



**THE ORIGINAL GREEN  
SEAL OF APPROVAL  
SINCE 1989**

# **GS-48 Green Seal™ Standard for Laundry Care Products for Household Use, First Edition**

## ***A Guide for Leadership in Laundry Care Products***

Green Seal offers this standard as a comprehensive benchmark for sustainable laundry care products, and provides manufacturers the opportunity for recognition as leaders in the industry. As consumers continue to demand safer, environmentally preferable products, GS-48 easily identifies those household laundry care products that meet the highest levels of sustainability.



Traditional laundry care products are significant contributors to water pollution and can harm human health. Many chemicals found in these products may be hazardous to human and aquatic life, and both manufacturers and users risk exposure to harmful chemicals through dermal exposure and inhalation. These products often contain volatile organic compounds (VOCs), chemicals that can have short and long-term health effects, and contribute to the ozone problem.

### ***Scope of GS-48***

This standard applies to over 17 categories of laundry care products used in the household to clean, remove stains, and/or otherwise treat the softness, static, or wrinkle characteristics of laundry. The standard does not address equipment or equipment maintenance.

Products that can be certified to GS-48 include:

<b>Cleaning Products</b>	<b>Fabric Care Products</b>
<ul style="list-style-type: none"> <li>• Laundry prewash</li> <li>• Everyday laundry detergents (and combination products)</li> <li>• Fine washable laundry detergents</li> <li>• Spot removers</li> <li>• Stain removers</li> <li>• Bleaches</li> <li>• Antimicrobial pesticide products for home health care</li> <li>• Laundry detergents sold in Laundromat dispensers</li> </ul>	<ul style="list-style-type: none"> <li>• Fabric softeners (liquids &amp; single-use dryer sheets)</li> <li>• Anti-static products (liquids &amp; single use sheets)</li> <li>• Anti-wrinkle products</li> <li>• Fabric protectants</li> <li>• Fabric refreshers</li> <li>• Starch</li> <li>• Sizing</li> <li>• Fabric finish</li> </ul>

For information on Green Seal's laundry product standard for industrial and institutional use see [greenseal.org/GS51.aspx](http://greenseal.org/GS51.aspx).

**SUSTAINABILITY  
LEADERSHIP STANDARDS**



**INDEPENDENT  
THIRD-PARTY  
CERTIFICATION**



**SUSTAINABILITY  
RESEARCH &  
LIFE CYCLE ANALYSIS**



**TECHNICAL ASSISTANCE  
FOR INSTITUTIONAL  
GREENING**



## **Key Areas Addressed**

GS-48 protects water and air quality, health, and the environment by requiring certified products to be sold in concentrated form, requiring high performance in cold water, prohibiting harmful chemicals, specifying sustainable packaging, and limiting VOC content.

### ***Performance Requirements***

GS-48 ensures that certified laundry care products deliver satisfactory value in terms of performance so each product must be proven to perform as well as a comparable benchmark product. The evaluations may include: cleaning, general detergency, stain removal, color fastness, fabric appearance, softness, water absorbency, and static control.

**Cold Water Washing:** Over 70% of the energy invested in laundry care is expended during the use phase, mostly for heating the wash water. GS-48 requires laundry care products to perform well in cold water, thereby vastly reducing the energy needed for the wash process, and reducing air pollution and greenhouse gas emissions.

### ***Health and Environmental Requirements***

GS-48 enhances the safety of laundry care products by prohibiting a comprehensive list of harmful chemicals, including heavy metals, phthalates, formaldehyde donors, carcinogens, mutagens, reproductive toxins, triclosan, and ozone depleting compounds. Water quality is protected by setting limits on environmental toxicity and bioaccumulation to ensure that harmful chemicals do not build up in the waterways. The VOC content is limited in order to prevent ground level ozone air pollution and to protect the health of users.

### ***Concentration and Compaction***

Laundry detergents, both liquid and solid, as well as fabric softeners must be sold in concentrated (2X) or ultra-concentrated (4X) form. This requirement reduces the volume of product sold, thereby minimizing transportation and storage needs, leading to fewer trucks on the road, savings in fuel, and reductions in greenhouse gas emissions. Less packaging is needed, saving raw materials and reducing the waste stream.

### ***Packaging Requirements***

GS-48 requires that the primary package contain at least 20% less material than an equivalent package; be recyclable and contain 25% post-consumer material, or be a refillable package with an effective take-back program. Harmful compounds, such as phthalates, bisphenol A, and chlorinated packaging material should not be added intentionally.

### ***Labeling Requirements***

Labeling on the package should contain clear instructions for the dilution required for the product before use (if relevant), dosing directions for various water hardness conditions, and prominent directions for use, precautions, and recommendations for the use of personal protective equipment.

**This is only a summary of GS-48. The full standard is available for free viewing and downloading at: <http://www.greenseal.org/GS48.aspx>.**

**For more information call (202) 872-6400 or email**

**[greenseal@greenseal.org](mailto:greenseal@greenseal.org).**