GS-20

GREEN SEAL® STANDARD FOR
ENVIRONMENTAL INNOVATION

EDITION 2.1

April 30, 2021

Green Seal, Inc. • 1001 Connecticut Ave. NW, Ste 827 • Washington, DC USA 20036-5525
(202) 872-6400 • FAX (202) 872-4324 • www.greenseal.org

GREEN SEAL®

Green Seal is a nonprofit organization whose mission is to use science-based programs to empower consumers, purchasers, and companies to create a more sustainable world. Green Seal sets leadership standards that aim to reduce, to the extent technologically and economically feasible, the environmental, health, and social impacts throughout the life-cycle of products, services, and companies. The standards may be used for conformity assessment, purchaser specifications, and public education.

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

Green Seal
1001 Connecticut Avenue, NW, Suite 827
Washington, DC 20036-5525
(202) 872-6400 • FAX (202) 872-4324
greenseal@greenseal.org
greenseal.org

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FOREWORD

Edition. Edition 2.1 was issued on April 30, 2021. It replaces Edition 2.0 from April 1, 2019. Corrections and/or clarifications of this edition were also made on April 30, 2021. Information on changes made to this standard can be found on Green Seal's website. [1]

General. Green Seal believes that product manufacturing breakthroughs in performance, health and environmental safety transform the economy to better serve people and the planet. 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 development of criteria, with resulting criteria as the basis for certification of environmental innovations. This certification demonstrates that an independent third party has verified a product contains an innovative aspect resulting in a significant reduction of human health and environmental impacts compared to products of the same functional class and not previously demonstrated within the product category. The criteria documents that are the result of the Green Seal Environmental Innovation standard (GS-20) are not designed to function as a product category standard or industry-wide sustainability benchmark. Applicants within a product category are neither required to nor eligible to certify against the same innovation as one already verified through the framework within this standard.

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

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.

[1] Library of Standards Documents, www.greenseal.org/green-seal-standards/library#section7

ACRONYMS AND ABBREVIATIONS

ACGIH. American Conference of Governmental Industrial Hygienists
ASTM. ASTM International.
BCF. Bioconcentration Factor
BOD. Biochemical Oxygen Demand
CARB. Air Resources Board for the State of California
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 for the Classification and Labelling of Chemicals
ICCVAM. Interagency Coordinating Committee on the Validation of Alternative Methods
IFRA. International Fragrance Association
INCI. International Nomenclature of Cosmetic Ingredients.
ISO. International Organization for Standardization.
MAK. Maximum Allowable Concentrations
OECD. Organisation 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.

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1.0 ELIGIBILITY

All eligibility requirements shall be met in order for a manufacturer to register an applicant product under this standard.

Commercially Available. The product shall be commercially available.

Comparable Alternatives. There must be products that provide the same function as the applicant product in order to make comparisons.

Legal Compliance. Manufacturer shall not be in violation of any applicable environmental regulations or laws nor any applicable regulations under the authority of the U.S. Federal Trade Commission, U.S. Food and Drug Administration, or the U.S. Environmental Protection Agency (or equivalent if based outside the United States).

Established Lifecycle Impacts. Studies on the environmental and/or health impacts of the raw material extraction, manufacturing, transportation, use, and disposal of the applicant product, must be readily available. Green Seal reserves the right to require studies conducted by independent authorities.

Compliance with Existing Green Seal Standards. Products for which a Green Seal standard exists shall be certified under the requirements for that standard before attempting certification under GS-20, except when Green Seal determines the product innovation demonstrates impact reduction above the applicable standard and is the first of its kind in the North American market.

Exclusions. This standard does not cover services, processes, proofs of concept, or products for which there is insufficient technical, lifecycle, or market information.

2.0 PRODUCT LIFECYCLE IMPACT REVIEW

Citing authoritative sources, applicant shall submit statements that define all possible, anticipated, or known environmental and health impacts for each phase in the product lifecycle, (i.e., raw material acquisition, production, use, end-of-life, and disposal), in alignment with the guidelines specified in ISO 14040.

3.0 ENVIRONMENTAL INNOVATION REVIEW

The applicant shall demonstrate that a product is environmentally innovative via the following process: the applicant shall provide evidence demonstrating that a specific new approach to the product results in reductions of significant health or environmental impacts with at least a 30%

reduction of one or 20% in each of two or more significant environmental or human health impacts, as identified in Section 2.0, as compared to available alternatives.

All innovations considered for certification must meet the following requirements.

3.1 Product Differentiation. The innovation shall distinguish the applicant product from products that provide the same function and are available on the US market, and applicants must disclose in the Final Criteria Document how the innovation is differentiated.

3.2 Reduces Impacts. The innovation shall reduce significant environmental and human health impacts compared to products that provide the same function, as established in the Product Lifecycle Impact Review (Section 2.0, herein).

3.3 First to Market. The product shall be the first within its functional class sold on the North American market to demonstrate this innovation.

3.4 Mitigates Burden Shifting. As needed, the applicant shall implement mitigation requirements, as determined by Green Seal, to account for *burden shifting* that results from the innovation.

4.0 EVALUATION OF FUNCTIONAL PERFORMANCE AND FITNESS FOR PURPOSE

Applicant shall demonstrate that the product functions as well as or better than at least one nationally recognized or market-leading *benchmark product* of its type. The *benchmark product* shall be approved by Green Seal.

4.1 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.

4.2 Independent Testing. Green Seal reserves the right to require third-party testing by an *independent laboratory* as needed, and in the following cases:

Public records from the last five years exist that demonstrate legal misconduct regulated by institutions such as the U.S. Federal Trade Commission, U.S. Food and Drug Administration, or environmental regulations reported by the U.S. Environmental Protection Agency, or is not in good standing according to groups such as Better Business Bureau, Consumer Reports, and Truth in Advertising.

5.0 HUMAN HEALTH AND ENVIRONMENTAL REQUIREMENTS

Green Seal maintains the discretion to evaluate applications and products on a case-by-case basis and to add to or disregard any of the requirements as appropriate. Any variances from the requirements in this section granted to an applicant—e.g., for a hazardous functional ingredient with no available alternative or substitute—will be publicly documented and technically justified.

Green Seal uses the following factors to determine the level of disclosure required (i.e., to comply with Section 5.1), and which subsequent requirements are applicable to the product (i.e., Section 5.2 – 5.21):

- Product Form (e.g., Gas, Aerosol, Water-Based Solution, Nonaqueous Liquid or Solution, Paste, Gel, Powder, Solid, Assembly of Parts, Some Combination of the Above, etc.)
- Direct Human *Exposure Pathway* (e.g., Skin Absorption, Inhalation, Ingestion)
- Environmental Releases (e.g., into Air, Water, Wastewater, Land, Landfill)

The following Environmental and Human Health requirements apply when *possible exposure pathways* exist for the whole product or any product *component*(s). The requirements are designed to prevent human exposure to and environmental releases of hazardous chemicals during product use and disposal lifecycle stages, through regular handling and use.

Unless specified otherwise, *components* at 0.01% or more (by weight) shall meet the requirements below.

When there is more than one criterion that applies to a product *component*, the more stringent criterion applies, unless otherwise determined by Green Seal.

Electronic *components* of products shall comply with appropriate environmental standards available for the product category.

5.1 Disclosure. All relevant product *components* shall be disclosed to the certification program. For example, 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 list of chemical *components* and preassembled parts.

5.2 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 critical for product function.

5.3 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-musks
- Phthalates
- Polycyclic musks
- Triclosan
- Triphenyl tins and tributyl tins

5.4 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. If no CARB limit exists for the product category, Green Seal will determine the acceptable VOC content.

5.5 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.

5.6 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:

- 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.

5.7 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 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.

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

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

5.10 Skin Sensitization. The product shall not be a *skin sensitizer*. 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 sensitizer*.

5.11 Skin Absorption. The *undiluted product* shall not contain *component*s 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.

5.12 Chronic Inhalation Toxicity. The *product as used* shall not contain *components* that are classified as producing significant toxic effects in mammals via inhalation, with a possible inhalation *exposure pathway* e.g., with 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.

5.13 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.

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

5.15 Colorants. Each *colorant* shall meet one of the following:

- Be 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.

5.16 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, Section 5.18 herein, it may be considered to not bioaccumulate.

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

5.18 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:

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

OR

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.

5.19 Toxicity to Aquatic Life. The *product as used* shall not be toxic to aquatic life. A product is considered not toxic to aquatic life if the lowest available and most representative acute LC50 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, OEDC Test Guidance (TG) 203 for fish, OECD TG 202 for daphnia, or OECD TG 201 for algae.

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

5.21 Product-Specific Requirements. Green Seal reserves the right to include requirements for applicants in addition to Section 5.1 – 5.20 to effectively address significant environmental or human health lifecycle impacts within a product category.

6.0 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.

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

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

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

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

6.2 Resin Identification Code. Plastic packaging shall be marked with the appropriate Resin Identification Code.

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

6.4 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.*

6.5 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*.

7.0 PRODUCT LABEL REQUIREMENTS

7.1 Labeling Requirements for Products Sold as Liquids.

7.1.1 Label Language. The use instructions shall be in English and another language or English and a graphical representation or icons.

7.1.2 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.

7.1.3 Label Use and Disposal Directions. 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.

7.2 Ingredient Line. 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.

7.3 Fragrance Labeling. The product label and SDS shall declare if a *fragrance* has been added or if no *fragrance* has been added. If applicable, liquid products with no *fragrance* added shall state that no *fragrance* has been added.

Note: Solid products with no *fragrance* added are exempt from this requirement.

7.4 Allergen Labeling. The product label and SDS shall 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.

8.0 TRADEMARK USE REQUIREMENTS

8.1 Trademark Use. Any use of the Green Seal® Certification Mark or Green Seal name, e.g., on the product, product label, packaging, secondary documents, or promotional materials, must be in accordance with Green Seal's Trademark Use Guidelines.[2]

8.2 Misleading Claims. 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.

[2] www.greenseal.org/trademark-use-guidelines

ANNEX A – DEFINITIONS (Normative)

Note that the defined terms are italicized throughout the standard

Asthmagen. A substance designated as an *asthma*-causing agent as specifically listed by Chemical Abstracts Service (CAS) number by the Association of Occupational and Environmental Clinics (AOEC), which after review by AOEC has met the AOEC sensitization criteria (i.e., A with Rs or Rrs), or if classified as a *respiratory sensitizer*, and with a probable/plausible route of inhalation exposure.

Benchmark Product. A product used for comparison in performance testing; for the purposes of this standard either a *reference product* could be used, or else a national market-leading product, typically selected from the top three or four selling brands or companies for its category from nation-wide data.

Burden Shifting. A concept within product lifecycle review frameworks that defines an unintentional consequence of a change in the system that results in a reduction in one impact category and a significant increase in another impact category, e, g., carbon emissions.

Carcinogen. A substance listed as a known, probable, reasonably anticipated, or possible human *carcinogen* by any of the following agencies or programs: International Agency for Research on Cancer (Groups 1, 2A, and 2B); National Toxicology Program (Groups 1 and 2); EPA Integrated Risk Information System (weight-of-evidence classifications A, B1, B2, C, carcinogenic, known/likely human carcinogen, likely to be carcinogenic to humans, and suggestive evidence of carcinogenicity or carcinogen potential); Occupational Safety Health Administration (as *carcinogens* under 29 Code of Federal Regulations (CFR) 1910.1003(a)(1)); or under the GHS (hazard categories 1 (H350, may cause cancer) and 2 (H351, suspected of causing cancer)).

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 in the product at least at 0.01% by weight.

Exposure Pathway. The way in which a person can be exposed to a hazardous substance. A complete *exposure pathway* includes (1) the source of chemical and mechanism for release, (2) the exposure point, (3) the transport medium (i.e., from source to exposure point, if different), and (4) the exposure route (e.g., ingestion, inhalation, absorption, etc.).

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

Independent Laboratory. A laboratory that (1) has been recognized by a laboratory accrediting organization to test and evaluate products to a related product standard, and (2) is free from commercial, financial, and other pressures that may influence the testing and evaluation process.

Intentionally Introduced. 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.

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 substance 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*, cap, or lid.

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 classified as 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 classified 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. Identified under Category 1 for skin sensitization (H317) under the GHS.

Source-Reduced Package. A *primary package* that has at least 20% less material (by weight) compared to containers commonly used for that product type.

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