



Floor Care Products

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Environmentally Preferable Purchasing Considerations

- Air quality
- Climate Change
- Reduce toxic chemicals
- Water Efficiency

Benefits of Purchase

- Better indoor air quality
- Better health for building occupants
- Reduced toxic releases during rinsing down the drain
- Reduced exposure to carcinogens and reproductive toxins

How To Buy

- Western States Contracting Alliance (WSCA) Janitorial Cleaning Contract # [00307](#).
- Call the vendors to verify products with DfE certification.

★ **GOAL: To reduce or eliminate the use of toxic floor care products .**★

Overview

Floor care products include strippers, cleaners, and finishers. Floor finishers are designed to polish, protect, or enhance floor surfaces with a protective wax, polymer, or resin coating. They are made to be routinely stripped and reapplied. Strippers are used to remove floor finish polymers and waxes.

The US Environmental Protection Agency (EPA) cites the [Green Report](#) published by Green Seal in 1998 for the health problems associated with cleaning chemicals. These include reproductive disorders, organ damage, permanent eye damage, asthma and other respiratory ailments, headaches, dizziness, and fatigue.

Chemicals used for cleaning either evaporate into the air, where they can be inhaled, or they are flushed down the drain and enter the environment.

Look to purchase flooring materials that do not require the use of these chemicals. If chemicals are required, purchase the least toxic products available.

Standards

Toxicological data is not available for many chemicals found in floor care products. Material Safety Data Sheets used to certify cleaning products often do not list proprietary and inert ingredients. As a result, some standard-setting organizations in North America register products as “green” when the toxicology of some of the ingredients is unknown.

Ecology recommends products certified by Green Seal, Canada’s EcoLogo, and/or those recognized by [EPA’s Design for the Environment \(DfE\)](#). DfE recognizes products and partners using safer chemical formulations.

Ecology also encourages agencies to promote the use of safer chemical alternatives. Global standards such as Europe’s [Registration, Evaluation, and Authorization and Restriction of Chemical Substances \(REACH\)](#), place more responsibility on manufacturers to manage the risks associated with their products.

Success Story: Department of Ecology

The Washington State Department of Ecology developed a floor-care program that reduces chemical use.

Chemicals leave behind residuals on carpet fibers which act like glue for dirt particles. Ecology steam-cleans carpet

without the use of chemicals.

Ecology dusts and wet-mops its concrete floors. Certified sealers and wax products are used on the concrete and tiled surfaces only once or twice each year.

Environmentally Preferable Purchasing Fact Sheet- Floor Care Products

Washington State Department of Ecology

Environmentally Preferable Purchasing

The Department of Ecology offers tools and resources to make environmentally preferable purchasing easier.

Learn about environmentally preferable products, standards and certifications, state EPP directives, and more at our website:

www.ecy.wa.gov/beyondwaste/epp.html

Contact:

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Web Resources

[City of Seattle's Environmentally Preferable Cleaning Products](#)

[Green Clean Schools](#)

[California Proposition 65: List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity](#)

[Design for the Environment \(DfE\) Safer Detergents Initiative](#)

[Department of Ecology's PBT Initiative](#)

[INFORM - Strategies for a Better Environment](#)

[International Agency for Research on Cancer: IARC](#)

[National Toxicology Program: Eleventh Report on Carcinogens](#)

[REACH](#)

[U.S. EPA Greening Your Purchase of Cleaning Products](#)

Product Performance

Safe floor-care products perform as well as those with toxins and are widely available. Custodians can test the safer products and select those that perform best.

[Kate Davies, PhD. of Antioch University](#), published a study in 2005 of the economic costs associated with environmentally related diseases and disabilities in Washington state. The study looked at asthma among other diseases. Davies evaluated the fractions of the costs that can be attributed to environmental contaminants.

Davies found that when employers account for absenteeism, medical bills, worker's compensation, and insurance claims related to asthma, the costs were significant.

When choosing a vendor, evaluate the ability to train custodial personnel on:

- safety issues;
- proper mixing of chemicals;
- proper cleaning techniques; and
- strategies to reduce chemical use and exposures.

Laws and Directives

Executive Order 02-03	Requires sustainable practices by state agencies. This includes practices that do not sacrifice the needs of future generations.
Executive Order 04-01	Directs state agencies to adopt measures to reduce the use of equipment, supplies, and other products that contain persistent toxic chemicals.

End-of-Life

Non-environmentally preferred floor care products can release toxins into the air, water, and soil through waste water, improper use, and accidents. End-of-life (disposal) issues associated with toxic floor care products can be costly.

Some floor care products may be replaced with high pressure sprayers or steam cleaners. Microfiber mops also reduce the need for chemicals. Water is, after all, the universal solvent.

Using steam cleaners, high pressure sprayers, microfiber mops and safe chemicals if required, avoids most, if not all, end-of-life issues.

