



EWG VERIFIED™: Cleaning Products Criteria



Overview

EWG scientists and researchers have developed strict standards to be met by makers of cleaning products that bear the EWG VERIFIED™ mark. The mark shows consumers that a product meets our strictest criteria both for the ingredients it contains and how those ingredients are disclosed to customers. To earn the mark, products must meet each of our health and transparency standards. Those standards are detailed in the pages that follow, but here is a general summary.

First, to be considered for the mark, products must fall into a category we have approved for licensing. They must also score an A or a B in EWG's Guide to Healthy Cleaning.

Next, cleaning products cannot contain any ingredients on EWG's "Unacceptable" list of ingredients with health, ecotoxicity or contamination concerns. They also cannot contain any ingredients on our "Restricted" list without first fully substantiating that the appropriate conditions have been met.

Products that earn the mark must:

- i. Be formulated to minimize the potential for harm to people and the environment.
- ii. Disclose all intentionally added ingredients, including those used in fragrance.
- iii. Disclose all fragrance allergens and nanomaterials.
- iv. Meet air quality standards.
- v. Pass microbial challenge tests to ensure they will be shelf stable for an appropriate period of time.

Manufacturers must:

- i. Disclose results of efficacy testing.
- ii. Follow standard ingredient naming guidelines.
- iii. Develop and follow best manufacturing practices.
- iv. Commit to submitting all information on potential substantial product hazards to the Consumer Product Safety Commission, or CPSC (or to the Environmental Protection Agency if the product is a registered, or conditionally registered, disinfectant), and to EWG.

In addition, manufacturers must agree to these stipulations:

- i. EWG has the right to perform random product testing to ensure that products meet the provisions in this document.
- ii. Licensed products will be added to EWG's Guide to Healthy Cleaning.
- iii. EWG's Guide to Healthy Cleaning is dynamic, and the scoring system may change.
- iv. EWG's "Unacceptable" and "Restricted" lists for ingredients in cleaning products may be reviewed annually and updated as needed, with a phase-in period to allow companies to comply with updates required to maintain use of the EWG VERIFIED mark.
- v. EWG has the right to approve of the use of the EWG VERIFIED mark on licensed products.

Detailed Criteria for EWG VERIFIED: Cleaning Products

To be eligible to receive the EWG VERIFIED mark, products must meet the following health and transparency criteria:

1) Products must fall under one of the EWG-approved product categories.

EWG will license cleaning products that fall within one of the following categories only:

| | |
|--|---|
| All-purpose and multisurface cleaner | Hard water stain and mineral remover |
| Anti-static and wrinkle remover | Jewelry cleaner |
| Baby bottle detergent, soap and cleaner | Kitchen cleaner |
| Barbecue and grill cleaner | Laundry additive |
| Bathroom cleaner | Laundry detergent |
| Bleach | Laundry detergent, for delicates and hand washing |
| Carpet cleaner | Laundry stain remover |
| Carpet stain treatment | Leather cleaner |
| Counter and surfaces cleaner | Leather conditioner |
| Deck and patio cleaner | Metal cleaner |
| Degreaser | Mold and mildew remover |
| Dishwasher cleaner | Odor reducer |
| Dishwasher detergent | Oven cleaner |
| Dishwasher rinse aid | Shower cleaner |
| Disinfectant cleaner or sanitizer | Soap-scum remover |
| Drain opener and clog remover | Stain remover, for carpets, fabric and upholstery |
| Fabric softener | Starch treatment |
| Fabric and upholstery cleaner | Stove top cleaner |
| Fabric and upholstery stain prevention and treatment | Toilet bowl cleaner |
| Floor cleaner | Toy, highchair and surface cleaner |
| Floor wax and polish | Tub, tile and sink cleaner |
| Furniture duster | Washing machine cleaner |
| Glass and window cleaner | Wood cleaner, for floors and furniture |
| Grout cleaner | Wood wax and polish, for floors and furniture |
| Hand dishwashing detergent and soap | |



EWG will not license products in the following categories:

Air fresheners
Automobile products
Candles
Continuous- or timed-release odor reducers (including melts, plug-ins, solid countertop or small-spaces units)
Disinfectant or sanitizing aerosol sprays
Disinfectant or sanitizing wipes
Industrial products
Liquid dishwashing pods or packets
Liquid laundry pods or packets
Toilet deodorizer
Product types not eligible for inclusion in the Guide to Healthy Cleaners
(for more details, see ewg.org/guides/cleaners/content/methodology)

2) Products must score an A or B in EWG's Guide to Healthy Cleaning.

EWG will license only products that score As or Bs in **EWG's Guide to Healthy Cleaning**. Products rated in the Guide are scored on an A to F scale using a comprehensive weight of evidence evaluation of ingredient hazards and ingredient disclosure.

3) Products cannot contain any ingredients on EWG's "Unacceptable" list.

EWG's "Unacceptable" list of ingredients for cleaning products includes:

- i. Certain ingredients with health, ecotoxicity and/or contamination issues. These include, but are not limited to, ingredients that score an F in EWG's Guide to Healthy Cleaning database; and
- ii. Substances that fall within any of the following categories based on scientific safety evaluations (with specified, limited exceptions):
 - a. Chemicals associated with an increased risk of cancer, including known, probable and possible carcinogens and genotoxic substances designated by:
 - State of California (as listed on the Proposition 65 registry).
 - International Agency for Research on Cancer.
 - National Toxicology Program's Report on Carcinogens.
 - EPA's IRIS program.
 - Globally Harmonized System of Classification and Labeling of Chemicals, or GHS.
 - b. Chemicals classified as reproductive toxicants by:
 - State of California (as listed on the Proposition 65 registry).
 - EU (substances classified as Category 1 endocrine disruptors).
 - GHS.

- c. Chemicals that present acute, dermal, respiratory and/or neurological toxicity.
- d. Substances designated as sensitizing asthmagens by the Association of Occupational and Environmental Clinics, with the exception of enzymes.
- e. Substances that do not pass established aquatic toxicology guidelines, such as those identified in the European Detergent Ingredient Database or recognized by authoritative bodies as persistent, bio-accumulative or inherently toxic to non-human organisms.
- f. Microplastics, which are defined as insoluble plastic particles smaller than 5 mm.
- g. Colorants not approved by the Food and Drug Administration, or FDA.
- h. Cosmetic ingredients banned by the FDA, Health Canada or the European Commission.

4) Products cannot contain any ingredients on EWG's "Restricted" list without adequate substantiation.

EWG's "Restricted" list of ingredients includes substances classified as hazardous or persistent by national and international governments, authoritative bodies and certain cosmetics and fragrance industry institutions. Note that the EWG "Restricted" list includes only restrictions that, in EWG's assessment, are relevant to the ingredient's use in cleaning products. Should the guidance of these bodies differ, EWG shall use the most health protective.

The restrictions include, but are not limited to, acceptable product-use categories, concentration limits, contamination restrictions and EWG maximum-use concentrations based on hazard classifications as established by the following authoritative bodies, organizations and frameworks:

- i. GHS.
- ii. International Fragrance Association.
- iii. FDA.
- iv. EU (as listed in the European Commission CosIng database).
- v. Health Canada.
- vi. Japan's Ministry of Health, Labour and Welfare.
- vii. Personal Care Products Council's Cosmetics Ingredient Review.

In lieu of established restrictions for ingredients as used in cleaning products, EWG will apply cosmetic restrictions, whenever relevant, as follows:

- i. Cosmetics restrictions defining contamination concerns apply to all product categories.
- ii. Concentration limits for ingredients in rinse-off products apply to product categories where prolonged dermal contact occurs (i.e., hand dishwashing soaps and hand wash laundry detergents).



5) Products must be formulated to minimize the potential for harm to humans and the environment.

EWG will license only products that are not acutely toxic, sensitizing or irritating. EWG sets strict limits on the potential contamination of the final product and requires that the use of non-biodegradable polymers and plastics not exceed a certain percentage of the total formulation. The final product must meet these criteria:

- i. It must not cause acute harm and, as such, should have a calculated average LD50 greater than 5000 mg/kg (as specified by GHS mixtures).
- ii. It must have a pH within the range 2.0–11.5 as sold, except for liquid hand dishwashing soaps and hand laundry detergents, which must have a pH within the range 3.0–9.5.
- iii. The concentration of each sensitizing ingredient, based on GHS classification and labeling, must be limited to 0.1 percent of the final product formulation.
- iv. Persistent chemicals, i.e., those with a half-life of more than 60 days, and/or listed as persistent in the European Detergent Ingredients Database, must be limited to 2 percent of the product formulation.
- v. The fragrance component of a product must not exceed 1 percent of the final formulation.
- vi. Powdered enzymes must be encapsulated, with a minimum diameter of 0.15 mm.
- vii. Concentrated products must meet the criteria as sold. EWG will not license concentrated products in ready-to-use containers.

Product manufacturers must follow best practices for reducing product contamination. This includes, but is not limited to, ensuring ingredient purity and verifying that suppliers are not using ingredients of concern in the production, preparation or preservation of ingredient mixtures. Manufacturers must also certify that the final product does not contain, or is not expected to contain, any of the contaminants, or “nonfunctional constituent[s]” listed in California’s Cleaning Product Right to Know Act of 2017 above reportable levels. The “nonfunctional constituent[s]” and their reportable levels are identified in Appendix III.

6) Products must disclose all intentionally added ingredients, including those used in fragrance. If the product includes non-chemical materials or substrates, such as wipes, that material must also be disclosed.

EWG will license only those products that disclose their ingredients to the public. This provision includes, but is not limited to, complete disclosure of all specific substances within chemical classes (e.g., “alcohol ethoxylates”) and functional groups (e.g., “surfactants,” “cleaning agents,” “preservative(s)” and “dye(s)”/“colorant(s)”). An ingredient is “any substance used in the preparation of the product that is still present in the final commercial product.” Products that include non-chemical materials or substrates, such as wipes, must include that material in the ingredient list.

All intentionally added ingredients in a product’s fragrance mixture must be disclosed to EWG and publicly disclosed down to 0.01 percent. In cases in which a product’s fragrance mixture

is five ingredients or fewer, the company must list all the fragrance ingredients on the product package. If the fragrance mixture comprises more than five ingredients, the company must include, on the product’s package, either 1) a disclosed fragrance ingredient list down to 0.01 percent, or 2) the term “fragrance” followed by an asterisk, referring to a note listing the first five ingredients in the fragrance mixture (based on concentration) and instructions about where to find the disclosed list of ingredients, directly beneath the ingredient list (see example below for details on placement and wording). The company must include the disclosed ingredient list, including fragrance ingredients down to 0.01 percent, in EWG’s Guide to Healthy Cleaners and on the relevant product webpage on the company’s website.

Example of a product ingredient list:

*Ingredients: Water, Hydrogen Peroxide, Fragrance.**

** Fragrance ingredients include: Citrus Paradisi (Grapefruit) Extract, Citrus Limon (Lemon) Extract, Lavandula Angustifolia (Lavender) Extract, Camellia Sinensis (Green Tea) Extract, Mentha Piperita (Peppermint) Leaf Extract, and others. (See full fragrance ingredient list on company website.)*

“Intentionally added ingredients” are defined as substances that manufacturers have intentionally added to their formulation that have a functional or technical effect in the product. This does not include components of intentionally added fragrance ingredients. For example, if an essential oil is added to the formulation, the essential oil, not the specific components of that essential oil, should be disclosed as an ingredient (unless those components must be disclosed based on Criterion 7).

To allow companies to protect its confidential business information about the product and fragrance formulation, EWG does not require disclosure of the weight or amount of an intentionally added ingredient outside of certifications necessary to satisfy concentration restrictions.

Note that EWG reserves the right to perform random product testing, including through qualified third-party testing services, to ensure that products fully disclose all ingredients on the label.

7) Products must disclose all fragrance allergens and nanomaterials.

As with the EU requirement for cosmetics companies, EWG requires cleaning product manufacturers to indicate the presence of any of 26 fragrance allergens in the list of ingredients when they are present above a given concentration, regardless of whether they were added directly as an ingredient or are present as a component of a fragrance ingredient. Due to increased exposure concerns, allergens in liquid hand dishwashing soap and hand laundry detergent will require disclosure at the 0.001 percent level. All other products require allergen disclosure at the 0.01 percent level. The allergens and their Chemical Abstract Service, or CAS, numbers are attached in Appendix IV.

EWG requires that companies list all fragrance allergens meeting the above criteria at the end of the ingredient list on a product’s packaging.

In addition, EWG requires manufacturers to identify the full list of known and probable contact allergens present in a product, as recommended by the EU Scientific Committee on Consumer Safety. This extended list (identified in Appendix V) should be disclosed on a product’s website when the concentration exceeds 0.001 percent for hand dishwashing liquid and hand laundry detergents, and 0.01 percent for all other products.



Please note that whenever EU requirements for labeling fragrance allergens are updated, EWG's licensing criteria will be updated accordingly. Companies will be given 18 months to comply with any such changes.

EWG requires that all licensed products follow the European Union 2009 labeling guidelines for nanomaterials in cosmetics. EWG uses the EU's 2011 definition:

'Nanomaterial' means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 percent or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm-100 nm.

This criterion requires manufacturers using ingredients that meet the definition of nanomaterials (as outlined above) to identify these ingredients on a product's packaging. The ingredient name must be followed by the word "nano" in parentheses.

For more information on the EU's guideline for nanomaterials in cosmetics products, see: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:342:0059:0209:en:PDF>.

8) Products must meet EWG's air quality standards.

- **Volatile Organic Compound restrictions**

EWG will license only products that meet volatile organic compound, or VOC, concentration limits. EWG's VOC restrictions are based on **California's Air Resources Board, or CARB, Consumer Products Regulations** (<https://www.arb.ca.gov/consprod/regs/regs.htm>), with a few modifications to ensure greater health protection. The CARB VOC category limits are shown in Appendix VI. For the purpose of these restrictions, the product category is determined by following the CARB regulations and, for products that can be categorized in two or more categories, the more stringent limit will apply. Unlike the CARB limit, the EWG VOC limits include fragrance compounds in the overall assessment and do not exempt low vapor pressure VOCs (as defined in 17 CCR § 94508) or other exempted compounds from the total VOC concentration.

For product categories and forms not regulated by CARB, the VOC level (of the product as used) shall not exceed 0.5 percent by weight.

- **Aerosol restrictions**

Aerosol products must meet EWG's restrictions on propellants, particle size and nanoparticles:

- Acceptable propellants are limited to compressed air, nitrogen and carbon dioxide.
- Aerosol products must not release more respirable particles than an average pump spray product does. As such, no more than 0.7 percent of the sprayed mass of an aerosol product can be under 10 microns in size when measured using ASTM-E1260 or an equivalent standard test method.
- Aerosol products must not contain nanomaterials (see applicable definition in Criterion 7).

For the purpose of this program, aerosol products are those that are pressurized, through the use of a propellant or mechanical force, to dispense product. This definition of aerosol does not include pump spray products.

9) Products must pass microbial challenge tests.

EWG will license only products that have passed microbial challenge tests for the finished product (current formulation) according to the U.S. Pharmacopoeia, or USP. (See USP Anti-Microbial Effectiveness Testing for the relevant challenge test). Companies must also have protocols in place to repeat the tests to address potential changes in the product formulation, manufacturing process and/or packaging.

In keeping with International Organization for Standardization, or ISO, standard 29621, products with the following characteristics are considered to present a low risk of microbial contamination and are therefore exempt from this criterion:

| <i>Physico-Chemical Characteristics</i> | <i>Limits</i> |
|---|---------------------|
| pH | < 3.0 |
| pH | > 10.0 |
| Ethanol or other alcohol | > 20% |
| Filling temperature | > 65.0 °C |
| Water activity (a _w) | < 0.75 ^a |
| Solvent based products | |
| Oxidizing products | |
| Aluminium chlorohydrate | > 25% |

EWG will exempt disinfectant/sanitizer products registered and conditionally registered with the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act, provided the company attests it complies with FIFRA's requirements.

10) Product manufactures must disclose efficacy testing.

EWG will license only products that disclose specifics about completed efficacy testing. Disclosed details should include international standards that have been met, such as ASTM or NSF, or in-house testing that validates statistically significant efficacy. If no efficacy testing has been conducted, that must be disclosed as well.

In addition, manufacturers of odor-eliminating products must provide experimental data showing that their products effectively reduce malodors in a fragrance-free formulation. Scent-based variations of the product may be verified without the provision of additional efficacy data, as long as the odor-reduction active ingredients are used at equivalent or higher concentrations.



11) Products must follow standard ingredient-naming guidelines.

- i. Each ingredient name should be listed using either 1) the Household & Commercial Products Association, or HCPA, nomenclature as detailed in the Consumer Product Ingredients Dictionary, or 2) the International Nomenclature of Cosmetics Ingredients, or INCI, nomenclature. The HCPA nomenclature conventions are based on the INCI labeling, with a primary purpose of providing simple chemical names that consumers can use. (For more information on HCPA nomenclature conventions, see: https://www.productingredients.com/docs/nomenclature_convention.pdf). If there is no applicable HCPA or INCI name, manufacturers should use the chemical's common name.
- ii. Mixtures must be listed by their individual component names.
- iii. All botanicals should include the scientific name followed by the chemical modification, such as extract or oil. A company may decide whether it will also list the common name. The general naming structure should be as follows:
 - a. [Botanical name] [(Common name), optional]
 - b. [Name of relevant plant part, such as leaf or stem, if applicable]
 - c. [Chemical modification]
 - d. For example, Aloe Barbadensis (Aloe Vera) Leaf Extract
- iv. Colorants must be listed using Food, Drug and Cosmetic Act names as listed in the Code of Federal Regulations (CFR) Title 16, **Part 73** and **Part 74**.

12) Product manufacturers must have a quality control system in place.

EWG requires that manufacturers of licensed products develop, follow and submit documentation detailing the use of a quality control system.

These practices include but are not limited to:

- i. Maintenance of documentation and records.
- ii. Procedures for analysis of product specifications and quality.
- iii. Process for internal audits.
- iv. Assessment of the suitability of buildings, facilities and equipment.
- v. Adequate training of all personal.
- vi. Maintenance of adequate cleanliness and pest controls.
- vii. Compliance of suppliers and raw materials.

Criteria for Companies To License the EWG VERIFIED Mark

For its products to bear the EWG VERIFIED mark, a company must agree to all of the following:

- i. Commit to submitting to the Consumer Protect Safety Commission (or to the Environmental Protection Agency if the product is a registered disinfectant) and to EWG all information on reportable noncompliance and/or defects that could create a substantial product hazard or unreasonable risk of serious injury or death (as obligated by the Consumer Product Safety Act and in accordance with reporting provisions set forth in the **Code of Federal Regulations (CFR) Title 16, Part 1115**). All personally identifiable information (e.g., names, addresses) should be redacted from such reports.

EWG requires companies with licensed products to submit all reports suggesting a substantial product hazard resulting from, or that may result from, the use of any of the company's licensed products to the CPSC through the Safer Products site <https://www.saferproducts.gov/CPSRMSPublic/Section15/>. For EPA-registered products, companies should follow the Voluntary Guidance (<https://www.epa.gov/pesticide-incidents/voluntary-incident-reporting-forms-and-instructions>). Companies should also submit those reports, with all personally identifiable information (e.g., names, addresses) redacted, to EWG.

Product problems include but are not limited to:

- a. Product contamination.
- b. A defect in packaging.
- c. Questionable stability.
- d. Labeling concerns.

Serious injury includes:

- a. Death.
 - b. A life-threatening event.
 - c. Hospitalization.
 - d. A disability or permanent damage.
 - e. A congenital anomaly or birth defect.
 - f. Disfigurement, including serious and persistent rashes and infections.
- ii. Acknowledge and agree that EWG has the right to perform random product testing, audits of production practices, and site visits to ensure that all products meet the provisions outlined in EWG's Licensing Criteria.



EWG requires companies with licensed products to acknowledge that it has the right to perform random product testing, which may include the use of qualified third-party services, to ensure that products bearing the EWG licensed mark meet the provisions highlighted in this document.

- iii. Acknowledge that EWG's "Unacceptable" and "Restricted" lists may be reviewed annually and updated as needed. A phase-in period will be provided to allow companies to comply with any updates.

EWG may review and update its "Unacceptable" and "Restricted" lists annually to reflect the latest in science, regulations and other relevant considerations. If EWG makes changes, it will alert companies that a new list is pending 2 months beforehand. Companies will be granted 18 months from the time the new lists are publicly announced to make the necessary changes to their formulation and packaging. At the end of the 18-month period, companies will no longer be able to manufacture or distribute products with EWG's licensed mark that do not comply with the new "Unacceptable" or "Restricted" lists. If companies continue to distribute non-compliant products with EWG's licensed mark, this will be treated as a breach of the license agreement. In the rare event that scientific evidence emerges demonstrating that a cleaning product ingredient may pose significant harm to human health, EWG reserves the right to request that companies either remove the ingredient or cease distribution of the relevant products with EWG's licensed mark in a shorter time frame than specified above.

- iv. Companies must sign a disclosure agreement acknowledging that as a condition of the company's participation in the licensing program, EWG will add all of its licensed products to EWG's Guide to Healthy Cleaning if it does not already rate them.
- v. Acknowledge that EWG's Guide to Healthy Cleaning is dynamic, and the scoring algorithm may change over time.

EWG strives to make all of its consumer databases as robust as possible. For this reason, EWG's Guide to Healthy Cleaning is dynamic: Product and ingredient scores are subject to change over time due to both emerging science and scoring algorithm improvements. If changes to the EWG Guide to Healthy Cleaning scoring system render a company's product out of compliance with EWG's licensing criteria, the company will have 18 months either to regain compliance or to remove the EWG licensed mark from its product packaging and associated materials.

- vi. Companies must acknowledge that EWG has the right to approve, in advance, any use of the EWG VERIFIED mark in advertising, marketing, artwork, packaging, point-of-sale materials, website content, promotion and other materials. Prior to public use or distribution, companies must submit to EWG samples of the final licensed product, including all packaging, product inserts and other materials accompanying such licensed product or otherwise bearing the trademarks.
- vii. Companies must acknowledge that, although product claims are not addressed in EWG's Licensing Criteria, EWG reserves the right to disallow use of the EWG VERIFIED mark on any product that uses claims that would harm or discredit EWG or the EWG VERIFIED program.
- viii. Companies must acknowledge whether their products are required to be registered with the EPA under FIFRA, and if so, whether the product's label complies with FIFRA's requirements.

Documenting Compliance with EWG's Health and Transparency Criteria for Cleaning Products

To verify a product meets EWG's standards for health and transparency, a company must submit the following documentation for each EWG VERIFIED criteria.

CRITERIA 1, 2, 3, 11:

1. Must be in one of the approved licensing product categories.
2. Must score an A or B in EWG's Guide to Healthy Cleaning.
3. Be free from ingredients on the EWG "Unacceptable" list.
11. Follow standard ingredient-naming guidelines.

DOCUMENTATION: Companies must submit to EWG a completed Product Submission Form with the product name, ingredients listed on the package, and ingredients listed on a publicly accessible website, as well as any additional package text. Companies must also submit applicable product safety data sheets and legible images or pictures of their package (as they appear on actual products for sale) for verification purposes. In cases where the package text and/or artwork has yet to be finalized, EWG will review proof images during the application process. However, companies must submit final package images for EWG's approval before the mark will be approved for use.

Product Submission Forms can be downloaded from the application page.

EWG will upload product information to an internal platform that will highlight whether the product to be licensed meets the EWG criteria specified above.

CRITERION 4: Products cannot contain any ingredients on EWG's "Restricted" list for cleaning products that do not meet the restriction set by authoritative bodies, industry institutions and EWG.

DOCUMENTATION: EWG will require companies to complete and submit a Safety Substantiation Notice form to acknowledge that EWG requires additional information to substantiate relevant restrictions outlined in EWG's Licensing Criteria.

For concentration restrictions, companies must provide a certification that any restricted ingredient present in the product meet the relevant concentration restrictions. A company may meet this requirement by certifying that the concentration used is below relevant standards.

For any relevant contamination restrictions, companies must submit laboratory test results showing that the restricted ingredient meets the relevant contamination limits set by authoritative bodies and industry institutions.



CRITERION 5: Products must be formulated to minimize the potential for harm to people and the environment.

DOCUMENTATION: EWG will require companies to submit a material safety data sheet for the product identifying known hazards and showing that the pH is within the range 3.0-9.5 for liquid hand dishwashing soaps and hand laundry detergents, and pH 2-11.5 for all other product categories.

EWG will require companies to submit documentation of safety substantiation proving the attributes of the final product formulation. The Product Safety Substantiation will require that the total concentration of persistent chemicals be limited to 2 percent of the product formulation. The fragrance component of a product must not exceed 1 percent of the final formulation. Additionally, a calculation of the weighted LD50 will need to be provided and be above 5,000 mg/kg to ensure that the final product is not acutely toxic.

EWG will require companies to submit a signed affidavit verifying that all ingredients and mixtures purchased from third parties do not intentionally contain any phthalates or preservatives on the EWG "Unacceptable" list.

CRITERION 6: Products must disclose all intentionally added ingredients, including those used in fragrance.

DOCUMENTATION: Companies must submit a signed affidavit stating that they have disclosed all the product's intentionally added ingredients, including those used in fragrance, to EWG and they have labeled or otherwise disclosed on the product's webpage all non-fragrance ingredients as well as all fragrance ingredients down to 0.01 percent as outlined in criterion 6. EWG will supply companies with the necessary form.

The Master Cleaning Products Affidavit can be downloaded from the application page.

CRITERION 7: Products must fully disclose fragrance allergens and nanomaterials.

DOCUMENTATION: EWG will require companies to sign an affidavit that they will identify on the product packaging the presence of any of 26 fragrance allergens (Appendix IV), similar to the EU requirement for cosmetics labeling, and the full list of known and probable contact allergens (Appendix V) on the product's webpage. EWG will additionally review product ingredients and assess whether fragrance allergens are likely present, whether as a directly added ingredient or as a component of a fragrance ingredient. If EWG discovers that fragrance allergens may be present, companies must either label them appropriately or submit a signed affidavit from their ingredient supplier stating that no allergen is present or, if present, all fragrance allergens meet the concentration restrictions of 0.01 percent, except for hand dishwashing liquid and hand laundry detergent, in which fragrance allergens must be disclosed down to 0.001 percent. EWG will supply companies with the necessary form.

EWG requires companies to sign an affidavit that they will follow EU labeling guidelines for nanomaterials in cosmetics. EWG will require companies either to label nanoscale ingredients or submit affidavits from ingredient suppliers stating that none of the ingredients in the licensed product is considered a nanomaterial according to the EU 2011 recommended definition outlined in Criterion 7. EWG will supply companies with the necessary form.

The Master Cleaning Products Affidavit can be downloaded from the application page.

CRITERION 8: Products must meet air quality standards.

DOCUMENTATION: EWG requires that all products meet the EWG VOC concentration restrictions using Test Method 310, "Standard Operating Procedure for the Total Volatile Measurement of Consumer Products," as specified by California's Air Resources Board, or CARB, or an equivalent test method. The EWG VOC limit includes fragrance compounds in the overall assessment and does not exempt low vapor pressure VOCs or other exempted compounds from the total VOC concentration. For product categories and forms not regulated by CARB, the VOC level (of the product as used) shall not exceed 0.5 percent by weight.

For aerosol products, EWG requires that the product not contain nanomaterials and that testing data be submitted verifying that no more than 0.7 percent of the sprayed mass of the product be under 10 microns in size when measured using ASTM-E1260 or an equivalent test method.

The Master Cleaning Products Affidavit can be downloaded from the application page.

CRITERION 9: Products must pass basic microbial challenge tests.

DOCUMENTATION: EWG will require companies to sign an affidavit that their product either satisfies the requirements for exemption from this criterion or passed basic microbial challenge tests. EWG also reserves the right to request documentation proving that the product meets the requirements for exemption or documentation of the challenge tests results.

The Master Cleaning Products Affidavit can be downloaded from the application page.

CRITERIA 10: Product manufacturers must disclose efficacy testing data.

DOCUMENTATION: For each product, EWG will require companies to submit details of any efficacy tests, including the test methods used and a summary of the results. Applicable test methods include but are not limited to ASTM or NSF standards met and any in-house testing. If no efficacy tests were performed, a company must explicitly disclose that information to EWG.

For odor eliminator products, experimental data substantiating efficacy in a fragrance-free version of the formulation must be completed and submitted.

Companies must agree that EWG will publicize whether they have completed efficacy testing and the test methods used in our Guide to Healthy Cleaning.

CRITERION 12: Develop, follow and document the use of a quality control system.

DOCUMENTATION: EWG will require companies to submit documentation detailing the quality control system it is using.



APPENDICES

Appendix I: EWG's Unacceptable List: Cleaning Products

Note: This is a summary list.

Quaternary ammonium compounds

Concern: asthma and reproductive toxicity

Benzalkonium chloride

Dodecyldimethylammonium chloride

Ester quats

Polyacrylates

Concern: persistence and environmental toxicity

Sodium polyacrylate

Acrylic acid copolymer

Acrylic acid and maleic acid copolymer

EDTA, its salts and similar chemicals

Concern: persistence and environmental toxicity

DTPA

Trisodium HEDTA

Ethanolamines, their salts and alkanolamide surfactants

Concern: asthma and carcinogenicity; contamination

MEA

DEA

TEA

MEA citrate

Cocamide DEA

Cocamide MEA

Lauramide MEA

Glycols, Glycol ethers and esters

Concern: reproductive toxicity, respiratory toxicity and neurotoxicity

Ethylene glycol

Ethylene glycol monomethyl ether

Ethylene glycol monoethyl ether

Ethylene glycol diethyl ether

Ethylene glycol monobutyl ether

Propylene glycol monomethyl ether

Halogenated solvents and organic compounds

Concern: carcinogenicity, endocrine disruption and environmental toxicity

TCE

Chloroform

Triclosan

Symclosene

Troclosene sodium

Aromatic solvents

Concern: Carcinogenicity and neurotoxicity

Benzene

Toluene

Ethylbenzene

Xylene

Alkylphenol ethoxylates and alkylphenols

Concern: endocrine disruption and environmental toxicity

Nonoxynol

Nonylphenol



Formaldehyde and formaldehyde-releasing preservatives

Concern: *carcinogenicity and contact dermatitis*

DMDM hydantoin

Imidazolidinyl urea

Diazolidinyl urea

Quaternium-15

Bronopol (2-bromo-2-nitropropane-1,3 diol)

5-Bromo-5-nitro-1,3-dioxane

Optical brightening ingredients

Concern: *persistence, environmental toxicity, potential endocrine disruption*

FWA-1

FWA-5

Phthalates

Concern: *reproductive toxicity*

Dibutyl phthalate

Dimethyl phthalate

Diethyl phthalate

Benzyl Butyl phthalate

Diethylhexyl phthalate

Phosphates and phosphonates

Concern: *eutrophication/environmental toxicity*

Sodium tripolyphosphate

Tris-2-butoxyethyl phosphate

Sodium pyrophosphate

Nitro- and polycyclic musks

Concern: *persistence, environmental toxicity and endocrine disruption*

Musk xylene

Musk ketone

Galaxolide

Cyclic siloxanes

Concern: *environmental toxicity and endocrine disruption*

D3

D4

D5

D6

D7

Cyclomethicone

Per- and polyfluorinated compounds (PFAS)

Concern: *persistence, bioaccumulation, endocrine disruption and immunotoxicity*

Zinc salts

Concern: *environmental toxicity*

Zinc chloride

Zinc sulfate

Zinc carbonate

Petroleum distillates

Concern: *carcinogenicity and respiratory toxicity*

Isothiazolinones

Concern: *sensitization; contact dermatitis*

Methylisothiazolinone

Benzisothiazolinone

Methylchloroisothiazolinone

Octylisothiazolinone

Sodium and calcium hypochlorite

Concern: *dermal, respiratory and environmental toxicity*



Silver compounds

Concern: environmental toxicity

Glutaral

Concern: asthma

Benzotriazole

Concern: persistence and environmental toxicity

Polyhexanide

Concern: persistence and environmental toxicity

Thymol

Concern: suspected asthmagen

Appendix II: EWG's Restricted Ingredient List

Note: This is a summary list of ingredients that are permitted for use if concentration limits are met.

Boron-containing compounds

Concern: reproductive and developmental toxicity

Boric acid

Sodium borate

Disodium tetraborate

Acetic acid/vinegar

Concern: respiratory toxicity and skin irritation

Hydrogen peroxide

Concern: respiratory toxicity and skin irritation

Sodium/potassium hydroxide

Concern: skin irritation

Enzymes

Concern: respiratory toxicity, asthma

Amylase

Lipase

Protease

Mannanase

Subtilisin

Fragrance and volatile organic compounds

Concern: indoor air quality and respiratory toxicity

Sensitizing allergens

Concern: contact dermatitis, respiratory toxicity

See additional appendices



Chelating agents

Concern: contamination

Tetrasodium glutamate diacetate

Methylglycine diacetic acid

Polymers: non-aerobically degradable

Concern: environmental persistence

Siloxanes and Silicones

Paraffin

Hydroxypropyl methycellulose

Hydroxyethylcellulose

Block polymers

Surfactants: Non-anaerobically degradable

Concern: persistence and environmental toxicity

Linear alkyl benzene sulfonates

Xylene sulfonates

Sulpho-fatty acid methyl esters

Surfactants

Concern: skin irritation and eye damage

Alkyl sulfates

Alcohol ethoxylates

Amine oxides

Fatty acid amidopropyl betaines

Nanoparticles

Concern: respiratory toxicity

Appendix III: List of nonfunctional constituents manufacturers must certify are not contained, or are not expected to be contained, in the final product

| <i>Chemical name</i> | <i>Reportable level</i> |
|----------------------------|-------------------------|
| 1, 4 dioxane | 0.001% |
| 1,1 dichloroethane | 0.01% |
| Acrylic acid | 0.01% |
| Benzene | 0.01% |
| Benzidine | 0.01% |
| 1,3 butadiene | 0.01% |
| Carbon tetrachloride | 0.01% |
| Chloroform | 0.01% |
| Ethylene oxide | 0.01% |
| Nitrilotriacetic acid | 0.01% |
| Butyl benzyl phthalate | 0.01% |
| Butyl decyl phthalate | 0.01% |
| Di(2-ethylhexyl) phthalate | 0.01% |
| Diethyl phthalate | 0.01% |
| Diisobutyl phthalate | 0.01% |
| Di(n-octyl) phthalate | 0.01% |
| Diisononyl phthalate | 0.01% |
| Diocetyl phthalate | 0.01% |
| Butylparaben | 0.01% |
| Ethylparaben | 0.01% |
| Isobutylparaben | 0.01% |
| Methylparaben | 0.01% |
| Propylparaben | 0.01% |
| Formaldehyde | 0.01% |



| <i>Chemical name</i> | <i>Reportable level</i> |
|--|-------------------------|
| 1-(3-chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride | 0.01% |
| DMDM hydantoin | 0.01% |
| Diazolidinyl urea | 0.01% |
| Glyoxal | 0.01% |
| Imidazolidinyl urea | 0.01% |
| Polyoxymethylene urea | 0.01% |
| Sodium hydroxymethylglycinate | 0.01% |
| 2-Bromo-2-nitropropane-1,3-diol | 0.01% |
| N-Nitrosodimethylamine | 0.01% |
| N-Nitrosodiethylamine | 0.01% |

Appendix IV: List of allergens required for labeling on product packaging

| <i>Chemical name</i> | <i>CAS number</i> |
|--|-------------------|
| Amyl cinnamal | 122-40-7 |
| Amylcinnamyl alcohol | 101-85-9 |
| Benzyl alcohol | 100-51-6 |
| Benzyl salicylate | 118-58-1 |
| Cinnamyl alcohol | 104-54-1 |
| Cinnamal | 104-55-2 |
| Citral | 5392-40-5 |
| Coumarin | 91-64-5 |
| Eugenol | 97-53-0 |
| Geraniol | 106-24-1 |
| Hydroxycitronella | 107-75-5 |
| Hydroxymethylpentylcyclohexenecarboxaldehyde | 31906-04-4 |
| Isoeugenol | 97-54-1 |
| Anisyl alcohol | 105-13-5 |
| Benzyl benzoate | 120-51-4 |
| Benzyl cinnamate | 103-41-3 |
| Citronellol | 106-22-9 |
| Farnesol | 4602-84-0 |
| Hexyl cinnamaldehyde | 101-86-0 |
| Lilial | 80-54-6 |
| d-Limonene | 5989-27-5 |
| Linalool | 78-70-6 |
| Methyl heptine carbonate | 111-12-6 |
| 3-Methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one | 127-51-5 |
| Oak moss | 90028-68-5 |
| Tree moss | 90028-67-4 |

* For liquid hand dishwashing soap and hand laundry detergent, disclosure is required at the 0.001 percent level. Use of these chemicals may be additionally restricted based on the "Unacceptable" or "Restricted" lists.



Appendix V: Expanded list of allergens required for disclosure on website

| Chemical name | CAS number |
|--|---|
| Acetylcedren | 32388-55-9 |
| Amyl salicylate | 2050-08-0 |
| Trans-Anethole | 4180-23-8 |
| Benzaldehyde | 100-52-7 |
| Camphor | 76-22-2 / 464-49-3 |
| Beta-caryophyllene | 87-44-5 |
| Carvone | 99-49-0 / 6485-40-1 / 2244-16-8 |
| Rose keton-4 (damascenone) | 23696-85-7 |
| Alpha-damascone (TMCHB) | 43052-87-5 / 23726-94-5 |
| Cis-beta-damascone | 23726-92-3 |
| Delta-damascone | 57378-68-4 |
| Dimethylbenzyl carbonyl acetate (DMBCA) | 151-05-3 |
| Hexadecanolactone | 109-29-5 |
| Hexamethylindanopyrn | 1222-05-5 |
| Linalyl acetate | 115-95-7 |
| Menthol | 1490-06-4 / 89-78-1 / 2216-51-5 |
| 6-methyl coumarin | 92-48-8 |
| Methyl salicylate | 119-36-8 |
| 3-methyl-5-(2,2,3-trimethyl-3-cyclopentenyl)pent-4-en-2-ol | 67801-20-1 |
| Alpha-pinene | 80-56-8 |
| Beta-pinene | 127-91-3 |
| Propylidene phthalide | 17369-59-4 |
| Salicylaldehyde | 90-02-8 |
| Alpha-santalol | 115-71-9 |
| Beta-santalol | 77-42-9 |
| Sclareol | 515-03-7 |
| Terpineol (mixture of isomers) | 8000-41-7 |
| Alpha-terpineol | 100482-56-1 / 98-55-5 |
| Terpinolene | 586-62-9 |
| Tetramethyl acetyloctahydronaphthalenes | 54464-57-2 / 54464-59-4 / 68155-66-8 / 68155-67-9 |
| Trimethyl-benzenepropanol (Majantol) | 103694-68-4 |
| Vanillin | 121-33-5 |

| Natural extracts | CAS number |
|---|-------------------------------------|
| Cananga odorata and ylang-ylang oil | 83863-30-3 |
| Cedrus atlantica bark oil | 92201-55-3 |
| Cinnamomum cassia leaf oil | 8007-80-5 |
| Cinnamomum zeylanicum bark oil | 84649-98-6 |
| Citrus aurantium amara flower / peel oil | 8016-38-4 / 72968-50-4 |
| Citrus bergamia peel oil expressed | 89957-91-5 |
| Citrus limonum peel oil expressed | 84929-31-7 |
| Citrus sinensis (syn.: aurantium dulcis) peel oil expressed | 97766-30-8 / 8028-48-6 |
| Cymbopogon citratus / schoenanthus oils | 89998-14-1 / 8007-02-1 / 89998-16-3 |
| Eucalyptus spp. Leaf oil | 92502-70-0 / 8000-48-4 |
| Eugenia caryophyllus leaf / flower oil | 8000-34-8 |
| Jasminum grandiflorum / officinale | 84776-64-7 / 90045-94-6 / 8022-96-6 |
| Juniperus virginiana | 8000-27-9 / 85085-41-2 |
| Laurus nobilis | 8002-41-3 / 8007-48-5 / 84603-73-6 |
| Lavandula hybrida | 91722-69-9 |
| Lavandula officinalis | 84776-65-8 |
| Mentha piperita | 8006-90-4 / 84082-70-2 |
| Mentha spicata | 84696-51-5 |
| Myroxylon pereirae | 8007-00-9 |
| Narcissus spp. | diverse |
| Pelargonium graveolens | 90082-51-2 / 8000-46-2 |
| Pinus mugo/pumila | 90082-72-7 / 97676-05-6 |
| Pogostemon cablin | 8014-09-3 / 84238-39-1 |
| Rose flower oil (rosa spp.) | diverse |
| Santalum album | 84787-70-2 / 8006-87-9 |
| Turpentine (oil) | 8006-64-2 / 9005-90-7 / 8052-14-0 |
| Verbena absolute | 8024-12-2 |

* For liquid hand dishwashing soap and hand laundry detergent, disclosure is required at the 0.001 percent level. Use of these chemicals may be additionally restricted based on the "Unacceptable" or "Restricted" lists.



Appendix VI. California's Air Resources Board Consumer Products VOC limits

The following table has been adapted from 17 CCR § 94509, which should be consulted to ensure compliance with California regulations.

| Product category & type | Date | Limit (%) |
|--|------------|-----------|
| Product categories and forms not regulated by CARB | EWG set | 0.5 |
| Air freshener | | |
| Double phase aerosol | 12/31/2012 | 20 |
| Single phase aerosol | 1/1/1996 | 30 |
| Dual purpose air freshener/disinfectant | | |
| EWG - requires products in this category to follow disinfectant limits | | |
| Anti-static product | | |
| Aerosol | 12/31/2008 | 80 |
| Nonaerosol | 12/31/2006 | 11 |
| Bathroom and tile cleaner | | |
| Aerosol | 1/1/1994 | 7 |
| All other forms | 1/1/1994 | 5 |
| Nonaerosol | 12/31/2008 | 1 |
| Carpet/upholstery cleaner | | |
| Aerosol | 12/31/2010 | 5 |
| Nonaerosol (dilutable) | 1/1/2001 | 0.1 |
| Nonaerosol (ready-to-use) | 12/31/2010 | 1 |
| Disinfectant | | |
| Nonaerosol | 12/31/2008 | 1 |
| Dusting aid | | |
| Aerosol | 12/31/2010 | 17 |
| Nonaerosol | 12/31/2010 | 3 |

| Product category & type | Date | Limit (%) |
|---|------------|----------------------|
| Fabric protectant | | |
| Aerosol | 1/1/97 | 60 |
| Nonaerosol | 12/31/2010 | 1 |
| Fabric refresher | | |
| Aerosol | 12/31/2006 | 15 |
| Nonaerosol | 12/31/2006 | 6 |
| Fabric softener - single use dryer product | | |
| | | See section 94509(o) |
| Floor maintenance product | | |
| Floor maintenance product | 12/31/2010 | 1 |
| Floor polish or wax | | |
| Resilient flooring material | 12/31/2010 | 1 |
| Nonresilient flooring material | 12/31/2010 | 1 |
| Wood floor wax | 12/31/2010 | 70 |
| Floor wax stripper | | |
| Nonaerosol | | See Section 94509(j) |
| Footwear or leather care product | | |
| Aerosol | 12/31/2006 | 75 |
| Solid | 12/31/2006 | 55 |
| All other forms | 12/31/2006 | 15 |
| Furniture maintenance product | | |
| Aerosol | 12/31/2013 | 12 |
| All other forms (except solid/paste forms) | 1/1/1994 | 7 |
| Nonaerosol (except solid/paste forms) | 12/31/2008 | 3 |
| General purpose cleaner | | |
| Aerosol | 12/31/2008 | 8 |
| Nonaerosol | 12/31/2012 | 0.5 |



| <i>Product category & type</i> | <i>Date</i> | <i>Limit (%)</i> |
|---|-------------|------------------|
| General purpose degreaser | | |
| Aerosol | 12/31/2010 | 10 |
| Nonaerosol | 12/31/2012 | 0.5 |
| Glass cleaner | | |
| Aerosol | 12/31/2012 | 10 |
| Nonaerosol | 12/31/2012 | 3 |
| Graffiti remover | | |
| Aerosol | 12/31/2006 | 50 |
| Nonaerosol | 12/31/2006 | 30 |
| Laundry prewash | | |
| Aerosol/solid | 1/1/1994 | 22 |
| All other forms | 1/1/2094 | 5 |
| Laundry starch/sizing/fabric finish product | 1/31/2008 | 4.5 |
| Metal polish or cleanser | | |
| Aerosol | 12/31/2012 | 15 |
| Nonaerosol | 12/31/2012 | 3 |
| Multi-purpose solvent | | |
| Aerosol | 1/1/2016 | 10 |
| Nonaerosol | 12/31/2013 | 3 |
| Odor remover/eliminator | | |
| Aerosol | 12/31/2010 | 25 |
| Nonaerosol | 12/31/2010 | 6 |
| Oven or grill cleaner | | |
| Aerosol/pump spray | 1/1/1993 | 8 |
| Aerosol | 1/1/1993 | 8 |
| Liquid | 1/1/1993 | 5 |
| Nonaerosol | 12/10/2011 | 4 |

| <i>Product category & type</i> | <i>Date</i> | <i>Limit (%)</i> |
|------------------------------------|-------------|------------------|
| Pressurized gas duster | 12/31/2010 | 1 |
| Rubber/vinyl protectant | | |
| Aerosol | 1/1/2005 | 10 |
| Nonaerosol | 1/1/2003 | 3 |
| Sanitizer | | |
| Aerosol | 12/31/2008 | 70 |
| Nonaerosol | 12/31/2008 | 1 |
| Spot remover | | |
| Aerosol | 12/31/2012 | 15 |
| Nonaerosol | 12/31/2012 | 3 |
| Toilet/urinal care product | | |
| Aerosol | 12/31/2006 | 10 |
| Nonaerosol | 12/31/2006 | 3 |
| Wood cleaner | | |
| Aerosol | 12/31/2006 | 17 |
| Nonaerosol | 12/31/2006 | 4 |

