



Greywater-Compatible Cleaning Products

Greywater-Compatible Products

Greywater is the used water that drains from washing machines, bathroom sinks, showers, and tubs. In California, greywater can legally be used to irrigate plants in the yard, if certain rules are followed. Many common household soaps and laundry detergents contain high levels of salts and synthetic compounds that can build up in the soil, so using plant-friendly products with your greywater system is important. Toxic discharges such as rinse water from paint, chlorine bleach, or hair dye should never be released into the greywater system. Instead, they should be routed to the municipal sewer. All greywater systems should have a three-way valve installed to easily switch the discharge water flow to the sewer or yard.

Product Ingredients

For greywater systems, generally seek out cleaning products that are “biodegradable” or “biocompatible” and free of 1) salts, sodium compounds; 2) boron, borate, and borax; and 3) chlorine bleach. Avoid other synthetic compounds that degrade soil quality, like coloring agents, synthetic fragrance, and artificial preservatives.

Ingredients to Avoid

Ingredient formulas in consumer products may unexpectedly change, so read product labels **every time** you buy soaps or detergents, even your favorites. Avoid:

- sodium and ingredients with the word “sodium” or “salt” in them
- boron/borax (toxic to plants)
- sodium perborate
- petroleum distillate
- anti-bacterial soaps and cleaners
- “whiteners” and “softeners”
- chromium oxide
- artificial colors, FD&C colors
- synthetic fragrance
- artificial preservatives
- parabens (methyl, propyl, butyl, and ethyl)
- chlorine bleach / sodium hypochlorite (household bleach)*

**Hydrogen peroxide is an acceptable alternative.*

Mulch Basin

The effect that certain cleaning product ingredients will have in your yard depends in part on what type of greywater system is in place. If the greywater is going into the soil through a mulch basin (“terrestrial”), Nitrogen and Phosphorus ingredients are not a problem, and in fact end up as soil nutrients. This is the case for greywater systems that follow California code and typical “laundry-to-landscape” type systems. If greywater is discharged in or near a creek or other body of water, however, these same nutrients will cause harmful algae to grow. For this and other reasons, greywater should not be used within 100 feet of a creek or body of water.

Contaminants

Send to sewer all water used to wash diapers or similarly soiled items and when members of the household or guests have a communicable disease such as Staph infection or Hepatitis. Divert to the sewer all water containing hazardous chemicals and water from oily or greasy rags. When in doubt about whether a cleaning product is compatible, don’t use it in your greywater system. Don’t plant root vegetables or edible leafy greens in the greywater garden. Use greywater for flowers, herbs, fruit trees, and above-ground fruiting vegetables. Wash food before eating it, and wash hands after working in the soil.

factsheet

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Laundry Greywater Systems

Look for products that list their ingredients. Many conventional brands do not list all of their ingredients on their labels. This is a common practice and is not illegal. However, it is safe to assume that many of these products contain unlisted artificial colors and scents. You're more apt to find greywater-compatible products at natural foods grocery stores and ecologically-minded stores. Choose liquid soaps over powder as they tend to contain less sodium. Using less of a product will reduce its impact on your garden plants – use only as much as is needed to be effective.

Greywater-Compatible Laundry Products:

- Oasis laundry liquid
- Bio Pac laundry liquid
- Hydrogen Peroxide bleach, oxygen bleach, or non-chlorine bleach
- Soap Nuts

Bathroom Sink and Shower Greywater Systems

There are numerous ingredients to avoid in body care products. Find out what chemicals are in your body and beauty products using the Skin Deep database (ewg.org/skindeep). Many greywater-compatible soaps are available at the Ecology Center store and at many natural grocery stores.

Greywater-Compatible Body Soaps & Shampoos:

- Dr. Bronner's Magic Soaps (liquid)
- Oasis dishwash/all-purpose cleaner for handwashing dishes, body & shampoo
- Most bar soaps and shampoo bars are fine, but they make the water more basic (opposite of acidic), so avoid using that greywater for acid-loving plants (eg. blueberries or rhododendrons)

Greywater-Compatible Household Cleaners & All Purpose Liquid Cleaners:

- Oasis dishwash/all-purpose cleaner for handwashing dishes, body & shampoo
- Dr. Bronner's Liquid Castile Soap
- Ecos: Creamy Cleanser, Parsley Plus, Window Kleener, Floor Kleener

Observe Your Plants

Regularly observe your plants' vigor. If you see distressed plants, stop using a product and experiment with a replacement. Of course, poor plant health could be due to other factors in the plant's environment, such as over or underwatering.

Recommended Resources

City of Berkeley Home Graywater Guide: ci.berkeley.ca.us/ContentDisplay.aspx?id=45756

Greywater Action FAQ: greywateraction.org/greywater-faq

San Francisco Water Power Sewer Graywater Webpages: sfwater.org/index.aspx?page=100
(includes San Francisco Graywater Design Manual for Outdoor Irrigation & CA greywater code requirements)

EBMUD Graywater and Rebate Info: ebmud.com/water-and-drought/recycled-water/graywater/

Rainwater Harvesting for Drylands: harvestingrainwater.com/greywater-harvesting/

The Water-Wise Home, by Laura Allen, 2015

Create an Oasis with Greywater, 5th ed., by Art Ludwig

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