

# Janitorial Cleaning Supplies

Janitorial cleaning supplies include all-purpose hard surface cleaners, industrial cleaners, toilet bowl cleaners, floor cleaners/degreasers, dishwasher detergents, floor strippers, disinfectants, glass, carpet and upholstery cleaners and spot and stain removers. They are typically directly purchased and used by government personnel or purchased indirectly when government contractors clean government buildings, office spaces, public spaces, public schools, and hospitals.



## What are the key green issues?

- » **Human Health and Safety:** Many cleaners contain toxic ingredients that after continuous exposure pose a health hazard to the janitorial workers and cleaning staff. These ingredients can include carcinogenic chemicals causing cancer, endocrine-disrupting chemicals interfering with hormone processes, toxins that can cause liver, kidney, respiratory, skin, nervous system or reproductive damage and sensitizers that can trigger serious allergic reactions after initial exposure.
- » **Water and Air Quality:** Cleaning detergents disposed into sewer systems can contaminate local freshwater supplies. As they are not removed from the waste stream by sewage treatment, their pollutants, such as phosphates, overload aquatic ecosystems with nutrients. That leads to algae blooming on the water's surface, blocking out sunlight and causing reduced plant growth below the surface, leading to decreased oxygen supplies in the water.
- » **Energy Use and Emissions:** In many cleaning products, petroleum based solvents, bleach and chlorine-based ingredients are used, which are mostly still produced by methods based on a high consumption of energy.

## How do green janitorial cleaning supplies advance Government's strategic priorities?

### ✓ Improving Human Health and Safety

Reducing or even eliminating the use of toxic cleaning products creates a safer workplace for government staff and contractors by reducing the incidence of diseases, such as occupational asthma and cancer that are related to chemical exposure. In the case of public schools or hospitals, it can also affect students, patients and other people who would be exposed to toxins. Switching to green cleaners helps reduce the more than \$75 million a year U.S. institutions spend to address chemical-related custodial injuries.

### ✓ Reducing Emissions and Improving Air Quality

Concentrated green cleaning materials, which reduce the amount of cleaning supplies necessary, reduce transportation emissions and reduce the amount of toxins (Volatile Organic Compounds) released into the atmosphere.

### ✓ Reducing Energy and Natural Resource Use

By using cold water for diluting solutions, energy can be saved by avoiding the need to heat water — which is energy intensive. Using bio-based cleaners reduces the demand for petroleum-based ingredients.

### ✓ Improving Water Quality

Using non-toxic cleaning products stops environmental contaminants from going into aquatic and marine ecosystems. This is the most effective form of pollution prevention.

### ✓ Reducing Unnecessary Waste

Green cleaners have minimum and recyclable packaging. Using concentrated cleaners that can be diluted with cold water, reduces the amount of packaging and waste. Purchasing bulk supplies and refilling containers can further reduce waste.

## Myth Buster

It is not true that all green cleaning solutions are of low quality and clean poorly. There are many quality green solutions on the market that create long lasting suds and clean effectively.

Recommended	Why is it important?	How do I know I am getting it?
<p>✓ All cleaning products used in cleaning services, by government staff or contractors, must be ECOLOGO or Green Seal certified and come with a complete list of chemical ingredients on their third party certified Material safety data sheet (MSDS)</p>	<p>Substituting conventional with green cleaners is one of the most effective ways to reduce or eliminate exposure to chemicals that pose environmental and human health risks. ECOLOGO and Green Seal have used the environmentalist approach to pollutant assessments and provide science-based environmental certification standards that are credible and help purchasers make responsible procurement choices.</p>	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Cleaner is certified by one of the following two internationally recognized environmental certifications, which give you assurance on performance (the cleaner must work), and restrictions on pollutants such as phosphates, endocrine disrupters, chelating agents etc., as well as reduced packaging, strict limits on aquatic toxicity and biodegradability is also part of the criteria.</p> <p><a href="#">ECOLOGO™</a></p> <p><a href="#">Green Seal</a></p> </div> </div>
<p>✓ Products shall not contain toxic chemicals: Volatile organic compounds (VOCs), ethylenediaminetetraacetic acid (EDTA), trisodium nitrilotriacetate (NTA), alkylphenol ethoxylate (APE), phosphates, chlorine, petro-chemicals, triclosan, 2-butoxyethanol, and powdered silica</p>	<p>Eliminating the most toxic chemicals from used cleaning supplies will reduce human health and environmental risks substantially.</p>	<p>ECOLOGO or Green Seal certified cleaners come with a Material Safety Data Sheet (MSDS), which lists all the chemical ingredients. Check the list yourself or require the supplier to verify that the toxic chemicals listed on the left are not contained in the cleaner.</p>
<p>✓ Packaging must be comprised of recycled-content and be recyclable or refillable. Concentrated formulas are preferable. Products for refillable bottles and pump sprays shall be delivered in bulk</p>	<p>This will reduce unnecessary waste as well as reduce materials used and carbon emissions from producing packaging materials.</p>	<p>Ensure with the supplier or cleaning service contractor that packaging is minimized, and that you use bulk and concentrated formula options whenever possible.</p>

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<p><input checked="" type="checkbox"/> Consolidate total number of cleaners</p>	<p>Reducing the total number of cleaners in use will reduce costs from a materials management perspective.</p>	<p>Ensure with the supplier or cleaning service contractor that the use of different cleaners is consolidated where possible.</p>
<p><input checked="" type="checkbox"/> Using better cleaning equipment</p>	<p>Using microfibre mops and cloths reduces the need for cleaning chemicals. Using high efficiency filtration vacuum cleaners reduces the dust generated by older vacuum technologies. High Efficiency Particulate Air (HEPA) Filtration Systems are up to 99.97 percent efficient in removing particles as small as 0.3 microns.</p>	<p>Ensure with the supplier to deliver better performing cleaning equipment such as microfibre mops, high efficiency filtration vacuum cleaners or High Efficiency Particulate Air (HEPA) Filtration Systems.</p>
<p><input checked="" type="checkbox"/> Clean by need rather than schedule</p>	<p>Cleaning only when there is a need will reduce consumption of water, energy and cleaning supplies and also potentially decrease cost.</p>	<p>For example, you could forgo scheduled floor stripping in favor of flexible timelines that allow floors to be stripped only when needed. This is encouraged by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standard for existing buildings.</p>

## What else could I look for?

In addition to the minimum recommended criteria outlined above, there are stronger green attributes you can look for when making your purchasing decision.

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<b>Bio-based cleaners</b>	Bio-based solutions, e.g. made from citrus, seed, soybeans, corn, wheat cotton, vegetable and pine oils combine safe, natural ingredients and live microorganisms that produce digestive enzymes and convert dirt and grime into safe carbon dioxide and water. This evaporates, leaving the surface completely clean and free of chemical deposits (often the case when cleaning with chemical cleaners) simply by applying and wiping or scrubbing away. Bio-based active ingredients have less of an impact on the environment because they are able to biodegrade quickly without the release of harmful chemical byproducts.	 <p>Ask your supplier for bio-based cleaners. The <a href="#">USDA BioPreferred® Program</a> certification gives assurance that the USDA stands behind the accuracy of the claim that the product contains biological ingredients in the amounts stated on the label.</p>

## Resources

- Prohibited toxic substances as listed in the Canadian Government's Accelerated Reduction or Elimination of Toxic Substance
- Responsible Purchasing Network (RPN) [www.responsiblepurchasing.org](http://www.responsiblepurchasing.org)
- Guide to Less Toxic Products