



1. What is GreenEarth®? GreenEarth is the brand name for a liquid silicone dry cleaning solution. It is an exclusive, patented dry cleaning process whose name and logo are trademarked (there are no “generic” forms of GreenEarth). The scientific name for liquid silicone is [decamethylpentacyclosiloxane](#) or D5.

2. Why is it better for the earth? Eighty-five percent of dry cleaners use a solvent known as perc, short for perchloroethylene, a chlorinated hydrocarbon classified by the [EPA](#) as a Toxic Air Contaminant. Use of perc is highly regulated because indiscriminate disposal of perc can seriously contaminate soil and groundwater, and exposure can irritate eyes, nose and throat, as well as cause headaches, dizziness or fatigue. Perc is also classified by the EPA as a possible to probable human carcinogen.

In contrast, GreenEarth is so safe the EPA does not regulate it; it’s safe for the air, water and soil. What’s more, the GreenEarth solution is not a [VOC](#); it is non-toxic, and non-hazardous. If you wanted to, you could safely rub it on your skin. In fact, you probably already do. That’s because GreenEarth’s solution is pure liquid [silicone](#)—essentially liquefied sand. It’s the same base ingredient found in everyday shampoos, soaps and lotions. Plus, when released to the environment, liquid silicone safely degrades back into its three natural components: sand (SiO₂), water and carbon dioxide.

3. Why is it better for clothes? GreenEarth solution is different from dry cleaning solvents in that liquid silicone is chemically inert, meaning it does not interact with the textile fabric or dyes during the cleaning process. This helps preserve the quality of garments, eliminates problems with fabric wear or color loss, maintains a soft “hand” and prevents shrinkage. Delicate silks, suede, leather, beads, sequins, painted garments, specialty buttons and trims, couture, heirloom fabrics and other “problem” items are no problem at all. And, unlike petroleum based solvents like perc or hydrocarbon, liquid silicone is odorless, so there is no lingering chemical smell on your clothes.

4. Why is it better for dry cleaners? Dry cleaners face a difficult dilemma: it can be very expensive to purchase and operate an environmentally responsible cleaning system. GreenEarth is the one truly “green” system that is affordable for dry cleaners. The cost for a machine capable of using GreenEarth is similar to the perc machines most dry cleaners currently use. And, because it requires less labor to process and finish items cleaned with the GreenEarth system and machines can be configured to use less energy than traditional systems, dry cleaners using GreenEarth enjoy better operating efficiency. Best of all, GreenEarth produces a noticeable difference that customers can see, touch and smell, helping Affiliates attract and keep loyal customers.

5. Are there other environmentally friendly dry cleaning alternatives? The only other recognized “green” alternatives in dry cleaning are CO₂ and 100% wet cleaning. CO₂ systems use a liquid carbon dioxide solvent, converted from gas under extremely high pressure in special machines. Wet cleaning uses water as its solvent, much like home laundry, only with more sophisticated machinery. Both systems offer an environmentally safe alternative for consumers, but dry cleaners have been reluctant to risk investing in them. The problem for dry cleaners, especially the small “mom and pop” cleaners who are the backbone of the industry, is that it is very difficult to make a living operating exclusively with either of these eco-friendly systems. CO₂ machines can cost up to three times as much as traditional dry cleaning machines. Wet cleaning requires more labor to produce and finish garments, thus both options are considerably more expensive to operate. Less than one-third of one percent of dry cleaners operates with CO₂ or 100% wet cleaning exclusively.

6. How many GreenEarth Affiliates are there? There are more than 1000 active licensees worldwide. Approximately 600 Affiliate locations are in the United States and can be located using the [Store Locator](#) on this web site.

7. What is the regulatory outlook for dry cleaning and GreenEarth? Dry cleaning is under increasing regulatory scrutiny. California's ban on both the use of perc and the purchase of new perc machines is widely regarded as the beginning of the end of perc solvents. New Jersey, Massachusetts, New York, Texas and Toronto have similar bans under consideration. If the industry continues to drag its feet when it comes to adopting "more environment friendly alternatives", regulators can be expected to grow increasingly concerned and increase legislative pressure.

GreenEarth is recognized by regulatory bodies as a safe alternative solvent. The EPA does not regulate the use of liquid silicone in dry cleaning (or any other application), nor does it view silicone as a toxic air contaminant or potential carcinogen. California's Air Resources Board conducted an extensive 18 month review of the health and safety research available on D5 liquid silicone and in February of 2008, declared GreenEarth an "acceptable dry cleaning solvent alternative" and "sees no need" to regulate its use in dry cleaning because it "does not pose an adverse health risk for the public". GreenEarth meets and exceeds all regulatory requirements and regulations in all states.

8. Has there been much testing of liquid silicone or the GreenEarth dry cleaning method? Yes, and that is important. Liquid silicone (D5) is one of the most extensively studied materials in consumer applications. Over \$30 million worth of [independent testing and research](#) has also been done on D5 liquid silicone to confirm that there are no risks to public safety resulting from its use in all of its many applications. It has been used safely for more than 40 years in many different applications, and is a base ingredient in a wide range of everyday personal care products, from shampoos and conditioners to cosmetics, lotions and antiperspirants.

GreenEarth Cleaning is the only company to perform and openly report extensive testing on the environment and safety profile of its cleaning system. GreenEarth Cleaning underwrote a comprehensive [2002 IFI Fellowship Study](#) to compare the GreenEarth system to the industry standard perc system. The IFI declared it to be "as effective as perc with no environmental concerns". GreenEarth has also sponsored independent waste stream and air exposure testing to confirm that liquid silicone as used in daily dry cleaning operation exceeds all federal, state and local requirements for water and air safety.

9. I am seeing a lot of "organic" dry cleaning claims, is GreenEarth organic? No. And that is a good thing. When "organic" describes food, it is universally understood to mean pesticide and chemical free. "Organic", as it relates to chemistry means something very different because it refers to anything with a carbon backbone. Gasoline and asphalt are organic. Dry cleaners who market themselves this way are misleading the consumer. Perc and hydrocarbon are both organic solvents.

10. Is hydrocarbon (sold under brand names like DF2000) environmentally friendly? Many well intentioned dry cleaners have converted from perc to hydrocarbon believing that it was a good "green" alternative. But while certainly a big improvement over perc, hydrocarbons are classified as a volatile organic compound (VOC) which means they are a contributor to smog formation. They would also likely require clean up if spilled. And, like perc, hydrocarbon is listed by the EPA as a neurotoxin and skin and eye irritant for workers. The good news is that most machines designed to use hydrocarbon solvent are also designed to use GreenEarth solution, so dry cleaners using hydrocarbon can affordably convert to a truly green system if they want to.