any party. Green Seal makes no express or implied warranty of merchantability or fitness for a particular purpose, nor any other express or implied warranty with respect to this standard.

Tests may be required by the standard that involve safety considerations. Adequate safeguards for personnel and property should be employed in conducting such tests.
ACRONYMS AND ABBREVIATIONS

ACGIH. American Conference of Governmental Industrial Hygienists
ASTM. ASTM International, a standard setting organization formerly known as the American Society for Testing and Materials
BCF. Bioconcentration Factor
BOD. Biological Oxygen Demand
CARB. California Air Resources Board
CAS. Chemical Abstracts Service
CO₂. Carbon Dioxide
CFR. Code of Federal Regulations
DFG. German Deutsche Forschungsgemeinschaft
DOC. Dissolved Organic Carbon
ECVAM. European Centre for the Validation of Alternative Methods
EPA. United States Environmental Protection Agency
GHS. Globally Harmonized System of Classification and Labeling of Chemicals
ICCVAM. Interagency Coordinating Committee on the Validation of Alternative Methods
IFRA. International Fragrance Association
ISO. International Organization for Standardization
MAK. Maximum Allowable Concentrations
OECD. Organization for Economic Co-operation and Development
SDS. Safety Data Sheet
ThOD. Theoretical Oxygen Demand.
TG. Test Guidance
TLV. Threshold Limit Value
VOC. Volatile Organic Compound
GREEN SEAL® STANDARD FOR ENVIRONMENTAL INNOVATION, GS-20

1.0 SCOPE

This program is intended for commercially available\(^1\) manufactured products with comparable alternatives,\(^2\) having clearly established, published science regarding lifecycle impacts.

Exclusions.
- Services, processes, or proofs of concept.
- Products requiring comparisons for which there is insufficient information.
- Certification based on benefits or conditions typically covered by governmental regulation or authority.

Products for which a Green Seal standard exists shall meet the functional performance, health and environmental, and packaging requirements for that standard.

Words and phrases described in the standard that appear in *italics* have a corresponding definition located in the definition section of the standard, Annex A.

2.0 INNOVATION AND PRODUCT REVIEW

2.1 Product Type and Function. The applicant shall define the product type and functional class.

2.2 Product Lifecycle Impact Review. The applicant shall document the anticipated human health and environmental impacts for each phase of the product category’s lifecycle.\(^3\) The applicant shall note which of those lifecycle impacts are most significant (i.e., greatest in negative effect) and provide a detailed technical summary that supports those findings.

2.3 Environmental Innovation Review. The applicant shall provide the following:

2.3.1 Innovation Statement. A statement that clearly defines the Environmental Innovation of the product through one of the following options:

**Option 1: Improved Design.** State how the product design differs from other products and how this variation results in a reduction of the significant lifecycle impacts. Demonstrate a baseline of 30% reduction of one significant impact or 20% in each of two or more significant impacts.

**Option 2: Improved Function.** Demonstrate an improved functional output of the

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\(^1\) All products shall be commercially available or pending commercial introduction (e.g., earning GS-20 Certification is part of the product launch) at the time of application.

\(^2\) Comparable alternatives are products that provide the same function as the applicant product.

\(^3\) These phases include extraction of resources, manufacturing, distribution, use, reuse or end-of-life management.
product that results in a reduction of the significant human health and environmental impacts, using a baseline of 30% improvement for one performance area, or 20% improvement for each of two or more performance areas.

**Note:** See Section 3.3 for additional requirements to comply with Option 2.

**Option 3: Alternative Method.** Use another method to demonstrate a reduction of the significant lifecycle impacts of the product. Applicant shall achieve a 30% reduction or improvement for one significant impact, or 20% reduction or improvement for each of two or more significant impacts. Alternative methods will be considered on a case-by-case basis.

2.3.2 **Impact Reduction Statement.** A statement that clearly describes how the Environmental Innovation results in a reduction of the significant environmental and human health impact, as established in Section 2.2, Product Lifecycle Impact Analysis.

2.3.3 **Market Analysis.** An analysis that compares the applicant product and Environmental Innovation to the nationally recognized or market-leading products of the same functional class. Provide evidence that the applicant’s product is the first and only sold on the North American market to claim this Environmental Innovation.

2.3.4 **Drawbacks Analysis.** An analysis of the potential for the Environmental Innovation to result in burden shifting, i.e., resulting in any new significant or increased impacts within the lifecycle.

**EVALUATION OF FUNCTIONAL PERFORMANCE AND FITNESS FOR PURPOSE**

Section 3.0 provides the requirements for the evaluation of functional performance. Applicant shall meet the following requirements to demonstrate functional performance:

3.1 **Test Methods.** If available for the product category, test methods shall comply with relevant industry standards, American National Standards, ASTM standards, ISO standards, or other equivalent methodology. Alternatively, if unavailable, another objective, scientifically validated method conducted under controlled and reproducible laboratory conditions may be used, subject to Green Seal approval. Test methodology and results must be documented in sufficient detail for this determination to be made.

3.2 **Test Reports.** Applicant shall submit in-house or independent performance tests to Green Seal. All test reports shall include:

- Test method number and description;
- Name of the product(s) tested (including at least three market leading products designed to achieve the same function);
- Date of the test;
- Any sample preparation;
- Types of test substrates and/or soils if not specified by the method;
Test results;
Laboratory name, address, and contact person.

3.3 **Independent Testing.** Applicants pursuing Option 2, Improved Function in Section 2.3.1 are required to use a third-party independent laboratory to conduct performance tests. Results from in-house laboratory tests will not be accepted.

**ENVIRONMENTAL AND HUMAN HEALTH REQUIREMENTS**

Components at 0.01% or more (by weight), unless specified otherwise, shall meet the relevant requirements, based on the results of Section 2.2: Product Lifecycle Impact Review and based on the product’s expected exposure pathways. Green Seal maintains the discretion to determine which requirements must be addressed and reserves the right to add to or disregard any of the requirements below to appropriately evaluate products on a case-by-case basis. Any variances from the below requirements will be publicly documented.

When there is more than one criterion that applies to a product *component*, the more stringent criterion applies.

3.4 **Disclosure.** All product *components* shall be disclosed to the certification program. For products sold in liquid form, provide the chemical name, the Chemical Abstracts Service (CAS) registry number, and the levels (% by weight) present in the product. For products sold as solid material, provide a comprehensive list of raw materials, assemblies and sub-assemblies, *components* and other crucial items for product manufacturing.

3.5 **Carcinogens, Mutagens, and Reproductive Toxins.** The product shall not contain any *components* that are *carcinogens*, *mutagens*, or *reproductive toxins*. An exemption may be made if the component is necessary for product function and no likely exposure pathway exists.

3.6 **Prohibited Components.** The product shall not contain the following *components*. An exemption may be made if the *component* is necessary for product function and no likely exposure pathway exists. Green Seal maintains the discretion to add relevant, scientifically valid prohibitions on a case-by-case basis.

- 1,2-dichlorobenzene
- 2-butoxyethanol
- Alkylphenol ethoxylates
- Formaldehyde donors
- The heavy metals lead, mercury, cadmium, hexavalent chromium, and antimony in the elemental form or compounds
- o-Phenylphenol
- Neonicotinoid pesticides
- Nitro-musk
- Phthalates
- Polycyclic musks
• Triclosan
• Triphenyl tins and tributyl tins

3.7 Volatile Organic Compounds (VOCs). The VOC content of the *product as used* shall contain no more than the current regulatory limits of the Air Resources Board for the State of California (CARB) for its product category.\(^4\) If no CARB limit exists for the product category, Green Seal will determine the acceptable VOC content.

3.8 Animal Testing. To avoid new animal testing, previous test results will be accepted as evidence of meeting a criterion. When existing data is not available, the preferred methods for new testing include methods that replace, reduce, or refine animal use, particularly those recommended by the Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM) or the European Centre for the Validation of Alternative Methods (ECVAM), unless indicated otherwise. In addition, other non-animal (in-vitro) test results, modeling data, data from structural analogs, and other lines of evidence may be accepted, provided that the methods are peer-reviewed and applicable. Specific in vitro or modeling methods may be noted in the standard, but additional options may be accepted by the certification program. Further, a mixture need not be tested if existing information demonstrates that each of the applicable *components* complies with the criterion.

3.9 Acute Toxicity. The product shall not be toxic to humans when inhaled or ingested. A product is considered toxic if either of the following criteria apply\(^5,6\):

- Oral lethal dose (LD50) < 5,000 mg/kg
- Inhalation lethal concentration (LC50) < 20,000 ppmV at 1 hr

For purposes of demonstrating compliance with this requirement, existing acute toxicity data for each of the product’s *components* may be used.\(^7\)

3.10 Skin and Eye Damage. The product shall not cause skin corrosion or cause serious eye damage.

For purposes of demonstrating compliance with this requirement, data may be evaluated for each of the product’s *components*. If these *components*, 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 vivo or in vitro test methods may also be accepted. Testing is not required for any *component* for which sufficient information

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\(^4\) Instructions for calculating VOC content and methods for determining VOCs can be found in GS-53: Specialty Cleaning Products for Industrial and Institutional Use, Section 3.12. https://www.greenseal.org/gs53.aspx

\(^5\) Products meeting the requirements in 4.6 will not fall into hazard categories 1 through 5 for acute oral toxicity and will not fall into hazard categories 1 through 4 for acute inhalation toxicity under the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS) when the whole product is evaluated using the weighted average approach.

\(^6\) Recognizing the need to protect animal welfare, testing to demonstrate conformance should only be done after consulting with the certification program to ensure that other means of determining/estimating conformance have been exhausted, including existing data, modeling data, data from structural analogs, and other lines of evidence.

exists.

Further, a product is considered to cause skin corrosion or to cause serious eye damage if it has a pH less than or equal to 2.0 or greater than or equal to 11.5, unless data prove otherwise.

3.11 **Asthmagens.** The product shall not contain any components that have been identified as asthmagens.

3.12 **Respiratory Sensitization.** The product shall not contain any components that have been identified as respiratory sensitizers.

3.13 **Skin Sensitization.** The product shall not be a skin sensitizers. For purposes of demonstrating compliance with this requirement, data may be evaluated for each of the product’s components. If these components are not shown to be skin sensitizers, then the product will not be considered to be a skin sensitizers.

3.14 **Skin Absorption.** The undiluted product shall not contain components present at 1% or more in the product that are listed on the American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit value (TLV) list carrying a skin notation or substances that are listed on the German Deutsche Forschungsgemeinschaft (DFG) maximum allowable concentrations (MAK) list with a skin absorption H notation. Further, the product shall not contain components at 0.01% or more in the undiluted product that sum to 1% in the formula that are listed on ACGIH or DFG with the same target organ.

3.15 **Chronic Inhalation Toxicity.** The product as used shall not contain components that are classified as producing significant toxic effects in mammals, with a vapor pressure above 1 mm mercury at 1 atm pressure and 20°C, 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.

3.16 **Combustibility.** The product shall not be combustible. The product or 99% by weight of the product components shall have a flashpoint above 65.5°C (150°F), as tested using either the Cleveland Open Cup Tester (ASTM D92-05a), the Abel Closed-Cup method (ISO 13736), or the Pensky-Martens Closed-Cup method (ISO 2719). Alternatively, the product shall not sustain a flame when tested using ASTM D 4206 Standard Test Method for Sustained Burning of Liquid Mixtures Using the Small Scale Open-Cup Apparatus.

3.17 **Fragrances.** All fragrances used shall be produced and handled following the code of practice of the International Fragrance Association (IFRA).

3.18 **Colorants.** Each colorant shall meet one of the following:
   - U.S. Food and Drug Administration-certified and permitted for ingestion.
   - Be a natural colorant.
• Not have any of the following heavy metals intentionally added: arsenic, cadmium, cobalt, hexavalent chromium, lead, manganese, mercury, nickel, and selenium.

3.19 **Bioaccumulating Compounds.** The product shall not contain any *components* that bioaccumulate or are known to form degradation products that bioaccumulate. A chemical is considered to bioaccumulate when it has a bioconcentration factor (BCF) ≥ 500 (or log Kow ≥4). The preferred source of data is from OECD TG 305 (for BCF). If the chemical meets the requirement for biodegradability, 4.18 herein, it may be considered to not bioaccumulate.

3.20 **Eutrophication.** The product shall not contain phosphorus at more than 0.5% by weight.

3.21 **Aquatic Biodegradability.** Each of the individual organic *components* shall exhibit ready biodegradability in accordance with the OECD definition, except for polymers. Biodegradability shall be measured according to any of the following methods: ISO 7827, 9439, 10707, 10708, 9408, 14593; OECD Methods 301A – F; or OECD 310. Specifically, within a 28-day test, the *component* shall meet one of the following criteria within 10 days of the time when biodegradation first reaches 10%:

- Removal of Dissolved Organic Carbon (DOC) > 70%
- Biochemical Oxygen Demand (BOD) > 60%
- BOD, as % of Theoretical Oxygen Demand (ThOD) > 60%
- CO₂ evolution, as % of theoretical CO₂ > 60%

Per OECD guidance the 10-day window requirement does not apply to structurally-related surfactant homologues.

**Alternative Evaluation Options: Substances that Do Not Exhibit Ready Biodegradability.**

For organic *components* in the *product as used* that do not exhibit ready biodegradability, one of the following options may be acceptable:

1. The manufacturer may demonstrate biodegradability in sewage treatment plants using the Coupled Units Test found in OECD 303A by demonstrating DOC removal > 90%.

2. The manufacturer may demonstrate that the compound has low aquatic toxicity (acute LC50 ≥ 100 mg/L for algae, daphnia, or fish) and exhibits inherent ultimate biodegradability with biodegradation rates above 70% (measured as BOD, DOC, or COD), per ISO test methods 9887 or 9888 or OECD 302A-C.

**Note:** Testing is not required for any *component* for which sufficient information exists concerning its biodegradability, either in peer-reviewed literature or databases. In the absence of experimental data, Quantitative Structure-Activity Relationship data from EPA's BioWin (EpiSuite) models may be considered.
3.22 **Toxicity to Aquatic Life.** The *product as used* shall not be toxic to aquatic life. A product is considered not to toxic to aquatic life if the lowest available and most representative acute LC$_{50}$ data for fish, daphnia, or algae is greater than or equal to 100 mg/L. For purposes of demonstrating compliance with this requirement, data for each of the product’s *components* may be used to calculate a weighted average. The preferred sources of data come from the following appropriate protocols in the International Organization for Standardization (ISO) 7346-2 for fish, OECD Test Guidance (TG) 203 for fish, OECD TG 202 for daphnia, or OECD TG 201 for algae.

3.23 **Recovered Content.** Fiber-based materials shall contain a percentage of recovered content consistent with environmentally preferable products of the same function.

3.24 **Bleaching.** Fiber-based materials used in the product shall not be bleached with chlorine during the manufacturing process.

**PACKAGING REQUIREMENTS**

Green Seal maintains the discretion to determine which requirements must be addressed and reserves the right to add to or disregard any of the requirements below to appropriately evaluate products on a case-by-case basis. Any variances from the below requirements will be publicly documented.

3.25 **Primary and Secondary Packaging.** *Primary and secondary packaging* shall meet the following requirements, based on the packaging material type:

3.25.1 Packaging made from paper or paperboard shall be *recyclable* and made from 100% recovered material.

3.25.2 Packaging made from containerboard (corrugated cardboard) shall be *recyclable* and made from at least 30% recovered material.

3.25.3 Packaging made from plastic shall be *recyclable*, or source-reduced by 20%, or shall contain 25% recovered material content (pre- or post-consumer material).

Where a product’s packaging is below these levels, demonstrate that efforts have been made to use the maximum available pre- or post-consumer material in packaging. An exception shall be made for packaging with an effective take-back program.

3.26 **Plastic Labeling.** Plastic packaging shall be marked with the appropriate Resin Identification Code.

3.27 **Concentrated Product Packaging.** Concentrates are prohibited from being packaged in spray-dispenser bottles, disposable wipes, or other ready-to-use package types.

3.28 **Heavy Metal Restrictions.** The heavy metals lead, mercury, cadmium, and hexavalent chromium shall not be *intentionally introduced*. Further, the sum of the concentration...
levels of these metals shall not exceed 100 ppm; an exception is allowed for refillable packages or packages that would not exceed this maximum level but for the addition of post-consumer material.

3.29 Other Restrictions. Phthalates, bisphenol A, and chlorinated packaging material are prohibited from being intentionally introduced to plastic packaging; an exception is allowed for packages that would not have added phthalates, bisphenol A, or chlorinated packaging material but for the addition of post-consumer material.

CERTIFICATION REQUIREMENTS

3.30 Legal Compliance. The applicant shall provide attestation of compliance with all legal requirements (e.g., laws, regulations, etc.) relevant to the product, and comply with all environmental, labor, and safety legal requirements.

3.31 Site Visit. The applicant shall undergo a site audit of product manufacturing facilities that includes verifying product characteristics and quality manufacturing processes.

3.32 Label Language. The product label shall include English and another language or English and a graphical representation or icons.

3.32.1 Label Dilution or Dosage Directions for Concentrates. For concentrates, the manufacturer’s label shall state clearly and prominently that dilution with water from the unheated tap is recommended, unless tested otherwise to meet product performance requirements, and shall state the recommended level of dilution or dosage (e.g., for products that use manual dilution or dosage, state amount of product in common and measurable terms such as milliliters, ounces, teaspoons, or capfuls.

3.32.2 Label Use and Disposal Directions. For products sold as liquids, the product label shall have explicit disposal, recycling, reuse, or refill instructions, proper and clear directions for use, and appropriate precautions and recommendations for the use of personal protective equipment.

3.32.3 Ingredient Line. For products sold as liquids, the product label shall list the product ingredients using the naming convention of the International Nomenclature of Cosmetic Ingredients (INCI) in order of predominance. Where an INCI name does not exist for an ingredient, alternative nomenclature may be used. Ingredients in concentrations of less than 1% may be listed in any order after those in concentrations of more than 1%. A chemical function or chemical class descriptor may be used to protect trade secret information.

3.32.4 Fragrance and Allergen Labeling. The product label and SDS shall

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8 Alternative nomenclature may include International Union of Pure and Applied Chemistry (IUPAC) name, Chemical Abstract Service (CAS) name, Consumer Specialty Products Association (CSPA) Dictionary name, and or the common chemical name.
declare if a fragrance has been added or if no fragrance has been added. The product label and SDS shall also indicate any allergen components present in the product at 0.01% or more (e.g., “Contains allergen [allergen’s INCI name]”). Where an INCI name does not exist, alternative nomenclature may be used.9

3.33 **Certification Term.** The initial Certification Term shall be 3 years. After the Certification Term, the applicant has the option to undergo Recertification. If re-certification is pursued, the product shall be re-evaluated to ensure that the Environmental Innovation (1) continue to result in the same level of reductions of the significant human health and environmental impacts compared to products in the same functional class, and (2) that the product remains the first and only sold on the North American market to claim this Environmental Innovation. If the review determines that the Environmental Innovation no longer result in the reduction of the significant human health and environmental impacts, or that the Environmental Innovation are now implemented elsewhere in the product category, the applicant will have 12 months to pursue Certification under new requirements, or the Green Seal Certification will be withdrawn.

3.34 **Certification Mark.** The Green Seal® Certification Mark may appear on the product, packaging, secondary documents, and promotional materials, only in conjunction with the certified product. Use of the Mark must be in accordance with Rules Governing the Use of the Green Seal Certification Mark.10

The Green Seal Certification Mark shall not be used in conjunction with any modifying terms, phrases, or graphic images that might mislead consumers as to the extent or nature of the certification.

Green Seal must review all uses of the Certification Mark prior to printing or publishing

3.35 **Use With Other Claims.** The Green Seal Certification Mark shall not appear in conjunction with any human health or environmental claims unless verified and approved in writing by Green Seal.

3.36 **Statement of Basis for Certification.** Wherever the Green Seal Certification Mark appears, it shall be accompanied by a description of the basis for certification. The description shall be in a location, style, and typeface that are easily readable. If online space is limited, a link to the basis of certification may be used. A statement of basis for certification shall be developed for each product. The statement shall be approved in writing by Green Seal, and may be similar to the following example:

“[Name of product] is certified by Green Seal® for Environmental Innovation based on [details on basis for environmental innovation]. GreenSeal.org”

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9 Alternative nomenclature may include International Union of Pure and Applied Chemistry (IUPAC) name, Chemical Abstract Service (CAS) name, Consumer Specialty Products Association (CSPA) Dictionary name, and or the common chemical name.

10 [www.greenseal.org/TrademarkGuidelines](http://www.greenseal.org/TrademarkGuidelines)
ANNEX A (Glossary of Terms)

Note that the defined terms are italicized throughout the standard.

**Asthamagen.** A substance designated as an asthma causing agent by the Association of Occupational and Environmental Clinics (AOEC), which after review by AOEC have met the AOEC sensitization criteria.

**Carcinogen.** A chemical listed as a known, probable, reasonably anticipated, or possible human carcinogen by the International Agency for Research on Cancer (Groups 1, 2A, and 2B), National Toxicology Agency (Groups 1 and 2), EPA Integrated Risk Information System (weight-of-evidence classifications A, B1, B2, C, carcinogenic, likely to be carcinogenic, and suggestive evidence of carcinogenicity or carcinogen potential), or by Occupational Safety and Health Administration (as carcinogens under 29 Code of Federal Regulations (CFR) 1910.1003(a)(1)).

**Colorant.** A product component, such as a dye or pigment, whose only function is to change the product’s color.

**Component.** A constituent that is deliberately added at any level for its continued presence in the final product to provide a specific characteristic, appearance, or quality or a contaminant that was not deliberately added but is present above 0.01% by weight in the product.

**Fragrance.** An additive, often (but not limited to) a multi-component additive, used in a product with the purpose of imparting a scent to the product.

**Intentional Introduction.** The use of substances for their desired or deliberate presence in the primary package for the purpose of providing a specific characteristic or quality. It does not refer to the use of substances as processing aids or the use of an intermediate that imparts certain chemical or physical changes during manufacturing, as long as the substance or intermediate is present in the primary package at concentrations below 100 ppm.

**Mutagen.** A chemical that meets the criteria for Category 1, chemicals known to induce heritable mutations or to be regarded as if they induce heritable mutations in the germ cells of humans, under the GHS.

**Natural Colorant.** A colorant that comes from biological products, forestry or agricultural materials (including plant, animal, and marine materials), or minerals.

**Post-Consumer Material.** Material that would otherwise be destined for solid waste disposal, having completed its intended end-use and product life cycle. Post-consumer material does not include materials and by-products generated from, and commonly reused within, an original manufacturing and fabrication process.

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11 Naturally occurring elements and chlorinated organics that may be present as a result of chlorination of the water supply are not considered intentional components if the concentrations are below the applicable maximum contaminant levels in the National Primary Drinking Water Standards found in 40 CFR Part 141.
**Primary Package.** Package material that physically contains and contacts the product, not including the cap or lid.

**Product As Used.** The most concentrated form of the product that the manufacturer recommends for a product’s intended use.

**Recyclable.** The package can be collected in a substantial majority of communities, separated or recovered from the solid waste stream and used again, or reused in the manufacture or assembly of another package or product through an established recycling program.

**Refillable Package.** A container that is routinely returned to and refilled by the product manufacturer at least five times with the original product held by the package, and demonstrated in practice. For the purpose of this standard, the product manufacturer or the product manufacturer’s agent may refill a package.

**Reproductive Toxin.** A chemical listed as a reproductive toxin (including developmental, female, and male toxins) by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (California Code of Regulations, Title 22, Division 2, Subdivision 1, Chapter 3, Sections 1200, et. Seq., also known as Proposition 65).

**Respiratory Sensitizer.** A substance designated as leading to hypersensitivity of the airways following inhalation of the substance and meeting the classification criteria of Category 1 respiratory sensitization (H334) in accordance with the GHS.

**Secondary Packaging.** Packaging used to contain primary package/s and typically used for merchandizing. This does not include case or shipping packaging or the primary package.

**Serious Eye Damage.** The production of tissue damage in the eye, or serious physical decay of vision, following application of a test substance to the anterior surface of the eye, which is not fully reversible within 21 days of application. Substances identified under Category 1 for Serious Eye Damage/Eye Irritation (H318) under the GHS are also considered to cause serious eye damage.

**Skin Corrosion.** The production of irreversible damage to the skin, namely visible necrosis through the epidermis and into the dermis, following the application of a test substance for up to 4 hours. Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discoloration due to blanching of the skin, complete areas of alopecia, and scars. Substances designated as Category 1A, 1B or 1C for Skin Corrosion/Irritation (H314) under the GHS are also considered to cause skin corrosion.

**Skin Sensitizer.** A substance that will lead to an allergic response following skin contact.

**Undiluted Product.** The most concentrated form of the product produced by the manufacturer for transport outside its facility.