



A Guide to Understanding the Attributes of Green Towel & Tissue Product

Choosing Green

In today's marketplace many consumers of towel and tissue products incorporate environmental considerations in their buying decisions. This includes following mandates or policies to be green or simply wanting to create a healthier environment for their tenants, citizens, or employees. With the growing number of paper products and manufacturers claiming to offer green products, many consumers and buyers are confused by the packaging, marketing, and environmental claims. Seeking products with Green Seal certification can help sort through this confusion. Consumers and buyers can trust that products bearing the Green Seal® have been manufactured to strict environmental standards taking the guesswork out of the green evaluation process for the purchaser or decision maker.



Green Seal Certification

Green Seal is an independent, non-profit organization dedicated to safeguarding the environment and transforming the marketplace by promoting the manufacture, purchase, and use of environmentally responsible products. Green Seal offers credible, unbiased third-party certification standards for over 40 products and service categories including towel and tissue products. There are other third-party certification standards available for towel and tissue; however, the Green Seal standards are the most stringent and comprehensive. The Green Seal standards for towel and tissue products (GS-1 & GS-9) involve multiple attributes, which means the standards encompass more than one aspect of what makes a product environmentally preferable including paper fiber, manufacturing, and product packaging.

Paper Fiber

Choosing a towel or tissue product that is 100% recycled is extremely important when looking for green paper products. Every ton of 100% recycled paper (70 cases of roll towels) saves an estimated 4,100 kilowatt-hours of energy, 7,000 gallons of water, and 60 pounds of air pollutants/effluents¹.

In addition, paper products made entirely from recovered materials keep more used paper from the waste stream. This is why Green Seal mandates that products must be 100% recycled to meet their environmental standards. Some manufacturers claim that their towel and tissue products made with only a portion of recycled materials are green when, in fact, these products contain the balance of their paper fiber as virgin fiber. In reality, these products are not green as they require more energy and water to produce as well as cause additional air pollutants or effluents. Furthermore, less paper is being diverted from the waste stream when paper products are not manufactured from 100% recycled materials.

There are two types of recycled materials: recovered and post-consumer. Recovered materials include paper waste generated after the completion of the papermaking process such as bindery trimmings, obsolete inventories, or rejected stock. Post-consumer materials include any item that has already been used by consumers for its intended purpose such as newspapers, old cardboard boxes, and office wastepaper. Purchasing products with high-levels of post-consumer materials channels the greatest amount of waste away from our landfills.

¹Green Seal's Choose Green Report – Bathroom Tissue and Paper Towels, March 2004. One ton equivalent is based upon an average roll towel case weight of 28.5 lbs.

DID YOU KNOW?

The U.S. Environmental Protection Agency publishes recommended recovered and post-consumer fiber content levels in its Comprehensive Procurement Guidelines for Commercial Sanitary Tissue Products. For paper towels, the EPA recommends a minimum of 40% post-consumer wastepaper content and a minimum of 20% post-consumer wastepaper content for bathroom tissue. Any product that claims to be green should at least meet these minimum requirements in addition to being made of 100% recovered materials. Do not hesitate to ask manufacturers to verify, in writing, the levels of recycled content and post-consumer wastepaper in their towel and tissue products.



Manufacturing: Bleaching & Deinking

DID YOU KNOW?

Elemental chlorine free (ECF) and processed chlorine free (PCF) are not the same. When choosing towels and tissue, ask the manufacturer about their bleaching and deinking processes. Only 100% recycled towels and tissue manufactured processed chlorine free are environmentally preferable.

The process for how paper is manufactured is critical in evaluating green products. The Green Seal standards mandate that towels and tissue cannot be manufactured with any added inks, dyes, fragrances or pigments. Furthermore, wastepaper cannot be bleached or deinked with chlorine or any of its derivatives such as hypochlorite and chlorine dioxide. This is known as being processed chlorine free (PCF). There are some manufacturers that claim their towel and tissue products are bleached using an elemental chlorine free (ECF) process. Many consumers/buyers misinterpret the ECF term as being the same as processed chlorine free, however, it is not. Elemental chlorine free means the paper products are bleached with a chlorine derivative such as chlorine dioxide rather than with chlorine gas. The ECF process, along with true chlorine bleaching, can be harmful to aquatic life and wildlife as highly dangerous chemicals such as dioxins can be released when chlorine or its derivatives are used in manufacturing towels and tissue.

Product Packaging

Since most product packaging ends up in the waste stream, how the product is packaged is a significant component to whether a paper product is considered green. Packaging should be properly sized to eliminate excess packaging and reduce waste that may ultimately go to landfills. The Green Seal standards address source reduction by outlining minimum square feet requirements for bath and facial tissue products to reduce waste. Including recycled materials in product packaging also aids in environmental stewardship. Green Seal standards instruct that cores in the roll towels and bath tissue as well as the box for facial tissue be made from 100% recycled materials.

In addition, packaging cannot contain or be printed with toxic metals or other harmful chemicals including lead, cadmium, mercury and hexavalent chromium in excess of 100 parts per million (above trace levels).

DID YOU KNOW?

Green Seal mandates that bath tissue contain a minimum of 40 square feet of product per roll and for facial tissue, at least 70 square feet of product per inner box. This helps eliminate excess packaging for these items, saving waste.

Environmentally preferable packaging is more than just source reduction. Therefore, determining a product's green status should not be solely based upon this single attribute. Ask about paper fiber and manufacturing processes in addition to packaging materials and generated waste to conclude whether a product is green.

Boardwalk® Green and Boardwalk® Green Plus



Boardwalk® Green and Boardwalk® Green Plus towel and tissue products are certified as environmentally preferable by Green Seal, Inc. Products are 100% recycled and exceed U.S. EPA guidelines for post-consumer wastepaper content. Boardwalk® Green and Boardwalk® Green Plus products are also made with bleaching and deinking processes free of chlorine or any of its derivatives (processed chlorine free), and feature environmentally preferable packaging.

Green Seal™ vs. EcoLogo™



Requires products to be 100% recycled	YES	NO
Excludes use of chlorine and chlorine derivatives	YES	NO
Specifies environmentally preferable product packaging	YES	NO
Specifies minimum post-consumer waste content	YES	NO

GREEN SEAL, INC.

Certification criteria includes:

- Performance and packaging
- Content of recovered materials/post-consumer waste
- Deinking and bleaching - no chlorine or derivative
- Added ingredients
- No mill violations

Certification criteria does not include:

- Does not have specific language addressing energy, effluents, water consumption or waste

NOTE: Green Seal's position is that since certified products have to be made entirely of 100% recycled materials, that significantly reduces upfront the energy, water and air pollutants that are used to manufacture the paper. The recycled paper process bypasses several steps compared to the traditional papermaking process where trees are used.

ECOLOGO™ PROGRAM

Certification criteria includes:

- Resource and energy consumption
- Solid waste
- Effluents (waste water from a mill)
- Governmental and industrial safety

Certification criteria does not include:

- Does not exclude chlorine bleaching
- Does not specify that products be made of 100% recycled materials
- Does not specify criteria for product packaging
- Does not specify minimum content of recycled material

NOTE: According to EcoLogo™, this is incorporated into the calculation of resource consumption and solid waste production; therefore, products containing low amounts of recycled material are unlikely to qualify.

Certifying Organizations

These organizations offer independent product certification.



GREEN SEAL, INC.

A U.S. independent, non-profit organization dedicated to safeguarding the environment and transforming the marketplace by promoting the manufacture, purchase, and use of environmentally responsible products. www.greenseal.org



ECOLOGO[™] PROGRAM

A program of Environment Canada that creates green standards for a variety of products and provides product certification. www.ecologo.org



GOOD ENVIRONMENTAL CHOICE AUSTRALIA, LTD. (GECA)

Developed the only Australian Environmental Labeling Standards that indicate the environmental performance of a product from a whole of product life perspective for consumer goods. www.geca.org.au



CHLORINE FREE PRODUCTS ASSOCIATION

A non-profit accreditation and standard setting organization that focuses on promoting sustainable manufacturing practices and implementing advanced technologies free of chlorine chemistry. www.chlorinefreeproducts.org

Industry Organizations

These organizations do not certify products.

COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS): Facilitates design, construction and operation of high performance school environments that are energy and resource efficient as well as healthy and comfortable to promote quality education. www.chps.net

ENVIRONMENTAL PROTECTION AGENCY (EPA): Strives to protect human health and the environment by development of national standards for a variety of environmental programs. For example, the Comprehensive Procurement Guidelines (CPG) that offer recycled-content recommendations; and Design for the Environment (DfE) a non-regulatory, voluntary program that develops safer technologies for the design of products and processes. www.epa.gov

"GREEN" HOTELS ASSOCIATION[®]: Collaboration of hotels and property managers that strive to institute programs that save water, energy and reduce solid waste. www.greenhotels.com

HEALTHY SCHOOLS CAMPAIGN: Advocates policies and practices that allow students and teaching staff to learn and work in a healthy environment. www.healthyschoolscampaign.org

HOSPITALS FOR A HEALTHY ENVIRONMENT (H2E): Founded by the American Hospital Association, the U.S. EPA, Health Care Without Harm, and the American Nurses Association to educate healthcare professionals about pollution prevention and provide practical tools to facilitate the industry's movement toward environmental sustainability. cms.h2e-online.org/about

U.S. GREEN BUILDING COUNCIL (USGBC): A non-profit organization committed to expanding sustainable building practices to create environmentally responsible, profitable, and healthy places to live and work. Developed the LEED (Leadership in Energy and Environmental Design) national rating system for developing high-performance, sustainable buildings. www.usgbc.org

Independent
certification



100% recycled fiber
(no virgin fiber)

Processed
chlorine free

Quality
manufacturing
and performance
testing

No added
inks, dyes,
fragrances or
pigments

Meets or
exceeds EPA
guidelines
for post-
consumer
wastepaper

Certification
of packaging
materials

Towel and Tissue Environmental Puzzle

All pieces are required to be green.