

Delta Gamma Well Aware

Encompasses eight dimensions: Social, Spiritual, Physical, Emotional, Vocational, Intellectual, Financial and Leadership Development

Dry Cleaning – Is it Safe?

How Conventional Dry Cleaning Works

- Dry cleaning is a process that cleans clothes without water. The cleaning fluid that is used is a liquid, and all garments are immersed and cleaned in a liquid solvent; the fact that there is no water is why the process is called "dry."
- The dry cleaning process involves tagging and inspection, pre-treatment, dry cleaning, post-spotting and finishing.
- A dry cleaning machine is a motor-driven washer/extractor/dryer that holds from 20 to 100 pounds of clothes or fabrics in a rotating, perforated stainless-steel basket.
- As the clothes rotate in the perforated basket, there is a constant flow of clean solvent from the pump and filter system. The dirty solvent is pumped continuously through the filter and re-circulated free and clear of dirt that gets trapped in the filter.
- The next cycle drains and rapidly spins the clothes to expel the solvent and then goes into a dry cycle by circulating warm air through the clothes.
- The quality of cleaning, the degree of soil removal, the color brightness, the freshness, the odor and the softness all depend on the degree to which the cleaner controls the filter and solvent condition and moisture. Quality control can vary day to day unless the cleaner is constantly attentive to these factors.

The Chemicals Used in Dry Cleaning

- The chemical solvent used in 85 to 95 percent of dry cleaning is perchlorethylene, also known as perc, PCE, tetrachloroethylene and tetracholorethylene and is the only air toxic emitted from the dry cleaning process.
- Perc, according to the Environmental Protection Agency, is a "possible to probable" human carcinogen and a known environmental contaminant that has been linked to infertility, birth defects and tumors.
- Exposure to perc is also associated with chronic, non-cancer health effects, including liver and kidney damage and neurological effects.
- Acute exposures to perc can result in loss of coordination, eye, nose and throat irritation and headache.
- *If you use a conventional dry cleaner, remove clothes from the plastic bags immediately and air them out in a well-ventilated area (not your closet).*

Dry Cleaning Alternatives

- Although rayon, polyester blends and tailored or lined pieces, such as suits, must be dry cleaned, many items with "dry clean only" tags can be washed at home.
- Cashmere or wool can be hand washed with a gentle detergent or even shampoo and laid flat to dry.
- While at home dry cleaning kits do not contain perc, they may not effectively remove stains and can adversely affect those that are allergic to perfumes or artificial fragrances.

Green Dry Cleaning

- Some states, including California, are enacting a gradual ban of machines that use perc, which includes going completely perc free by 2023.
- [Wet cleaning](#) uses biodegradable soap and water with computer-controlled dryers and stretching machines to ensure that fabrics retain their natural size and shape. Wet cleaning is supposed to be able to clean 99.9 percent of "dry clean only" garments safely, including leather, suede, most tailored woolens, silks and rayons. (Neckties seem to be the one exception.)
- Silicone and [Liquid CO₂](#) Solvents are relatively new approaches to dry cleaning and have been developed based on both liquid carbon dioxide (usually obtained as a recycled byproduct of other industrial processes) and silicone. Dry cleaners using these solvents are currently few in number.
- Alternative Petroleum Solvents are more like standard dry cleaning, but the processes use alternative hydrocarbon solvents such as Exxon D-2000 or Chevron-Phillips' EcoSolv.

Choosing a Cleaner

- While choosing between dry cleaning alternatives, it is important not to base decisions entirely on labels such as "green cleaning" or "green technology."
- These terms can mean a variety of things, and while "green cleaning" is most often a term which refers to a 100% wet cleaning method, some cleaners may be using these labels to indicate any non-Perc system, including the riskier siloxane and hydrocarbon alternatives.
- In some instances cleaners might label themselves "greener" or "earth friendly" even if perc is still used in the process.
- Be sure to ask your cleaner what specific methods and chemicals they use before making your decision.
- Keep in mind the specific needs of your garments. Even though wet cleaning methods are definitely the safest and most environmentally friendly, in the case of an expensive tailored wool jacket or a brightly colored rayon blouse, CO₂ cleaning might be the best choice, while silks will likely do perfectly well with wet methods.


[Wellness Resources](#)

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U.S. Environmental Protection Agency, www.epa.gov

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