

## Appendix F: Purchasing Options for Safer Sanitizers and Disinfectants – May 2015

Below is a table listing examples of safer disinfecting products recognized by EPA’s Design for the Environment, Green Purchasing Institute, San Francisco Asthma Taskforce, and/or San Francisco Department of the Environment. This list is not exhaustive. See resources listed below for more recommendations and information.

Note: Some of the preferred product examples are concentrated while others are ready-to-use (RTU) formulations. Each has its own pros and cons.

- RTU pros: pre-diluted so the products tend to have relatively low hazards. Easier for staff to use and no dilution necessary.
- RTU cons: more expensive
- Concentrate pros: they contain 1/16 to 1/128 as much water so they can be shipped much more cheaply, with less fuel use and therefore greenhouse gas impacts.
- Concentrate cons: they have relatively few health warnings on their diluted use solution, but most are corrosive in their concentrated form.

All concentrated disinfecting products should be used ONLY with automatic dilution equipment – preferably “closed loop” systems, which preclude any contact with the concentrated product. Pump-style dilution systems are generally insufficient, as they do not eliminate risks of spills or splashes of the corrosive materials.

Active Ingredient	Product	Disinfecting Dwell Time	Example Retailers	Approximate Price	
Citric Acid	Clean-Cide (RTU, wipes)	5 minutes	Ebay	\$16 for 160 wipes (\$0.10/wipe)	
			Wexford Labs Call: 800-506-1146	\$10 for 1 quart \$99 for 12 quarts (\$8-10/qt) \$10 for 150 wipes \$96 for 12 150-wipe canisters (\$0.05 - 0.06/wipe)	
Hydrogen Peroxide (including “Accelerated” HP)	Accel Concentrate	5 minutes (1:16 dilution)	Amazon	\$53 for 1 gal (\$13/qt) (\$0.83/qt after dilution)	
	Accel Tb (RTU, wipes)	1 minute	Amazon	\$22 for 32-oz bottle (\$22/qt) \$28 for 160 wipes (\$0.18/wipe)	
	Clorox (Healthcare) Hydrogen Peroxide Cleaner Disinfectant (RTU, wipes)	1 minute	Amazon	\$19 for 32-oz bottle (\$19/qt) \$37 for 1 gal (\$9/qt) \$15 for 155 wipes (\$0.10/wipe)	
	Oxivir Five 16 (Concentrate)	5 minutes (1:16 dilution)	Amazon	\$56 for 2 pack of 1.4L bottles (\$18/qt) (\$1/qt after dilution)	
	Oxivir Tb (RTU, wipes)		1 minute	Amazon	\$57 for 12 pack of 32-oz RTU bottles (\$5/qt) \$83 for 12 pack of 60-count wipes (\$0.12/wipe)
				Office Depot/Max	\$21 for 160 wipes (\$0.13/wipe)
				Staples	\$57 for 12 pack of 32-oz RTU bottles (\$5/qt)
				Waxie Sanitary Supply (Livermore)	\$83.36 for 12 pack of 32-oz RTU bottles (\$7/qt)

EPA Design for the Environment Certified Disinfectants not listed above (<http://www.epa.gov/pesticides/regulating/labels/design-dfe-pilot.html>):

- Bright Green Disinfecting All Purpose Cleaner (Lactic Acid, RTU, 5-minute dwell time)
- Bright Green Antimicrobial Toilet Bowl Cleaner (Lactic Acid, RTU, 5-minute dwell time)
- Lysol Brand III Disinfecting All Purpose Cleaner (Lactic Acid, RTU, 5-minute dwell time)
- Lysol Brand Everyday Multi-Surface Disinfectant (Lactic Acid, RTU, 5-minute dwell time)
- Spartan GS Restroom Cleaner (Citric Acid, RTU, 10-minute dwell time)
- Dishwasher Magic Dishwasher Cleaner and Disinfectant (Citric Acid, RTU, n/a)

### **Safer Food Contact Sanitizers**

- SaniDate RTU (Hydrogen Peroxide, RTU, 1-minute dwell time)
- Benefect Broad Spectrum Disinfectant (Thymol\*, RTU, 5-10 minute dwell time)
- Cleanwell Daily/ Weekly/ Monthly Cleaner (Thymol\*, RTU, 10-minute dwell time, requires rinse)

\*The EPA has determined that the active ingredient thymol has minimal potential toxicity and poses minimal risk, however thymol can be a skin irritant and was rejected as a safer active ingredient by SF Environment (see below).

### **Additional Resources**

- SF Environment Safer Products and Practices for Disinfecting Surfaces (see Appendix A for recommended products) <http://www.sfenvironment.org/download/safer-products-and-practices-for-disinfecting-surfaces>
- Green Schools Initiative directory of asthma-safe disinfectants and sanitizers <http://www.greenschools.net/downloads/DisinfectantsTable.pdf>
- SF Asthma Taskforce 2013 Update: Bleach-free Disinfection and Sanitizing for Child Care <http://sfgov.org/asthma/child-care-settings>
- Clean & Healthy New York easy-to-use table of EPA-registered sanitizers and disinfectants that are asthma-friendly and Eco-Healthy <http://www.cleanhealthyny.org/#!/additional-resources/c11p5>

*Special thanks to Alicia Culver, Executive Director of the Responsible Purchasing Network.*



For the full Green Child Care Purchasing Implementation Guide visit [www.acgov.org/ece](http://www.acgov.org/ece) or contact Kim Hazard, [kim.hazard@acgov.org](mailto:kim.hazard@acgov.org), (510) 208-9645.