



GreenScreen Certified™ for Medical Devices & Supplies

Products certified to the GreenScreen Certified Standard for Medical Supplies & Devices meet the Environmentally Preferable Purchasing (EPP) requirements of leading health care organizations, including Kaiser Permanente and Vizient. Kaiser Permanente, for example, defines EPP as “the purchase of products and services that have been confirmed to be less damaging to the environment and to human health when compared to competing products and services.”¹ Environmentally Preferable Purchasing programs include preferring products that do not contain known chemicals of high concern to human health and the environment, such as phthalates and per- and polyfluoroalkyl substances (PFAS). Exposures to these and other chemicals of high concern are linked to a range of adverse human health impacts including reproductive and behavioral disorders, heart disease, immunosuppression, liver dysfunction, and cancer. Due to insufficient regulations, purchasers of medical supplies and devices may not be aware of the presence of hazardous chemical ingredients in the products they buy and use. For example, our *Chemical Footprint of Products*



Ortho-phthalates, which include di(2-ethylhexyl) phthalate (DEHP), are commonly used in flexible polyvinyl chloride (PVC) products such as IV bags and tubing, and can impair child brain development and increase children’s risks for learning, attention, and behavioral disorders.¹ Research by the National Institutes of Health confirms that pregnant women who were exposed to multiple phthalates during pregnancy had an increased risk of preterm birth (source: National Institutes of Health, “Preterm birth more likely with exposure to phthalates,” July 11, 2022, <https://www.nih.gov/news-events/news-releases/preterm-birth-more-likely-exposure-phthalates>, accessed 9/19/2022).

*Commonly Used in Pediatrics Departments*² report found that 45% of 253 products commonly found in a pediatric patient room contained at least one chemical of high concern to human health or the environment.

With the goal of eliminating chemicals of high concern from medical products, Clean Production Action worked with a diverse group of stakeholders from the medical community, including manufacturers, health care providers, purchasers, and external scientific experts to create the GreenScreen Certified Standard for Medical Supplies & Devices. The Standard simplifies the roadmap for purchasers seeking products that are healthier for people and the planet, and provides clear guidance for manufacturers and suppliers to identify and avoid hazardous chemical ingredients in their products.

The Standard applies to a wide range of both consumable and durable products used in health care such as bandages, gauze, home health care supplies, catheters, blood pressure cuffs, surgical gloves, bedpans, crutches, hospital beds, and wheelchairs.

Comprehensive Restricted Substances Lists (RSLs)

Products meeting the criteria for the GreenScreen Certified Standard for Medical Supplies & Devices must avoid a comprehensive list of prohibited substances and chemical classes identified in the EPP programs of leading health care organizations, including Kaiser Permanente and Vizient. Restricted substances include ortho-phthalates, bisphenols, PFAS, polyvinyl chloride (PVC) plastic, toxic flame retardants, California Proposition 65 chemicals, heavy metals, and chemicals that are persistent, bioaccumulative and toxic (PBT).

PFAS-Free Products

The certification process requires two methods to verify that a product does not contain PFAS. The supplier of each material in the product must attest that the product does not contain PFAS. Since fabric and molded fiber are known to commonly contain PFAS, analytical testing is required for products containing these materials to verify PFAS is not present above the specified threshold. PFAS are highly persistent and hazardous chemicals that are used widely for their stain and grease repellent properties. GreenScreen Certified reinforces the trend to greater governmental regulation of PFAS by requiring that manufacturers of Medical Supplies & Devices eliminate these chemicals from their products.

In-Depth Scrutiny of Chemical Ingredients

Knowing that supply chain transparency is an ongoing issue, and obtaining full chemical ingredient information for all materials in a product is not always possible, we created steps to address this issue and reward manufacturers who were able to obtain chemical ingredient information from most but not all of their suppliers.



SUMMARY OF CERTIFICATION REQUIREMENTS:

Section	Requirement	Bronze	Bronze+	Silver	Silver+	Gold	Gold+
RSL Screening	No Bronze RSL chemicals	95%	100%	100%	100%	100%	100%
	No Silver-Gold RSL chemicals			100%	100%	100%	100%
List Translator Screening	No LT-1 Chemicals *			100%	100%	100%	100%
GreenScreen Assessment	No Benchmark-1 Chemicals					95%	100%
Analytical Testing	Total Flourine for each fabric and for each molded fiber	Required for all levels					

Applicants who obtain the required ingredient information for at least 95% but less than 100% of the materials in the product and meet the requirements achieve the Bronze, Silver or Gold levels of certification. Applicants who obtain the required ingredient information for 100% of the materials in the product and meet the requirements achieve the Bronze+, Silver+ or Gold+ levels of certification.



GreenScreen® for Safer Chemicals Tools at the Heart of GreenScreen Certified

GreenScreen Certified builds on the globally recognized GreenScreen for Safer Chemicals method for chemical hazard assessment and identification of safer alternatives.

GreenScreen sets out four benchmarks on the path to safer chemicals with Benchmark-1 criteria defining the properties of chemicals of high concern. The GreenScreen List Translator™ is a screening tool used to quickly identify chemicals of high concern based on authoritative chemical hazard lists. A GreenScreen List Translator-1 (GS LT-1) score designates a chemical as a likely GreenScreen Benchmark-1 chemical. The Silver and Gold levels of certification use these tools in addition to the comprehensive RSLs.

* No GreenScreen Benchmark-1 scores are permitted in assessed materials of certified products, where there is a freely and publicly available GreenScreen assessment.



Each subsequent level of certification includes more stringent requirements around the evaluation of chemical hazards, avoidance of chemicals of concern, and the use of preferred chemicals. The requirements are additive, meaning for example, that the Bronze requirements must be met for the Silver and Gold levels of certification. The Bronze and Bronze+ levels require adherence with the Restricted Substances List. The Silver and Silver+ levels have both an expanded Restricted Substances List and each chemical (intentionally added, impurity, or residual) in the Product Inventory must be screened using GreenScreen List Translator and no GS LT-1 scores are permitted. The Gold and Gold+ levels also require assessment of each chemical using GreenScreen for Safer Chemicals, and no Benchmark-1 scores are permitted.

Product end of life consideration is also included in the Standard. To achieve certification at any level, each finished product or its packaging must meet two of the eight waste and recyclability criteria.

Learn more about the Standard and how to get certified, and view certified products at: www.greenscreenchemicals.org/certified/medical.



[1] Kaiser Permanente, Sustainable Procurement, <https://supplier.kp.org/impacts/pending/what-we-do/sustainable-procurement/>, accessed 9/18/2022.

[2] Mark Rossi and Wanda Ratliff, Chemical Footprint of Products Commonly Used in Pediatrics Departments, 2017, https://www.cleanproduction.org/images/ee_images/uploads/resources/ChemicalFootprintPediatrics_Report_201712204.pdf, accessed 9/19/2022.