

Finding informed substitutes.

How can you find third party certified ecolabel cleaning products?

You've screened for ingredients of concern and prioritized hazardous cleaning products for informed substitution. Now you need to find those less toxic or non-toxic methods, or ecolabel certified products.

Since that's largely the responsibility of those dealing with purchasing, this section is targeted mostly at procurement staff. Others (e.g., health and safety committee reps) can benefit too.



Nothing shady here folks.

In this section, we describe North American third-party certification programmes, and two other options. They are:

- Ecologo,
- Green Seal,
- the City of San Francisco SF Approved programme,
- the U.S. Environmental Protection Agency's Safer Choice Program,

- the Toxics Use Reduction Institute (TURI) Cleaning Solutions database, and
- microfibre products.

For each one, there are links to help you easily find informed substitutes for currently used hazardous cleaning products and information about the criteria that the organizations use to certify products.

What are third party certified cleaning products?

Several independent organizations and government agencies in North America certify “green” cleaning products. Each has its own criteria for “environmentally friendly” ingredients; occupational health criteria are increasingly common. They are developed with stakeholders including public health professionals, product manufacturers, advocacy groups, and end users.

The requirements for cleaning product ecolabels (i.e., they are ecological, “green”, or “environmentally friendly”) also improve indoor air quality, the health of people using the products, and the health of those in the areas where the products are used.

The B.C. government's green purchasing (procurement) policy requires the

use of third party certified ecolabel cleaning products. In turn, the company managing B.C. government buildings – the WSI subsidiary of Brookfield Global Integrated Solutions (called Brookfield Johnson Controls before May, 2015) – also stipulates that companies with which it contracts for the actual cleaning “will use only environmentally friendly products if available”. In this case, the sub-contractor is Bee Clean Building Maintenance.

Ecolabel products rarely contain a GreenScreen List Translator 1 (GS LT-1) chemical ingredient (a chemical of high concern). Many have been rigorously screened to eliminate any chemical with long-term effects on human health or the environment. Some still allow fragrances or enzymes in a few

circumstances, so we highlight the best choices to prevent asthma, and recommend fragrance-free products.

When using ecolabel certified products, **workers still must have** the right kind of tools, equipment, and protective gear and procedures to use the products. They need training about the hazards of cleaning products they use, how to use them (e.g., closed systems, dilution), and time to do their job.

When workers think they got sick or hurt from using a cleaning product, they should report that to supervisors, and the joint health and safety committee. The same applies to those who feel the effects of products used in their work areas, bathrooms, etc. Health and safety reps, supervisors, and procurement staff should investigate these reports, asking questions about the ingredients and their effects. It may be that the product should be replaced or used in a different way. (For more about how to do this, see Section 6.)

What's Ecologo?

Some products we reviewed had Ecologo certificates. Environment Canada started this programme in 1988, to provide information about “environmentally-friendly” products. The U.S.-based for-profit Underwriters Laboratory (now UL) bought it in 2010.

How do you find Ecologo cleaning products?

Anyone can find Ecologo certified cleaning products on line. The process is:

- 1 go to the [UL Sustainable Product Guide database](#);
- 2 scroll down under “Search for products”;
- 3 click on the + for “Evaluation Type” and click on “Ecologo certification”;
- 4 then go to “Product Categories” in the same column, go down to “Cleaning Products/Systems” and click on the name.



This will give you a list of Ecologo cleaning products. It's sorted into a range of sub-categories that appear if you click the + sign. They are:

- air fresheners,
- biologically-based cleaners,
- cleaning products,
- general cleaners (floor, general purpose and hard surface),
- hard surface cleaners (degreasers, general cleaners),
- institutional cleaning systems (hand cleaners),
- laundry (bleach, detergent, fabric softener),
- odour control (drain cleaners, carpet and fabric deodorizers, RV and marine additives, enzyme-based products), and
- pool and spa water treatment products.

Sub-categories usually are broken down into different product types (see some in the brackets of the list above). Cleaning products include:

- bathroom cleaners,
- carpet cleaners,
- carpet/upholstery cleaners,
- degreasers,
- dish cleaners,
- disinfectants,
- general hard surface cleaners,
- glass cleaners,
- hand cleanser,
- hard surface cleaners,
- kitchen cleaners,
- toilet cleaners, and
- window and glass cleaners.

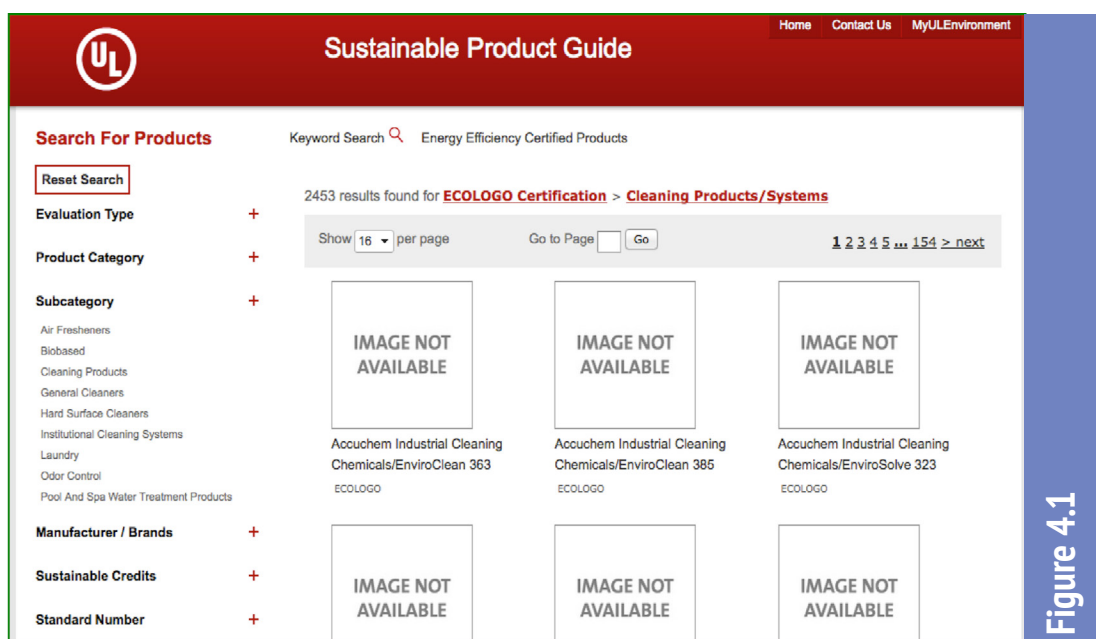


Figure 4.1

If necessary, narrow your search by opening the section called “Manufacturer/Brands” and look for local brands or ones that your supplier carries. Once you’ve found possibilities that you want to check out for ingredients, go to the manufacturers’ websites to get data sheets for the products. (Checking the data sheets is one way to be sure products actually meet your criteria.)

What criteria does Ecologo use to certify cleaning products?

UL chemical ingredient and packaging criteria are set out in its standards. Companies must meet the criteria there to get a certificate for a specific product group. They also get a label saying the product is certified to a specific standard.

For example the 2012 version of the *Standard for Sustainability for Disinfectants and Disinfectant Cleaners* (UL 2794) has 14 pages of detailed testing rules that manufacturers must meet. It also prohibits a variety of chemicals, including those that are:

- skin irritants;
- on specific lists of hazardous solvents or chemical groups (e.g., carcinogens on the IARC’s groups 1 and 2 lists, some ethylene glycol ethers – one of which was in a product on our results chart in Appendix 2);
- highly toxic to aquatic life or animals (and they must be biodegradable);
- linked to occupational asthma; and
- made with fragrances.

If Health and safety representatives and procurement staff want to check criteria like this in more detail, the standards can be downloaded for free (once you register on line).

To find specific criteria, including which chemicals are restricted, use the links below. Categories in the cleaning products and personal care group are:

- **UL 2759 hard surface cleaners** (formerly CCD 146)
- **UL 2776 liquid laundry detergent and fabric softeners** (formerly CCD 105)

- **UL 2777 hard floor care products**
(formerly CCD 147)
- **UL 2780 urinal blocks**
(formerly CCD 165)
- **UL 2781 pool and spa water treatment products**
(formerly CCD 171)
- **UL 2783 instant hand antiseptics**
(formerly CCD 170)
- **UL 2784 hand cleaners**
(formerly CCD 104)
- **UL 2792 biologically-based cleaning and degreasing compounds**
(formerly CCD 110)
- **UL 2794 disinfectants and disinfectant cleaners**
(formerly CCD 166)
- **UL 2795 carpet and upholstery cleaners**
(formerly CCD 148)
- **UL 2796 odor control additives**
(formerly CCD 115/107)
- **UL 2797 RV and marine holding tank treatment**
(formerly CCD 114)
- **UL 2829 laundry bleach**
(formerly CCD 106)
- **UL 2845 personal care** (formerly CCD103)

What's the upside of Ecologo's website and its certified products?

- There are thousands of product choices under the Ecologo label (which is why they are a popular labelling requirement in green procurement specifications).
- Ecologo offers certified products for homes and workplaces.
- Ecologo screens for most key human and environmental hazards¹.
- If a product has "safety-related" problems, you can report it on line.

¹Ecologo criteria do not specifically prohibit the use of all quats (quaternary ammonium compounds) in disinfectants. Once thought to be good biocidal agents, these chemicals increasingly are considered to be asthmagens. We expect Ecologo and other third party certified ecolabels to revise their standards to drop the use of all quats in cleaning products. Meanwhile, it's best to avoid using any quats in cleaning products. The City of San Francisco took that kind of precautionary action; it eliminated all quats from its list of SF Approved disinfectants. The California Department of Public Health has a similar recommendation; see the chart in Appendix 3 for more information.

What's the downside of Ecologo's website and its certified products?

- You must know what type of product you're looking for (e.g., floor cleaners, in the general cleaners sub-category).
- Finding the Safety Data Sheets (SDSs) for each product depends on the ease of navigating the manufacturer's website. Ecologo includes the manufacturer's and product website (sometimes the same). Follow that trail to find the data sheet for the product.
- If you want to find out more about the product's ingredients, check the SDS (sections 3 and 11) and use Pharos or another tool in Section 3.

What's Green Seal?

Green Seal is an American non-profit organization that started its work in 1989. Amongst other things, it provides third-party certification and the related ecolabel for a large range of institutional and household cleaning product standards.



How do you find Green Seal products?

To find Green Seal products and services, go to the [home page](#) and click on [find green products & services](#) at the top right. This takes you to a search function. There you can:

- 1 type in key words;
- 2 search by standard, manufacturer or category; or
- 3 click on the images to go directly to a product group.

Within “category” or the images, choose [Institutional Cleaning Products](#). That takes you to a wide range of products that can be searched by the manufacturer's name or the kind of product. Then you can search for the kind of cleaner you want (e.g., for floors, glass) by typing that into the “Search results” space on the right (under “Filter results”) and hit the “Search” button below it.

For example, if you were looking for floor cleaners, and typed in “floors”, you see (box below) that four products meet the GS-37 criteria and one that meets GS-40 rules.

The screenshot shows the Green Seal website's search results for 'floors'. The header includes the Green Seal logo and navigation links: 'about green seal', 'green living', 'green business', 'green governments & non-profits', 'news, events & publications', and 'find green seal products & services'. A sidebar on the left lists categories: 'Products', 'Cleaning Services', 'Hotels and Lodging Properties', and 'Restaurants and Food Services'. The main content area is titled 'find green products & services' and features a banner image of cleaning bottles. Below the banner, the section 'All products' is displayed with a 'back' link. A table lists products under two categories: 'GS-37 Cleaning Products for Industrial and Institutional Use' and 'GS-40 Floor-Care Products for Industrial and Institutional Use'. The table has columns for 'Manufacturer' and 'Product'. To the right of the table is a 'Filter results' section with dropdown menus for 'By Category', 'By Manufacturer', and 'By Standard', along with 'Filter Results' and 'Clear Filters' buttons. Below the filters is a 'Search results' section with a search bar containing the word 'floors' and 'Search' and 'Clear Search' buttons.

Manufacturer	Product
GS-37 Cleaning Products for Industrial and Institutional Use	
ARAMARK Facility Services	EnVerros FloorStar Light Duty Floor Cleaner 4
EnviroX	EnviroX Floors
ServiceMaster Clean	Green for Floors
GS-40 Floor-Care Products for Industrial and Institutional Use	
Kemsol Products	E2 Finish for Floors

Figure 4.2

What criteria does Green Seal use to certify cleaning products?

Its criteria for institutional cleaning products are found in GS-37 Green Seal Standard for Cleaning Products for Industrial and Institutional Use. The requirements are very similar to Ecologo's. Chemical ingredients must not be:

- carcinogens, mutagens and reproductive toxins,
- most ingredients that cause asthma or set it off (asthmagens)²,

²See the California Department of Public Health chart in Appendix 3 of this toolkit for more information.

- skin sensitisers (i.e., can cause skin allergies),
- absorbed through the skin,
- acutely toxic,
- skin and eye irritants,
- toxic to aquatic life,
- bioaccumulating compounds,
- ozone depleting compounds,
- toxic by chronic (long-term) inhalation, or
- prohibited ingredients (heavy metals, 2-butoxyethanol; alkylphenol ethoxylates, phthalates).

There are other standards for the more general category of cleaning products and services. They are organised into:

- cleaning and degreasing agents (GS-34),
- cleaning products for household use (GS-08),
- commercial and institutional cleaning services (GS-42),
- floor-care products for industrial and institutional use (GS-40),
- hand cleaners for industrial and institutional use (GS-41),
- laundry care products for household use (GS-48),
- laundry care products for industrial and institutional use (GS-51),
- powdered laundry bleach (GS-21),
- residential cleaning services (GS-49),
- specialty cleaning products for household use (GS-52), and
- specialty cleaning products for industrial and institutional use (GS-53).

At the left side of the search page, Cleaning Services (i.e., companies) lists four certified to Green Seal's GS-42 Standard. The requirements they must meet include:

- standardized green cleaning procedures;
- using energy-efficient cleaning equipment and certified products;
- staff training; and
- effective internal and external communications.

The standard also emphasizes procedures to reduce toxicity, waste, and hazards to cleaning workers and building occupants. Companies are monitored to ensure they are keeping up with the standard.

What's the upside of Green Seal's website and its certified products?

- Green Seal includes household cleaning products, as well as ones for “institutional” or “industrial” use.
- There are thousands of product choices under the Green Seal label, which is why they are a popular labelling requirement in green procurement specifications.
- Green Seal screens for most key human and environmental endpoints of concern. (See footnote 1 in this section.)

What's the downside of Green Seal's website and its certified products?

- Disinfectants do not have their own group, making it hard to search for these products.
- Finding the Safety Data Sheets (SDSs) for each product depends on the ease of navigating the manufacturer's website.
- To get an SDS, you need to look at the details about the product. Green Seal takes you to the manufacturer's website. Follow that trail to find the data sheet for the product. If you want to find out more about the product's ingredients, check the SDS (sections 3 and 11) and use Pharos or another tool in Section 3 of this toolkit.

What's Safer Choice?

For many years, the **United States Environmental Protection Agency (EPA)** has promoted less toxic products through their Design for Environment (DfE) programme.

The Safer Choice label (until 2015, called the DfE label) covers a wide range of household and institutional cleaning products. More than 2,000 products qualified for the label fit into a variety of categories. Cleaning products include these uses:



- boat and car care,
- carpet cleaners,
- drain cleaners,
- floor care,
- general purpose cleaners,
- glass cleaners,
- graffiti removers,
- laundry detergents,
- other industrial products,
- personal care, and
- washroom cleaners.

What criteria does EPA use to certify cleaning products?

The EPA considers products with the Safer Choice labels to be “best in class within that functional group.” A technical committee screens all the ingredients to choose the ones that pose the least concern among chemicals in their category (class). Functional groups refer to the role a chemical plays in the product such as giving it a smell (fragrance), its ability to mix (solvents), preservatives, and making it easier for two liquids to blend in the same product (surfactants).

With a “best in class” chemical approach, a product still could contain some hazardous ingredients, but very hazardous ones (e.g., carcinogens or many GreenScreen LT-1 chemicals) usually are prohibited. Safer Choice’s standard has a lot of details about the rules for a chemical’s hazards and exceptions. Clear criteria restrict harmful substances such as:

- allergens and sensitizers (chemicals causing or setting off allergic reactions);
- aquatic toxins;
- carcinogens, mutagens, reproductive or developmental toxicants (CMRs);
- chemicals suspected of being endocrine disruptors;
- chemicals that are persistent, bioaccumulative and toxic (PBT);
- chemicals that release, degrade to, or form by-products that are CMRs or PBTs;
- hazardous air pollutants (which meet a set of legal criteria);
- skin irritants; and
- volatile organic compounds (VOCs).

This programme provides the Safer Chemicals Ingredient List (SCIL) to help manufacturers choose less toxic ingredients. It also offers fragrance-free products to avoid chemicals that can cause allergic and other reactions. (It's often difficult to get information about the human health and environmental effects of fragrances, partly because they may not have been tested – especially for long-term effects – and partly because manufacturers or suppliers often claim the ingredients are “trade secrets”).

The Safer Choice website features a product search function that provides names of products and links to where the product can be bought. The results can be organised by column (i.e., product name, company name, sector covered, and type).

Here's an example of a search for floor cleaners for use in workplaces.

The screenshot shows the EPA Safer Choice website. The top navigation bar includes links for 'Learn the Issues', 'Science & Technology', 'Laws & Regulations', and 'About EPA'. A search bar is located in the top right corner. The left sidebar contains a 'Safer Choice' menu with various links. The main content area is titled 'Search Products that Meet the Safer Choice Standard'. Below the title, there is a search box with the following text: 'Looking for safer cleaning and other products? Use the search box below to find products that meet the Safer Choice Standard. Products displaying the Safer Choice label will be available in stores later this spring and summer.'

The search results are displayed in a table with the following columns: Product Name, Company, Sector, and Type. The table contains two rows of results.

Product Name	Company	Sector	Type
Advanced EarthCare Floor Cleaner	Advanced Blending, Inc.	Business	Floor Care Products : Floor Cleaners
All Natural Floor Cleaner SanoVerde Floor Restorer Liquid SanoVerde Floor Restore Gel SanoVerde Floor Cleaner e-clean HD Resilient Floor Cleaner & Stripper e-clean Laminate Floor Cleaner e-clean Floor Cleaner	Bullen Companies	Business	Floor Care Products : Floor Cleaners

Note: in the product listing, the notation ("+") means that the partner company is overdue for an audit.

Figure 4.3

What's the upside of the Safer Choice label and website?

- This ecolabel now offers specific fragrance-free products.
- It covers a wide range of home as well as institutional products.
- The website is easy to navigate.

What's the downside of Safer Choice label and website?

- The Safer Choice's "best in class" approach can recommend a product with some hazardous ingredients, if it is the best available at the moment. This means that manufacturers still need to find safer ingredients.
- Disinfectant products do not have their own sub-group, making it difficult to search for these products.
- To get an SDS, you need to look at the details about a product and where a product is available. Look for the manufacturer's website, or do a separate search using the product name. Follow that trail to find the data sheet for the product. If you want to find out more about the product's ingredients, check the SDS (sections 3 and 11) and use Pharos or another tool in Section 3 of this toolkit.

What is SF approved?



SF APPROVED

Use less, buy the right thing

The City of San Francisco has a long history of progressive and innovative actions about environmental issues. It was the first city in North America to adopt the precautionary principle in an ordinance in 2003.

The Department has lots of information about safer products and practices at work and for residents. Within this, there is an extensive programme called SF Approved, which includes guides for city staff, small businesses and homes, large organizations and manufacturers and vendors.

The programme's website takes you to green products that have certificates from Ecologo, Green Seal and others.

You can find products in several ways: browse by categories (see the top right and click on the arrow), do an advanced search for product/service category pages to get a list of cleaning products, or check the bottom of website for Products & Services. There is an example of doing this for disinfectants in Figure 4.4, and Figure 4.5 shows what other information is available.

Cleaning products are available in the following sub-categories:

- abrasive cleaners
- bathroom cleaners
- carpet cleaners
- cleaner degreasers
- dish soaps
- disinfectants
- drain openers
- floor cleaners
- floor finishes and strippers

- furniture polish
- general purpose cleaners
- glass cleaners
- graffiti control
- hand soaps

- odor control
- toilet cleaners (acid)
- toilet cleaners (non-acid)
- toilet deodorizers (hangers, pucks)

The screenshot shows the 'SF APPROVED' website interface. At the top, there's a search bar with 'batteries, cleaners, LED lights' and a 'Browse' button. Below the search bar, the page title is 'Disinfectants'. A filter bar shows 'Industrial' selected and 'Consumer' unselected. An information icon (i) is followed by a text block explaining that disinfectants are widely misused and overused, and that cleaning with plain soap and microfiber cloth can reduce 99% of bacteria. Below this, a 'Suggested' section displays three products: 'Oxivir® TB Disinfectant Cleaner Wipes', 'Oxivir Tb Ready-to-Use (RTU) Spray (Hospital Grade)', and 'Oxivir 516 Disinfectant, All-Purpose & Bath Cleaner (Hospital Grade, RTD) 4963357'. Each product has a star rating, a manufacturer name, and a 'When to Use' section. At the bottom, a navigation menu titled 'Information on Disinfectants' lists links: 'Why Go Green', 'Tips', 'Criteria for Disinfectants', 'Reports', 'Guide for City Staff', 'Guide for Small Businesses & Homes', and 'Guide for Large Organizations'. The footer of the menu area says 'Use less, buy the right thing.'

Figure 4.4

Figure 4.5

SF Approved also provides background information about products, explaining different strategies depending on the materials involved. Each category of cleaning product has a section called:

- “Why go green”, specific to the type of product;
- “Tips” about how to use the product;
- criteria behind the recommendations, and
- reports related to the product category.

For example, the graffiti remover report is *Safer Alternative Graffiti Management Methods for California*. The Institute for Research and Technical Assistance 2014 document is an alternatives analysis of various graffiti control methods and products.

What criteria does SF Approved use to certify cleaning products?

The criteria are similar to the Green Seal, Ecologo and Safer Choice approaches to chemicals hazards. At the same time, San Francisco made the elimination of any suspected asthmagens a priority. To accomplish this, they prohibited all quats (quaternary ammonium compounds) in all disinfectant products, as their criteria for disinfectants explains:

Products must be EPA registered as disinfectants or hard surface sanitizers, and contain only the following active ingredients: Hydrogen peroxide, citric acid, lactic acid, or caprylic acid. Products must not contain quaternary ammonium compounds or alkylphenol ethoxylates. Concentrated products must be adapted for use in a closed-loop dilution system.

Information about disinfectants

Tips

1. Use disinfectants sparingly.
2. Disinfectants are good for surfaces that are touched frequently, like doorknobs and keyboards.
3. A surface is not disinfected if the disinfectant is wiped away too soon. Disinfectants must sit/dwell on a surface for the number of minutes listed on the bottle.
4. Confused about ingredients? If the ingredient has the words “ammonium chloride” somewhere in a long chemical name, it is probably a quaternary ammonium compound, or “quat.” These are to be avoided.
5. Looking for products certified by an ecolabel organization (such as Green Seal)? You probably won’t find any. Federal regulations prohibit ecolabels on pesticides, and disinfectants are considered pesticides.

SF Approved: *Disinfectants*

The latest full set of criteria is in Required Environmental Purchasing Specifications: Regulation #SFE- 1 3-04-PPO (from March 8, 2014). It:

- ✓ includes extra limits on what can be in a toilet deodorizer (no para-dichlorobenzene, found in one product in our results chart);
- ✓ bans triclosan in hand sanitizers and hand dishwashing detergents (found in one product in our results chart); and
- ✓ says floor polish cannot contain a variety of things, including carcinogens on the California Proposition 65 list.

What's the upside of SF Approved and its website?

- This is one of the most precautionary approaches to choosing chemical cleaning products.
- It includes non-chemical solutions (i.e., microfiber mops, dusters, cloths).
- The website is very easy to navigate, with related reports and guidance to procurement officers under each product listing.
- It has products for households, and small and large businesses/institutions.
- Sometimes, there are direct links to an SDS in the “information about ...” section for a product.

What's the downside of SF Approved products and website?

- Like Ecologo, Green Seal and Safer Choice, if you want a Safety Data Sheet to check out a product, you might have to go to the manufacturer's website to find one.

What else is available to help find informed substitutes?

1. A Cleaning Solutions database

The Massachusetts Toxics Use Reduction Institute ([TURI](#)) is a leader in helping companies to reduce their use of toxic chemicals, and finding less toxic alternatives for a variety of products.

TURI's cleaning laboratory has worked on green cleaning since 1994. It tests industrial and janitorial cleaning products to encourage companies, other organizations, and product formulators to choose and develop less toxic substitutes. It recently started focusing on "[green disinfectants](#)".

One result of this important and practical work is a database about what kinds of chemicals work best for



different kinds of cleaning, wherever it's done. A search for third party certified cleaning products is available through the [Cleaner Solutions database](#).

There are two ways to use it.
One is to:

- 1 go to the database;
- 2 on the left side, click on [Find a cleaner](#);
- 3 in the "Contaminant" column (which must be used), choose one or more possibilities;
- 4 near the bottom, in the middle, use the optional search filter of "Product cleaning type" and choose "Janitorial cleaning"; and
- 5 check for "Return only effective results" before hitting "Submit".

TURI Cleaning Laboratory

Who We Serve

[Manufacturers: Parts Cleaning >>](#)

[Institutions: Janitorial Products and Equipment >>](#)

[Formulators, Manufacturers, Vendors: Cleaning Supplies and Equipment >>](#)

[Households: Safer Cleaning Alternatives >>](#)

If you do this for “Dirt”, for example, you’ll get 120 results. If you choose one, you get a direct link to data sheets along with test results for using the product on that kind of problem. And there’s more information available about their “[Safety Score](#)”.

A second way is to look via the link for [vendors](#) – on the left of the home page (although it doesn’t let you check for effective cleaners). Once you’re there:

- 1 choose “Janitorial Cleaning” in product type;
- 2 leave all the other options at “Any”;
- 3 hit “submit”.

Once you get the results, you can organise them by “Product Name”, “Classification” or “Safety Score”. 385 products are listed; the first few results are in Figure 4.6 below, organised by Safety Score.

CleanerSolutions Database

Toxics Use Reduction Institute - Surface Solutions Laboratory

Vendor Search Results | [Search Again](#)

Current Search Information

Search Criteria
[Cleaning_type](#): Janitorial Cleaning

Results
Found 385 records
Showing records 1 - 50

Help
[Search Results Field Definitions](#)
[Contact the lab](#)

<< < Showing records 1 - 50 of 385 | [Field Definitions](#) > >>

Vendor Name	Product Name	Classification	Safety Score
United Organics Corp	Tigmar 521 [compare]	Terpene-Semi-Aqueous	ND
Brazilian Womens Group	Maravilhoso Limpa Vidro [compare]	Alkaline Aqueous	ND
Garden Guys	Degreaser (Organic Product) [compare]	Biobased	ND
Mrs Myers Clean Day	Window Spray [compare]	Alcohol	ND
Don Garland Inc	Super Blue Non Ammoniated Stripper [compare]	Semi-Aqueous	ND
Mrs Myers Clean Day	Liquid Dish Soap [compare]	Alkaline Aqueous	ND
Brazilian Womens Group	Sabao Magico [compare]	Alkaline Aqueous	ND
Mrs Myers Clean Day	All Purpose Cleaner [compare]	Alkaline Aqueous	ND
Oxford Micelles	5009 [compare]	Alkaline Aqueous	ND
Brazilian Womens Group	Fantastico Multi-Use [compare]	Alkaline Aqueous	ND
Don Garland Inc	Zap Ammoniated Stripper [compare]	Semi-Aqueous	ND
Mrs Myers Clean Day	Shower Cleaner [compare]	Alkaline Aqueous	ND
Brazilian Womens Group	Sensacional Limpa Piso [compare]	Alkaline Aqueous	ND
Mrs Myers Clean Day	Countertop Spray [compare]	Alkaline Aqueous	ND
New Dawn Manufacturing Company	White Pearl Hand Soap [compare]	Neutral Aqueous	50
Warren Chemical Company	Sea Wash 77 [compare]	Neutral Aqueous	50
EnviroSafe Services Inc	Neutral Rust Remover 232 [compare]	Neutral Aqueous	50
Scout Systems	Scout Heavy Duty [compare]	Neutral Aqueous	50
Water	Water [compare]	Neutral Aqueous	50
Activeion Cleaning Solutions LLC	Activeion Pro [compare]	Other	50
Ortec Ltd Co	Eco Clean [compare]	Neutral Aqueous	50
Warren Chemical Company	Sea Wash Neutral [compare]	Neutral Aqueous	50

Figure 4.6

Clicking on a product name leads you to comprehensive product information, including:

- data sheets,
- recommendations about what problems the product tackles best (recommended contaminants),
- what kind of surface it works on (substrate),
- the equipment needed to use it, and
- if it is effective based on TURI's own laboratory tests.

If you need help to understand terms, how to search, etc, there are a variety of help topics.

TURI also includes a comprehensive list of household cleaning products, with an emphasis on do-it-yourself (DIY) products with recipes.

What's the upside of the TURI database and website?

- The database and website provide information about both household and janitorial cleaning products.
- Product information is very comprehensive.
- There are direct links to safety data sheets (although you should check to make sure they're the most up-to-date ones, since changes are being made with the GHS coming into effect).
- It points users of cleaning products to the state's Environmentally Preferable Products (EPP) Procurement Program.
- The Institute tests cleaners to figure out what works best in particular situations, and is still "green".

What's the downside of the TURI database and website?

- It is less user-friendly than others, such as SF Approved.
- Only 385 janitorial products are listed if you search for vendors, although more may be there if you use the first search strategy above.

2. Microfibre mops and cloths

There is one other option for workplaces looking for informed substitutes to toxic cleaning products: microfiber mops, dusters, and cloths.

The material is a synthetic (polyester and nylon) microfibre which get into spaces that cotton cloths or paper towels cannot reach. (The smaller the “denier” measurement, the finer and more effective the microfiber is; superior ones are 0.13 denier.)

At the same time, the fibres have a greater surface area, so they can absorb up to seven or eight times their weight in liquids. Scrubbing increases this capacity and makes microfibers better at picking up grease and oil. The fibres have a static electric charge so they



Microfibre mops = fewer injuries

Microfiber mops are often not used with the traditional, large mop buckets. Instead, they are wet once in a small bucket, used for one or two rooms, and then can be replaced with a clean mop. This means that custodians do not have to lift heavy mop buckets, and are less likely to suffer back injuries. One [case study](#) from the University of California Medical Center documented a reduction in workers compensation claims where microfiber mops were used.

SF Approved: [Microfiber cleaning products](#).

are much like a dust magnet and hold dust much better than string mops (95 percent versus 68 percent in a U.S. EPA [case study](#)³).

This adds up to many benefits, [according to](#) San Francisco's SF Approved programme. Microfibre materials:

- can get rid of 99% of bacteria with plain water, so they're great for disinfecting and sanitizing;

³ This information comes from a detailed booklet available from Informed Green Solutions: [**Cleaning for healthy schools – Infection control handbook**](#), published in 2010.

- *require 95 percent less water and cleaning chemicals (especially if the chemical is sprayed directly onto the cloth);*
- *clean 10 percent more in the same time;*
- *used dry, they are very effective for dusting;*
- *last five to 10 times longer and cost less; and*
- *cause fewer worker injuries than traditional methods (see box).*

What resources are out there to help choose informed substitutes?

Try these resources as a starter:

- The California Department of Public Health's Occupational Health Branch has helpful information about which specific ecolabels certifications are best to prevent asthma. (see Appendix 3);
- Informed Green Solutions: Carol Westinghouse has lots of practical materials with tools, checklists and more, including Cleaning for healthy schools – Infection control handbook.
- Institute for Research and Technical Assistance (Dr. Katy Wolf) identifies develops, tests and demonstrates less toxic alternatives for different applications (with an emphasis on solvents), and demonstrates and evaluates new and emerging technologies/processes. She has recommendations for graffiti removers, floor strippers, and more. Check the newsletters and reports for details.
- San Francisco Department of Environment's 2014 report: Comprehensive Report on Safer Disinfectant Products. (In particular, check out Appendix C, "Best practices for cleaning, sanitizing and disinfecting surfaces".)

What's next? Preparing a good procurement policy

You have good ideas about what products would be informed substitutes. You know the law requires them for some kinds of chemicals. Now you need a procurement policy that requires them, and is clear and enforced. Section 5 explains what's in a good one, and Section 6 provides ideas and tools about how to implement the policy.

TOOLS FOR INFORMED SUBSTITUTION

HOW DO YOU FIND SAFER CHEMICALS FOR THE WORKPLACE?

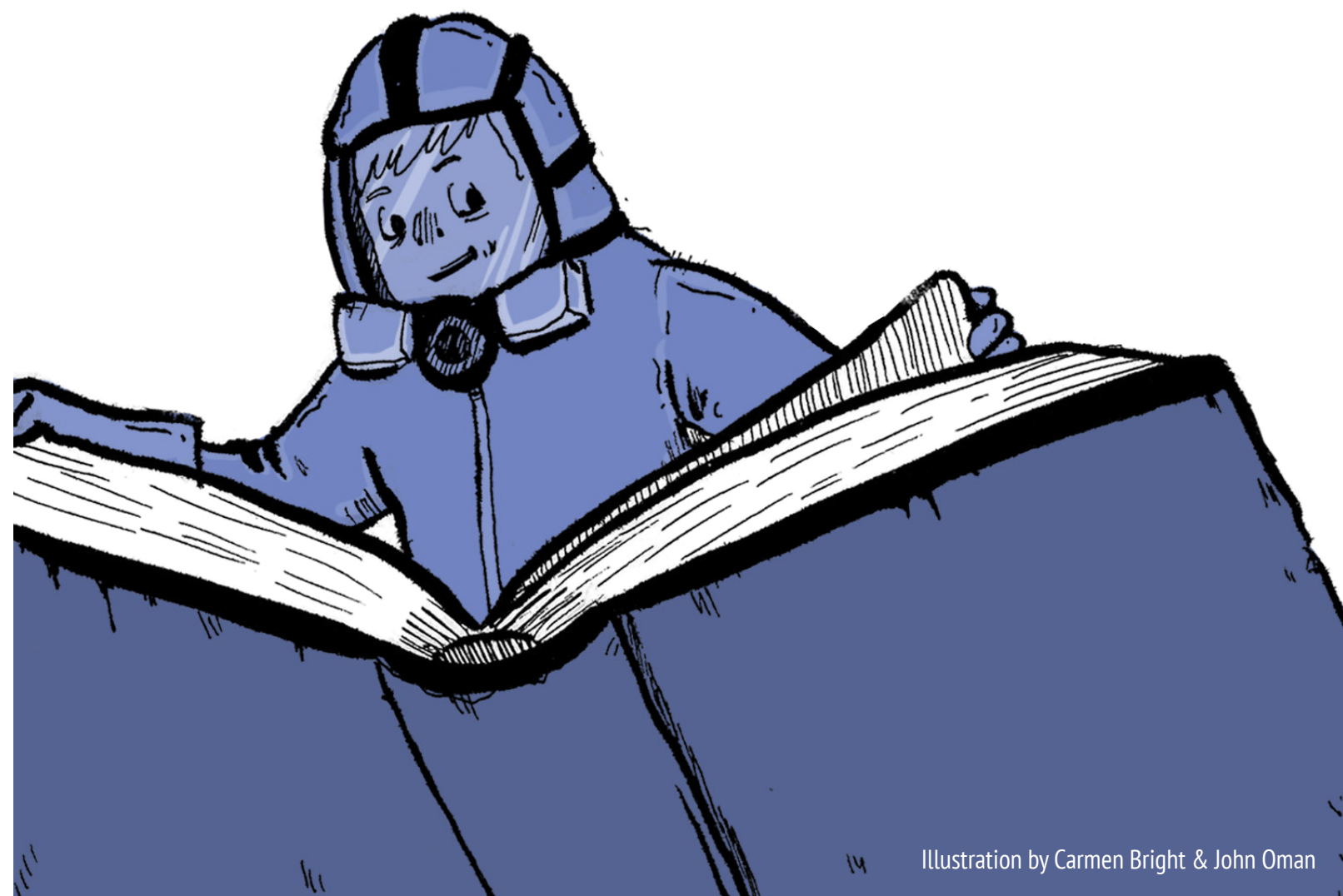


Illustration by Carmen Bright & John Oman

Table Of Contents

Introduction

Why this toolkit?

Section 1

Toxics in our cleaning products.

Why do chemicals matter?

- *How do cleaning products affect people and the environment?*
- *What resources are out there to help people understand how cleaning products can affect our health and environments?*
- *What's next? How do we find out what's a hazardous cleaning product?*

Section 2

From the right -to-know to the need to act. *How can WHMIS 2015 and B.C.'s safer substitution regulation take us there?*

- *What's new with WHMIS?*
- *What are the new hazard symbols? What do they mean?*
- *What are the new labels? What are they supposed to say?*
- *How are data sheets different?*

- *Does WHMIS apply to every product used at work? At home?*
- *How can you use a SDS to get to safer substitutes? Moving from right-to-know to action*
- *Where can you get more information?*
- *What's next? Prioritizing the most hazardous cleaning products for substitution.*

Section 3

Checking on chemicals of high concern. *What on-line tools can help?*

- *What information do you need before doing an on-line search?*
- *What's the Pharos database?*
- *How do you find a chemical's hazards with Pharos?*
- *What other on-line tools could you use?*
 - Chemical Hazard and Alternatives Toolbox (ChemHAT)
 - RISCTOX
- *What other resources can help us know what to avoid?*
- *What's next? Finding third-party ecolabel products*

Section 4

Finding informed substitutes. *How can you find third party certified ecolabel cleaning products?*

- *What are third party certified cleaning products?*
- *What's Ecologo?*
- *What's Green Seal?*
- *What's Safer Choice?*
- *What is SF approved?*
- *What else is available to help find informed substitutes?*
 - A Cleaning Solutions database
 - Microfibre mops and cloths
- *What resources are out there to help choose informed substitutes?*
- *What's next? Preparing a good procurement policy*

Section 5

Buying safer cleaning products. *How do you set good procurement policies for informed substitution?*

- *What are the best practices for green procurement policies?*
- *What about the costs?*
- *Where can you get more information?*
- *What's next? Implementing informed substitution in your workplace*

Section 6

Keeping the workplace healthy and safe. *How do you implement informed substitution?*

- *What are the steps?*
- *What are the benefits of informed substitution?*
- *What can you do to get informed substitution of cleaning products?*
 - *What can health and safety reps and staff do?*
 - *What if you're a worker?*
 - *What about supervisors, employers, and procurement staff?*
- *What does all this add up to?*
- Some resources for screening chemicals (especially in cleaning products)
- Some resources for informed substitution for workplaces
- Some resources for informed substitution for consumers

Appendices

More resources about hazardous chemicals and informed substitution

- Appendix 1
- Appendix 2
- Appendix 3