

GreenScreen Certified™ Furniture & Fabrics

enhancing the health of people and the planet by providing purchasers with a roadmap to environmentally preferable products



Why hazardous chemicals are a problem in furniture and fabrics

Furniture and fabrics can contain chemicals that are hazardous to human health and the environment. These hazardous chemicals will leak from the products through volatilization and abrasion into the air and dust in our homes, offices, schools, and hospitals. Studies demonstrate that U.S. household dust contains a wide variety of hazardous chemicals from building and consumer products that can affect our health, especially children's health. Researchers, for example, have identified 45 chemicals from five chemical classes—phthalates, flame retardants, environmental phenols including bisphenol A, fragrances, per- and polyfluoroalkyl substances (PFAS)—in

household dust that are associated with cancer, endocrine disruption, reproductive toxicity, and other adverse health effects.¹

But it is not just consumers that are exposed. The use of hazardous chemicals in furniture and fabrics exposes workers and communities to these chemicals during manufacturing operations, and exposes communities during product disposal. For example, the presence of highly persistent and toxic PFAS in carpets and textiles in landfills is a source of PFAS in landfill leachate, which can end up in waterways and drinking water.²

The regulatory process is slow and lagging in the face of known chemical hazards, but leading companies are moving beyond regulatory compliance, developing restricted substances lists (RSLs), and requiring suppliers to eliminate chemicals on RSLs that can include thousands of chemicals of high concern to human health and the environment.

For all these reasons, Clean Production Action created GreenScreen Certified[™] Standard for Furniture & Fabrics. It simplifies the roadmap for purchasers wanting environmentally preferable products that enhance the health of people and the planet.

The GreenScreen Certified[™] Standard for Furniture & Fabrics

GreenScreen Certified[™] provides a transparent material health certification for suppliers and purchasers that:

- Meets Kaiser Permanente's Environmentally Preferable Purchasing (EPP) Furniture & Fabrics Standard. Kaiser
 Permanente—one of the largest nonprofit healthcare organizations in the U.S. with 12.4 million members, 39 hospitals, and 715 medical offices has long been a leader in setting standards for environmentally preferable products. In 2016, Kaiser
 Permanente set the ambitious goal of increasing the purchase of products and materials meeting environmental standards to 50 percent by 2025.
- Builds upon GreenScreen[®] for Safer Chemicals, a globally recognized chemical hazard assessment tool.
- Restricts classes of chemicals of concern to human health and the environment, including phthalates, bisphenols, PFAS, azo dyes, antimicrobials, and flame retardants along with California Proposition 65 chemicals and other hazardous chemicals.
- Enables suppliers to utilize the Health Product Declaration[®] (HPD) Open Standard to report chemical ingredients.

 Aligns with the US Green Building Council's Leadership in Energy and Environmental Design (LEED) credit requirements



for material ingredient reporting and optimization for pathways using GreenScreen tools.

• Provides suppliers with clear steps on the journey to increasingly more environmentally preferable products.

Certification levels in the Standard range from Bronze to Gold with an increasingly comprehensive Restricted Substances List (RSL) and progressively rigorous GreenScreen® for Safer Chemicals Benchmark and List Translator scores. Table 1 summarizes the hazard evaluation requirements for each certification level. Total fluorine analytical testing is required for all certification levels to ensure certified products are PFAS-free. ³

Bronze and Bronze+ certifications align with Kaiser Permanente's EPP Furniture & Fabrics Standard, with the same RSL applicable at both levels but with different percentage of substances reviewed. Bronze and Bronze+ certifications prohibit a defined list of chemicals of concern including chemical classes (phthalates, bisphenols, PFAS, azo dyes, antimicrobials, and flame retardants); California Proposition 65 chemicals; polyvinyl chloride (PVC) plastic; heavy metals; and persistent, bioaccumulative, and toxic chemicals (PBTs).



Silver and Gold certifications incorporate the Bronze RSL requirements and expand the list of prohibited chemicals, including a broader list of phthalates and bisphenols, all organohalogens, and the ZDHC Manufacturing Restricted Substances List. In addition, Silver and Gold certification levels require the use of GreenScreen[®] Benchmarks and List Translator scores.

Products certified to the Silver and Silver+ levels do not contain chemicals designated GreenScreen List Translator LT-1, which currently identifies over 2,000 chemicals of high concern. Products certified to the Gold and Gold+ levels require an in depth hazard assessment of each ingredient using GreenScreen, and products do not contain any chemicals with a GreenScreen Benchmark-1 score.

The Standard also prohibits antimicrobials used for surface pathogens in certified products. Interior products containing antimicrobial chemicals have been suggested as a possible solution to aid in fighting the spread of disease. However, there is no evidence that antimicrobial impregnation in these applications has any benefit for infection or disease control, but there is evidence that antimicrobial impregnation has other harms related to human health and environmental toxicity.⁴

The Standard requires attestations and/or analytical testing for chemicals of concern in post- consumer recycled content used in furniture and fabrics. The Standard also addresses indoor air quality through criteria for volatile organic compounds, requires use of sustainably sourced wood, and addresses waste and recyclability requirements for end of life product management.

Access the GreenScreen Certified[™] Standard for Furniture & Fabrics and learn more about how to get certified at:

www.greenscreenchemicals.org/certified.

| Section of the Standard | Requirement | Certification Levels | | | | | |
|--------------------------------------------------|-----------------------------------|----------------------|--------------|--------------|--------------|--------------|--------------|
| | | Bronze | Bronze+ | Silver | Silver+ | Gold | Gold+ |
| Restricted Substances List (RSL) Screening | No Bronze RSL chemicals | 95% | 100% | \checkmark | \checkmark | \checkmark | \checkmark |
| | No Silver- Gold RSL chemicals | | | \checkmark | \checkmark | \checkmark | \checkmark |
| List Translator (LT) Screening | No LT-1 chemicals | | | \checkmark | \checkmark | \checkmark | \checkmark |
| GreenScreen Assessment | No Benchmark-1 Chemicals | | | | | 95% | 100% |
| Analytical Testing | Total Fluorine for each fabric | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark |

Table 1 - GreenScreen Certified[™] Standard for Furniture & Fabrics: Certification Levels & Summary of Hazard Evaluation Requirements

Endnotes

¹ Mitro SD, Dodson RE, Singla V, Adamkiewicz G, Elmi AF, Tilly MK, Zota AR. 2016. "<u>Consumer product chemicals in indoor</u> <u>dust: a quantitative meta-analysis of U.S. studies</u>." Environmental Science & Technology. 50(19):10661–10672. doi:10.1021/acs.est.6b02023.

² Lang JR, Allred BM, Peaslee GF, Field JA, Barlaz MA. 2016. "Release of Per- and Polyfluoroalkyl Substances (PFASs) from Carpet and Clothing in Model Anaerobic Landfill Reactors." Environmental Science & Technology. 50(10):5024-5032. https://pubs.acs.org/doi/abs/10.1021/acs.est.5b06237.

³ PFAS-free is defined as zero intentionally added PFAS to the product and PFAS contamination in the product must be less than 0.01 percent by weight of the product (100 parts per million) total organic fluorine measured by total fluorine by combustion ion chromatography or combustion followed by ion selective electrode.

⁴ Healthy Building Network. "Do Antimicrobial Building Products Protect Against COVID-19?" May 2020; <u>https://healthybuilding.net/blog/547-do-antimicrobial-building-products-protect-against-covid-19</u>, accessed 8/27/20.



<u>Clean Production Action</u>'s mission is to design and deliver strategic solutions for green chemicals, sustainable materials and environmentally preferable products.

CPA's unique role is to translate the systems-based vision of clean production into the tools and strategies NGOs, governments and businesses need to advance green chemicals, sustainable materials and environmentally preferable products. Critical to CPA's success is working closely with existing networks across the globe, developing new partnerships, learning about emerging technological trends and associated environmental health problems, and developing and communicating essential solutions. It is this combination of collaboration, empowerment and advocacy for a clearly defined vision that is key to achieving the fundamental transformations necessary in our economy.

