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Dry cleaning is a method of cleaning clothes and fabrics that uses chemical solvents instead of water. It’s particularly suitable for delicate fabrics like silk, wool, and garments with intricate detailing that can be damaged by traditional washing methods. But what exactly happens in the dry cleaning process, and what products do professional dry cleaners use to ensure your clothes come out looking their best? Let’s dive into the details. 1. Pre-treatment:Before the actual cleaning begins, dry cleaners inspect each garment for stains, dirt, and imperfections. The pre-treatment phase involves carefully identifying the type of stain and applying specific stain removers to target these spots. This might involve using a range of products, from oil-based solvents to enzyme-based cleaners for protein stains like blood or sweat. Skilled dry cleaners will also examine the garment’s fabric type and make sure they use appropriate products that won’t damage the material. 2. Cleaning:Once the pre-treatment is complete, garments are placed in a specialized dry cleaning machine. Instead of using water and detergent like a washing machine, this machine uses a chemical solvent. The clothes are agitated gently in the solvent, which dissolves oils, dirt, and stains. This process is called “dry” cleaning because water is not involved, making it ideal for fabrics that can shrink, distort, or lose color when exposed to moisture. 3. Post-cleaning:After the garments have been cleaned, they are dried using a controlled process where the solvent evaporates without leaving any residue on the fabric. The clothes are then carefully pressed, steamed, or ironed to remove wrinkles and restore their shape. This final step ensures the garment looks fresh and polished before being returned to the customer. Several different products and solvents are essential for effective dry cleaning. Each has a specific role in ensuring that garments are not only cleaned but also protected from damage. 1. Perchloroethylene (PERC):For decades, perchloroethylene (commonly known as PERC) has been the most widely used solvent in the dry cleaning industry. PERC is excellent at removing a wide variety of stains and cleaning fabrics without damaging their structure. However, concerns about its environmental impact and potential health risks have led to the development of alternative cleaning solutions. 2. Hydrocarbon Solvents:Hydrocarbon-based solvents are a popular alternative to PERC. While not as powerful as PERC in removing heavy stains, they are much gentler on fabrics. Hydrocarbon solvents are also less toxic and more environmentally friendly, making them a growing choice for many dry cleaners who want to reduce their environmental footprint. 3. Silicone-based Solvents:Silicone-based solvents, such as GreenEarth, are a more modern solution. They offer a safer and more eco-friendly approach to dry cleaning. These solvents are biodegradable and gentle on clothes, making them suitable for delicate fabrics while still effectively removing dirt and stains. 4. Cleaning Agents:In addition to solvents, professional dry cleaners use special detergents and cleaning agents designed for dry cleaning. These agents help break down oils and dirt within the solvent, ensuring that garments come out clean without leaving behind residues. Many dry cleaners use fabric softeners or conditioners that work within these systems to keep fabrics soft and prevent static cling. 5. Spot Removers and Stain Treatments:To deal with specific types of stains, dry cleaners use a variety of spot removers and stain treatments. These can range from protein-based stain removers to oil-based solvents that target grease and ink stains. The key to successful stain removal is understanding the type of fabric and the stain itself, then applying the correct product to treat it without causing further damage. While there are DIY dry cleaning kits available, professional dry cleaning offers several advantages. First, dry cleaners have the expertise to handle delicate fabrics and complex garments like suits, dresses, and coats that require special care. They know which solvents and products work best for different materials, ensuring that your clothes are cleaned thoroughly without being damaged. Additionally, professional dry cleaners can help extend the lifespan of your clothes. By using the right products and techniques, they prevent wear and tear that could occur with at-home washing or improper cleaning. T his makes dry cleaning an investment in the long-term care of your wardrobe. Dry cleaning is a specialized cleaning process that uses chemical solvents rather than water to clean clothes, making it ideal for delicate fabrics and garments that can’t withstand traditional washing methods. Products like PERC, hydrocarbon solvents, silicone-based cleaners, and specialized detergents play a key role in ensuring clothes come out looking fresh and spotless. As the industry moves toward more environmentally friendly solutions, newer solvents offer a safer alternative for both your clothes and the planet. So, the next time you drop off your clothes at a dry cleaner, you’ll know a bit more about the intricate process and the products used to keep your garments in top condition. For someone who isn’t very familiar with dry cleaning, it’s hard to believe clothes can get clean without being soaked in water and laundry detergent. After all, we’re used to washing machines swirling our laundry around in soapy water, so the idea of “dry” cleaning can feel unreliable. How does it work? What happens to your clothes once you drop them off? And most importantly, does it actually clean them? To clarify the most essential details about dry cleaning, we put together this first timer’s guide to walk you through the process, explain what to expect, and show why it’s the preferred method for cleaning everything from tailored suits to silk blouses. How to Prepare Your Clothes for Dry Cleaning Before you drop off your clothes, follow these simple steps to ensure everything is cleaned, treated, and returned to you looking its best. 1. Read the Care Labels Before assuming your garment (or even other textiles) needs dry cleaning, check the care label inside. Manufacturers provide specific instructions on how to clean different fabrics, and this will tell you if dry cleaning is required. Look for labels that say "Dry Clean Only" – these fabrics can be damaged in water. Some items may say "Dry Clean Recommended" – meaning it’s the safest option but not mandatory. If it says "Do Not Dry Clean," let your cleaner know so they can use an alternative method. Pro Tip: If a garment contains multiple fabrics—like a wool-blend suit with a silk lining—dry cleaning is usually the safest choice, even if only one fabric needs special care. 2. Inspect Your Clothes for Stains and Damage Before you hand over your clothes, give them a quick inspection to spot stains, loose buttons, missing embellishments, or weak seams. The more information you provide your cleaner, the better the results. Stains: Take note of any stains and let your dry cleaner know what caused them (oil, coffee, ink, sweat, etc.). This helps them choose the right pretreatment method. Odors: If your clothes have strong odors (like smoke or food smells), mention it so they can apply a deodorizing treatment. Loose Buttons, Zippers, or Threads: Some cleaners offer minor repairs, but it’s always best to check beforehand and ask if they can fix any loose fastenings. Pro Tip: Never try to remove a stain yourself with water, bleach, or detergent before taking it to the dry cleaner. This can cause stains to set deeper into the fabric, making them harder (or impossible) to remove professionally. 3. Empty All Pockets One of the biggest dry cleaning mishaps happens when customers forget to check their pockets. Items left inside—like pens, tissues, coins, or even gum—can cause damage to both your clothes and the cleaning equipment. Check jacket pockets, pant pockets, and shirt pockets for forgotten items. Remove receipts, tissues, and paper that could break down and create a mess in the cleaning machine. Take out anything sharp, like keys or pins, which could tear delicate fabrics. Pro Tip: If you’re dry cleaning multiple items, consider making a checklist to ensure nothing gets left behind. 4. Group Clothes by Fabric Type and Color Dry cleaners typically sort clothes by fabric and color before cleaning, but it’s helpful if you do a quick sort at home. Delicate Fabrics (Silk, Lace, Wool, Rayon) – These need extra care and specific cleaning techniques. Heavy Fabrics (Denim, Coats, Suits) – These require different drying times and pressing. Light Colors vs. Dark Colors – Light-colored garments are more prone to dye transfer, so keeping them separate reduces the risk of discoloration. If you have matching outfit pieces—like a suit and pants or a skirt and blouse—bring them together to ensure they’re cleaned in the same batch to maintain a consistent color and finish. 5. Remove Pet Hair and Lint (If Possible) While dry cleaning removes dirt, it doesn’t always pick up lint or pet hair. If your clothes are covered in fur, it’s a good idea to use a lint roller before dropping them off. This ensures a thorough clean and prevents hair from transferring onto other garments during the process. Use a lint brush or tape roller to remove surface lint. If pet hair is embedded in fabric (like wool or fleece), try using a slightly damp cloth to lift it before taking it to the cleaner. 6. Fold or Hang Clothes Neatly Before Drop-off Presentation matters! Dry cleaners process hundreds of garments daily, and clothes that arrive neatly folded or hung are easier to inspect and treat. Suits, dresses, and jackets should be brought in on hangers to maintain their shape. Sweaters, blouses, and pants can be neatly folded to prevent unnecessary wrinkles. Avoid stuffing clothes into a bag—this can lead to creases that are harder to press out later. Pro Tip: If your cleaner provides garment bags or reusable laundry bags, consider using them instead of plastic bags to keep clothes fresh and well organized. 7. Communicate Special Requests to Your Cleaner If you have specific concerns about your clothes, talk to your dry cleaner before leaving your items. Most professional cleaners are happy to accommodate special requests. Tell them about: Stains and what caused them. Delicate fabrics that need extra care. Any repairs you need (loose hems, missing buttons, etc.). Special preferences for pressing or folding. Some cleaners also offer eco-friendly dry cleaning options, so if you prefer a more sustainable cleaning method, ask about their green alternatives. 8. Keep Your Receipt and Ask About Pickup Time After you drop off your clothes, you’ll receive a receipt with a pickup date and time. Check that all your items are listed correctly. Ask when your clothes will be ready—some stains may require extra time. If you need a rush service, many cleaners offer same-day or next-day options for an extra fee. Pro Tip: Save your dry cleaner’s contact information (or email address) in case you need to check on your order or request an update. The Dry Cleaning Process The dry cleaning process is more advanced than a simple wash. It’s a specialized treatment designed to clean and protect fabrics that wouldn’t survive the harshness of a washing machine. Here’s a step-by-step breakdown of what happens behind the scenes. Step 1 – Garment Inspection and Tagging Before anything else, your clothes are carefully inspected. The cleaner looks for stains, damage, missing buttons, or weak seams. Each item is then tagged with a unique identifier to ensure it stays with your order throughout the process. Step 2 – Pretreatment and Stain Removal Some clothes require special treatment before the main cleaning process begins. Your dry cleaner will use targeted stain removal techniques, applying specialized solvents to dissolve oil-based stains (like grease or makeup) and water-based stains (like wine or sweat) without damaging the fabric. Step 3 – The Dry Cleaning Cycle Clothes go into a professional dry cleaning machine, which looks similar to a large washing machine but works very differently. Instead of water, the machine uses a liquid solvent that circulates through the fabric, lifting dirt and oils without causing shrinkage or fading. The solvent is then extracted, leaving garments clean and refreshed. Step 4 – Post-cleaning Inspection and Finishing Once the cleaning cycle is complete, your clothes go through a final inspection. Any lingering stains are treated again, and garments are professionally pressed or steamed to restore their original shape. Suits, dresses, and pleated garments get a precision finishing treatment. Step 5 – Packaging and Pickup Finally, your freshly cleaned and pressed clothes are packaged to prevent wrinkles and protected with a garment cover. They’re now ready for pickup, looking and feeling as good as new. Remember: Remove plastic garment bags as soon as you get home to allow fabrics to breathe and prevent moisture buildup. First Time Dry Cleaning? Let Ingram Cleaners Make It Simple for You! Don't be anxious about how your clothing will look after their first dry cleaning because at Ingram Cleaners, we guarantee a smooth and premium professional dry cleaning experience for you and your clothes. It's been more than 60 years that we've served (and are continuously serving) the residents and businesses in Abilene, Texas and the surrounding areas. Whether it’s your favorite suit, delicate dress, or even household linens, you can count on us for exceptional quality and attention to detail. Visit Us! Buffalo Gap Road: 2666 Buffalo Gap Rd., Abilene, TX, 79605 Call: 325-698-0190 Treadaway Boulevard: 1514 S. Treadaway Blvd., Abilene, TX, 79602 Call: 325-437-3333 Want a more convenient way? Schedule a pickup today, and our team will respond within 24 hours! What actually happens when you drop clothes off at the dry cleaner? We explain the process of dry cleaning, plus when to do so.Most of us have dropped something off to be dry-cleaned, from everyday clothing like work uniforms or dress shirts to special occasion items like wedding dresses or tuxedos. One of the great benefits of outsourcing laundry to a dry cleaner is not having to think about how it gets cleaned. But as a result, the how of dry cleaning can be a bit of a mystery.Maybe you've wondered what goes on once you've dropped your clothes off at the dry cleaner, and what, exactly, "dry cleaning" even means. This article will explain the dry cleaning process, the history of solvent-based fabric care, and when you might want to consider dry cleaning vs hand-washing or machine laundering.Getty Images / domin_dominWhat Is Dry Cleaning?While traditional laundry uses a combination of soap, water, and mechanical action to clean clothing and household goods like sheets and towels, dry cleaning relies on solvents—rather than water—for cleaning. Merriam-Webster defines dry cleaning as "the cleansing of fabrics with substantially nonaqueous organic solvents." That is, cleaning fabrics without the use of water or water-based cleaning agents.Dry cleaning is believed to have been invented in 1825. According to the National Library of Medicine, "The French Federation of Dyeing and Cleaning gave an account of a servant in the household of Jean-Baptiste Jolly in Paris in 1825 who spilled the contents of a lamp on a soiled tablecloth. When the tablecloth dried, the spots had disappeared. Use of volatile organic liquids to clean cloths became known as ‘French cleaning’ in Scotland and ‘chemical cleaning’ in Germany. Eventually, such processes were called ‘dry cleaning’ because they do not involve the use of water."Highly flammable petroleum-based solvents, like kerosene and gasoline, quickly proved to be unsafe, leading to the invention of non-petroleum solvents for use in dry cleaning. One such solvent, perchloroethylene, has been widely used in dry cleaning since the 1930s. However, perc, as it is commonly called, is carcinogenic and toxic to the environment, leading to contamination of soil and groundwater when spilled; perc is highly regulated by the Environmental Protection Agency.While perc is still widely used in dry cleaning, alternative solvents and cleaning methods have been developed to replace it with safer options. Typically referred to as green dry cleaning, these more modern solvents include synthetic petroleum, siloxane, and liquid carbon dioxide. Wet cleaning, i.e. the use of water-based cleaning methods and agents, is sometimes also used by dry cleaners as an alternative to perc.How Dry Cleaning Works"Garment care better describes what we do to clean clothes," says Wayne Edelman, a dry cleaning and fabric care expert and president of Meurice Garment Care, "because it is not just about dry cleaning. Some clothes need to be spot cleaned, hand cleaned, cleaned using water or hand washed." Those decisions are made after an item has been dropped off at the dry cleaner, which is when the following process begins.Step 1: Garment TaggingThe first thing that happens when items are dropped off for dry cleaning is that they are tagged with a unique number. The garment tag ensures that dry cleaners can keep track of customers' belongings so that you get your items back—and not someone else's!Step 2: Assessment and PretreatmentAfter tagging, a visual inspection and assessment take place: Stains are marked, and buttons and embellishments are covered to protect them from damage. In some cases, buttons and embellishments may be removed prior to dry cleaning and reattached after the process is complete. If necessary, stains are pretreated.Step 3: Garments Placed in Dry Cleaning MachineDry cleaning machines look very much like home washing machines, and they function similarly: Clothing and other dry-cleanable items are placed in the drum of the machine, and solvents are pumped in as the drum agitates the items to produce mechanical cleaning action.Step 4: InspectionAt the completion of the dry cleaning cycle, garments are removed from the dry cleaning machine and inspected. If any stains remain, they may be pretreated and/or put through a second round in the dry cleaning machine. Embellishments and buttons are inspected for damage or, if they had been removed, reattached to the garment.Step 5: Finishing TouchesIf needed, garments are pressed, ironed, or steamed to remove wrinkles, often using a machine called a form finisher. Form finishers, which look something like a padded mannequin, provide a smooth finish by allowing dry cleaners to steam garments in the position in which it is worn.Then, a final inspection is performed before the garments are covered in plastic and returned to their owner.When to Consider Dry Cleaning vs Hand- or Machine-LaunderingMany items of clothing that are labeled "dry clean only" can actually be hand- or machine-laundered. To determine if a garment can be hand- or machine-washed, consult the fabric content information on its care label.Cotton, linen, polyester, nylon, and spandex are almost always machine washable. Avoid the use of hot water and high-heat drying when laundering shrink-prone cotton and linen; nylon, which tends to be staticky, should be air dried. Spandex should not be washed with chlorine bleach. Wool, silk, rayon, and viscose do not react as well to wet cleaning, especially machine washing. Wool does not like to be overhandled, nor exposed to heat, which can cause it to shrink or become matted. Hand-laundering is fine for lightweight wool items, but heavy wool garments like overcoats should be professionally cleaned. Water damage and shrinking are common in silk, rayon, and viscose fabrics; dry cleaning is typically recommended for those fabrics. In addition, there are certain factors to consider, including the item's fabrication, value, and meaning to you. "Items made with mixed materials, embellishments, suede, leather, and vinyl trim should all be trusted to a professional," Edelman says. "High-value items or precious heirloom items with particular stains should always be brought to a professional."For more Better Homes & Gardens news, make sure to sign up for our newsletter!Read the original article on Better Homes & Gardens. When your nicest suit needs cleaning, you can’t just throw it into the washing machine and dryer with all of your everyday laundry. The same goes for sport coats, dress shirts, and dress pants. For these items (and other delicate pieces), it’s best to drop them off at your local dry cleaner so they can be professionally cleaned without risking any damage.While many people use the dry cleaners on a regular basis, few know what the process actually entails. Let’s take a look at how dry cleaning works, as well as how Rema Dri-Vac products can improve fabricare operations.The Dry-Cleaning Process ExplainedAs its name states, dry cleaning is a process that essentially cleans clothing without using any water. Instead, it uses a cleaning solvent called perchloroethylene. The dry-cleaning process consists of four main steps, including:Pre-Treatment – This step is designed to make the stain removal process more efficient. During pre-treatment, a special solution is applied to the garment. This product is similar to what you would apply at home before putting stained clothing in your washing machine.Dry Cleaning – During this step, clothing is cleaned using a machine that combines washing, extracting, and drying. Each dry-cleaning machine can hold up to 100 pounds of clothes, which are rotated inside of the appliance in a perforated basket. Pumps within the machine administer a constant flow of solvent into the cleaning basket. The soiled solvent is removed from the system simultaneously as fresh cleaning solution continues to enter it. After a cleaning cycle, all solvent is expelled from the machine, and the clothing will then enter the drying phase. This occurs by simply circulating warm air through the garments while they’re still inside the appliance. A dry cleaner’s prowess is largely based on the quality control measures deployed within their operations. Those who use high-quality equipment, such as those offered by Rema Dri-Vac, are more likely to deliver a more satisfactory cleaning. For example, our return systems can help dry cleaners maintain a steady temperature during the dry-cleaning process, thus eliminating issues with product quality.Post-Spotting – This step consists of using air, water, steam, and a vacuum to remove stains that still exist after dry cleaning. Again, this is a step that can have mixed results based on the quality of equipment used.Finishing – This step is similar to ironing. However, it doesn’t just serve to remove wrinkles from the garment; it can also repair any issues on it. During the finishing process, the garment is pressed using steam. The steam is then removed with a vacuum and the piece is folded or hung to be given back to the customer. Equipment from Rema Dri-Vac, such as an air vacuum, can help enhance the performance of finishing operations by minimizing the total energy used.While dry cleaning may seem like a basic process, the results can vary greatly if you don’t use the proper equipment. Rema Dri-Vac has been a leader in the fabricare industry for over 70 years. For more information about our products or to place an order, contact us today. Despite the name, dry cleaning is a process that uses liquids other than water to clean clothes, bedding, upholstery and other types of fabrics. Water can damage certain fabrics — such as wool, leather and silk — and a washing machine can wreak havoc on buttons, lace, sequins and other delicate decorations. Enter dry cleaning.Dry cleaners use a variety of solvents to clean fabric. Early solvents included gasoline, kerosene, benzene, turpentine and petroleum, which were very flammable and dangerous, according to the State Coalition for Remediation of Drycleaners (SCRD), a group whose members share information about cleanup programs. The 1930s saw the development of synthetic, nonflammable solvents — such as perchloroethylene (also known as perc or PCE) and decamethylcyclopentasiloxane (also known as GreenEarth) — which are still used today. Detergents are typically added to the solvents to aid in the removal of soils, according to an SCRD report titled "Chemicals Used in Drycleaning Operations." Detergents aid dry cleaning in three ways: You may like Carrying moisture to aid in the removal of water-soluble soils.Suspending soil after it has been removed from the fabric so it won't be reabsorbed.Acting as a spotting agent to penetrate the fabric so that the solvents will be able to remove the stains. Detergents are either added into the solvent before dry cleaning begins or added into the process at specific times.Dry cleaning machines consist of four parts, according to the Drycleaning & Laundry Institute (DLI), an international trade association for garment care professionals:The holding tank or base tank that holds the solvent.A pump that circulates the solvent through the machine.Filters that trap solid impurities and soils removed from either the solvent or the fabric.A cylinder or wheel where the items that are being cleaned are placed.During dry cleaning, the pump pulls solvent from the tank and sends it through the filters to remove any impurities. The filtered solvent then enters the cylinder, where it interacts with the fabrics and removes any soil. The solvent then travels back into the holding tank so it can begin the process again.After the items complete the cleaning cycle, the machine goes through an extraction cycle, which removes excess solvent. During this process, the rotation rate of the cylinder increases, much like the final spin cycle on a home washing machine. After the extraction cycle completes and the cylinder stops moving, the clothes are either dried within the same machine (if it is a closed system) or transferred into a separate drier. The excess solvent is collected, filtered and transferred back into the holding tank. History of dry cleaningDry cleaning dates back to ancient times, according to the DLI. Records about methods for cleaning delicate items have been found in the ruins of Pompeii, decimated by the eruption of Mount Vesuvius in the year 79. In those days, many clothes were made from wool, which was known to shrink in water. Professional clothes cleaners, known as fullers, used solvents such as ammonia (produced from urine) and lye, as well as a type of clay called fuller's earth, which excelled at absorbing dirt, sweat and grease stains.According to the DLI, the earliest reference to anything resembling modern dry cleaning was a story about a clumsy maid who spilled some kerosene on a greasy tablecloth. The kerosene quickly evaporated, and she noticed how much cleaner the spot where the chemical fell was. People performed many experiments after that incident to determine what types of solvents were best at cleaning greasy stains. These substances included turpentine spirits, kerosene, petroleum-based fluids, gasoline and camphor oil, according to the SCRD. The credit for being the first commercial dry cleaner goes to the firm of Jolly-Belin, which opened in 1825 in Paris, according to the Handbook of Solvents. In Paris, of course, fashion was an important part of society. The clothes were soaked in vats filled with turpentine, then put into a sort of predecessor to the washing machine and then air dried so that the turpentine could evaporate. The first dry cleaner in the United States showed up around the same time. Thomas Jennings, a U.S. tailor and inventor, as well as the first known African-American to receive a patent in the United States, used a method called "dry scouring" to clean clothes that traditional cleaning methods would damage. His process was patented in 1821, and Jennings ran a highly successful tailoring and dry cleaning business in New York City.The underlying issue with petroleum-based solvents was their extreme flammability, so alternatives were sought. Michael Faraday, an English physicist and chemist, first synthesized PCE in 1821. However, it wasn't readily used in dry cleaning until the early 1930s, after William Joseph Stoddard, a U.S. dry cleaner, further developed PCE as a dry cleaning solvent. Its use grew in the late 1930s and early 1940s due to a petroleum shortage during World War II. Environmental and health concernsWhile it is the most popular choice for dry cleaning, perchloroethylene has been found to be dangerous for both health and the environment. According to the Occupational Safety & Health Administration (OSHA), coming into contact with perc puts dry cleaning employees at high risk of health complications. Exposure to perc vapors may occur when an employee loads dirty clothes into a machine, removes items before the drying cycle completes, cleans lint or button traps, changes the filters, or performs maintenance on the machines. Those who have their clothes and uniforms dry cleaned regularly may also experience the side effects of perc. Inhaling these vapors for a prolonged period can cause dizziness, drowsiness, loss of coordination, mild memory loss, visual perception and blistering of the skin after prolonged contact.People in the dry cleaning business also face a risk of certain types of cancer. Long-term exposure, according to the National Library of Medicine, may lead to certain types of cancer, including esophageal, cervical, bladder, multiple myeloma and non-Hodgkin's lymphoma. There are also potential links to cervical and breast cancers. Damage to the central nervous system, liver, kidneys and lungs may also develop.Studies, such as one published in 2014 in the journal Environmental Health Perspectives, discuss links that have been found between perc and cancer, especially in the dry cleaning business. After going over many similar past studies, and after studying the effects of perc on rats, the researchers in the 2014 study concluded that perc exposure did have a strong correlation with certain types of cancer. Similar to the EPA's 2012 classification, the 2014 study characterized the substance as "likely to be carcinogenic to humans," no matter how someone came in contact with the chemical. Another 2014 study, also appearing in Environmental Health Perspectives, specifically examined the risk of bladder cancer in people exposed to perc. The researchers also found strong correlations between dry cleaners who use perc as a solvent and an increased risk of bladder cancer. This held true even after taking into account cigarette smoking, another known risk factor in the development of bladder cancer.The EPA also stated that there is some evidence, while inconclusive, that perc affects the reproductive system in both men and women, resulting in altered sperm structures and reduced fertility. There has also been some research into birth defects caused by perc, but the studies are few and have many limitations.Perc can be released into the air, water and soil in the environment around where it is produced or used, including the neighborhood dry cleaner. According to the Agency for Toxic Substances and Disease Registry, most of the perc in the atmosphere comes from the dry cleaning industry. The compound breaks down very slowly in the atmosphere, so it can travel long distances. Perc can enter the water system by liquid waste that may be contaminated with the solvent. Typically, most of the perc evaporates quickly from the water, and the leftovers break down slowly in the water. The chemical also breaks down slowly in soil, where it concentrates after seeping out at waste-disposal sites. The future of dry cleaningToday, there are at least 36,000 dry cleaners in the United States alone, according to IBISWorld, a market-research company. However, according to several sources, including a story published on American Drycleaner, many areas in the United States are losing dry cleaners. The article indicates that rising rents, casual attire becoming the new norm, more-durable fabrics being used for clothing and cheap clothing are just a few of the reasons for the shrinking number of dry cleaning stores in the United States. Another reason is that many dry cleaners are small, family-owned businesses. As the older generation retires, the younger generation looks for other types of jobs. Environmental concerns are also changing the industry. California, for example, is phasing out the use of perc in dry cleaning in favor of less-toxic choices, including water-based and carbon dioxide cleaning. Dry cleaning is a term many of us have heard, yet it often remains a mystery. What does "dry clean" mean, and how does it differ from regular washing? This article seeks to clarify the dry cleaning process. It will explain how it works and highlight the differences between dry cleaning and washing. Whether you're curious about how dry cleaners clean clothes or wondering if they do regular laundry, we've got you covered.What is Dry Cleaning?Dry cleaning is a method used to clean clothes and textiles using a solvent other than water. Contrary to what the name suggests, dry cleaning isn't actually "dry." The clothes are immersed in liquid solvents, which help remove dirt and stains without using water. The dry cleaning procedure at Happy Cleaners consists of multiple stages:Inspection and Tagging: When you drop off your clothes at a dry cleaner, each item is inspected and tagged to avoid mix-ups.Pre-treatment: Stains are pre-treated using special chemicals to ensure they are removed during cleaning.Cleaning: Clothes are placed in a dry cleaning machine and cleaned with a solvent. This solvent dissolves oils and dirt that water can't remove.Post-spotting: After cleaning, any remaining stains are treated again.Finishing: Finally, garments are pressed and folded or hung, ready for you to collect.The Solvents Used in Dry CleaningA critical component of dry cleaning is the solvent. Traditionally, perchloroethylene (perc) has been the primary solvent used. It is effective but has environmental and health concerns. Nowadays, many cleaners use alternative solvents like hydrocarbon, silicone-based solvents, and liquid CO2, which are more eco-friendly.The Benefits of Dry CleaningDry cleaning offers several advantages over traditional washing:Gentle on Fabrics: Dry cleaning is less abrasive than washing, which helps preserve delicate fabrics.Better Stain Removal: Solvents used in dry cleaning dissolve oils and greases better than water.Maintains Shape and Color: The process helps maintain the original shape and color of garments.Dry Cleaning vs. Washing: Key DifferencesThe primary difference between dry cleaning and washing is the use of water. While washing uses water and detergents, dry cleaning employs solvents. Here are some other differences:Fabric Care: Delicate fabrics like silk, wool, and leather often require dry cleaning to avoid damage.Stain Removal: Oil-based stains respond better to dry cleaning solvents.Environmental Impact: Modern dry cleaning methods are becoming more eco-friendly. However, traditional methods can have a greater impact than washing.When to Choose Dry Cleaning Over WashingCertain clothes benefit more from dry cleaning:Suits and Formal Wear: These items often require dry cleaning to maintain their shape and appearance.Delicate Fabrics: Fabrics like silk, wool, and velvet are best handled by dry cleaning.Stubborn Stains: Oil-based stains are more effectively removed through dry cleaning. Let's take a closer look at each step in the dry cleaning process.Inspection and TaggingEach garment is inspected for stains, missing buttons, and any special instructions. Tags are attached to ensure that your clothes are returned to you in the same condition.Pre-treatmentStains are pre-treated with specialized solvents. This step is crucial for removing tough stains like grease and oil.CleaningGarments are placed in a dry cleaning machine, which looks similar to a washing machine. The machine fills with the chosen solvent and gently agitates the clothes to remove dirt and stains.Post-spottingAfter cleaning, any remaining stains are addressed. This may involve additional solvents or steam to ensure thorough cleaning.FinishingFinally, garments are pressed to remove wrinkles and restore their shape. This step may include steaming or ironing, depending on the fabric. Dry cleaners offer a variety of services beyond just cleaning. They can:Repair and Alter: Many dry cleaners offer repair and alteration services.Preserve: Dry cleaners can preserve wedding dresses and other special garments.Laundry Services: Some dry cleaners also offer regular laundry services.Do Dry Cleaners Wash Clothes?While dry cleaning is their specialty, many dry cleaners also provide laundry services. They wash clothes using water and detergents, similar to what you do at home. Happy Cleaners boasts over 20 years of experience in the industry. Our state-of-the-art facility spans 15,000 square feet. Each month, we manage 100,000 pieces of clothing. Dry cleaning is an essential service that helps maintain the quality and longevity of certain garments. Understanding how dry cleaning works can help you decide when to choose it over washing. Dry cleaning provides advantages that regular washing cannot. It is ideal for delicate fabrics, tough stains, and preserving the shape of your clothes.The next time you think about your cleaning options, you will better understand what dry cleaning involves. You will also know when it is the right choice for your clothes. Remember to choose a reputable dry cleaner who uses modern, eco-friendly solvents for the best results. Anthony Tam A longtime New Yorker with a diverse global perspective, Anthony Tam combines expertise in the NYC real estate market with a professional communications background and unparalleled analytic skills. Experienced in residential sales, rentals and commercial real estate throughout NYC, Anthony has a particular expertise in Battery Park City, the Financial District and the West Village. Adept at forming quick connections with clients, he is a creative, action-oriented thinker who genuinely loves helping people discover New York and fulfill their real estate goals.Prior to venturing into real estate, Anthony was a brand manager specializing in digital advertising and marketing. He is extremely well versed in the latest technology, a skill set that allows him to analyze all opportunities on behalf of his buyers and craft innovative marketing plans for each of his sellers. He always listens closely to each client's needs and wants, then takes a strategic, story-centric approach that blends analytic and statistical research with his broad knowledge of local properties and neighborhoods. Above all, he has a knack for making the process fun and easy for everyone involved.Born in Malaysia, Anthony is a graduate of Parsons The New School for Design with a BFA in Communication Design, and has made New York City his home for over a decade. Fluent in Mandarin and Cantonese, his diverse background and experiences enhance his ability to service a broad range of clients. When not out exploring New York City neighborhoods, he can often be found swimming, working out, or taking in a movie. deepblue4you//Getty ImagesTaking our clothing to the dry cleaners is often a top chore on our to-do list, but rarely are we thinking about how our most precious shirts, pants and uniforms actually get cleaned. Unlike traditional laundry, which uses water and detergent, dry cleaning is the process of cleaning clothing without the use of water. And as strange as that may sound, dry cleaning does actually clean your clothes. Instead of cleaning with water and detergents, garments are cleaned with organic solvents that work to lift stains without damaging delicate fabrics such as silk, wool and velvet. Clothing — yours and other people’s — is washed in a machine similar (though bigger, more expensive and much more adjustable) to the washing machines we use at home. But don’t be fooled, dry cleaning is not a process you can do without the proper training and equipment. Most dry cleaners have years of hands-on experience, and organizations like the Drycleaning and Laundry Institute offer training and resources for dry cleaners around the world.The History of Dry CleaningIn 1820, Thomas Jennings, a tailor in New York, was working on finding a method to clean his customer’s clothing without damaging the delicate garments. A year later, he filed a patent with the U.S Patent Office for a process he called "dry scouring." This patent made Jennings the first African American to hold a patent in the United States, according to IPOEF. Unfortunately, it was destroyed in a fire in 1836, but the method used in modern day dry cleaners still closely follows his original process. According to Enviro Forensics, four years later, in 1825, Jean-Baptist Jolly, a dye-worker in France, made a similar discovery when a maid working for him spilled kerosene on a paint-stained linen tablecloth. When the kerosene evaporated, he noticed that the stains on the tablecloth had disappeared. Jolly recognized that this discovery had the potential to change the way we clean clothing and opened the first dry cleaning business in France.It wasn’t long before dry cleaners found that using petroleum-based chemicals (like kerosene and gasoline) was not a good option. These chemicals are incredibly flammable and not safe to work with over prolonged periods of time. William Joseph Stoddard, an American dry cleaner created the first non-petroleum cleaning solvent for dry cleaning, but it was Michael Faraday who discovered perchloroethylene, which is still the solvent of choice for most dry cleaners. Perchloroethylene (or perc as it’s commonly called) is a volatile organic compound which has been found to be carcinogenic and not great for the environment. Even minor spills can cause major contamination to the soil and groundwater around the dry cleaner facility. For these reasons, the EPA very heavily regulates the use of perc by dry cleaners.How the Process of Dry Cleaning WorksStep 1: Garment tagging.When you first drop off your clothing at the dry cleaner, it is tagged with a unique number to identify each item. This helps busy dry cleaners keep track of their customer’s clothing and avoids the headache of giving the wrong items to a customer when the process is finished.Step 2: Inspection and stain pre-treatment.All of the garments are visually inspected, and any stains are marked and pre-treated, if necessary. Pretreatment is done with special chemicals made for specific kinds of stains and fabrics. At this point, any embellishments or buttons are also covered with a soft cloth to protect them from damage during the dry cleaning process. Some dry cleaners may even choose to remove embellishments and buttons as an extra precaution. Step 3: Into the dry cleaning machine. The soiled clothing is placed in a dry cleaning machine. The organic solvent of choice (or water if your dry cleaner uses the wet cleaning method) is pumped into the machine while the clothing is agitated at a gentle pace. These machines are much larger than the washing machines we have at home but work with the same basic spinning function. Dry cleaning machines can be set to spin much slower and have greater temperature control, too.Step 4: A second inspection. When the dry cleaning cycle is finished, the garments are inspected again to make sure all stains have been removed from the garment. Additionally, all buttons, embellishments and seams are inspected to make sure they are still intact. If any embellishments and buttons were removed during the initial inspection step, they are now reattached. Step 5: The finishing touches. Depending on the type of fabric, the dry cleaner will now press, iron or steam each garment to get rid of wrinkles. Many dry cleaners use a form finisher for this step. Form finishers are machines that iron a garment using air or steam in the position that it is worn. It allows for a smoother, more pristine finish on the dry cleaned clothing. All garments are given a final inspection before being covered in plastic and returned to its owner.deepblue4you//Getty ImagesOther Types of Dry Cleaning From the need to produce a solvent that can replace the use of perc, came four other methods of dry cleaning (a.k.a "green" dry cleaning): synthetic petroleum (DF-2000), siloxane (Green Earth), liquid carbon dioxide and wet cleaning. Synthetic petroleum is a byproduct produced during the manufacture of gasoline that is often marketed as a more environmentally friendly alternative to perc. The EPA has gone on to classify it as a neurotoxin and it is as heavily regulated as perc is. Siloxane (through its commercial name of Green Earth), is a colorless, odorless liquid silicone used in the dry cleaning industry. This solvent safely degrades into sand, water and carbon dioxide, but has also been found to be carcinogenic in rats and may also be toxic to the liver. Liquid carbon dioxide is a nonflammable, nontoxic solvent that can be reused for multiple cleaning cycles. No new carbon dioxide is produced with this method, and it is a cheap, abundant solvent. However, the initial cost of purchasing the dry cleaning machine necessary for this method is very high, and therefore not an affordable option for many cleaners. Wet cleaning is exactly what it sounds like. This method uses water as the cleaning solvent, but the washing machine used can be set to very specific temperature and spinning modes. While it is often just as effective as traditional dry cleaning for most items, it may not be safe for all garments and fabrics, and Good Housekeeping Cleaning and Textile Labs tests have found it a struggle to remove some stains, especially oily ones, without pretreating. How to Get the Best Results from Your Dry CleanerCheck your garment label to make sure dry cleaning is the recommended method of cleaning. The care label symbol for dry clean is a circle and some labels indicate what type of dry cleaning solvent is recommended by a letter inside the circle. Before you drop off your garments, make sure to tell your dry cleaner about any stains. Many stains need to be pretreated before they are placed in the dry cleaning machine. Knowing what created the stains (coffee, oil, wine, etc.) on your clothes can help your dry cleaner choose the best pretreatment solution. Don't try to clean your dry clean only garments with your at home detergents. Garments are labeled as dry clean only for a reason. There are at-home cleaning products that claim to dry clean right in your dryer, but these are better suited to deodorize and remove wrinkles and light stains. They don't remove stains as well as the professional solvents and methods a dry cleaner uses.While it's a good idea to remove the plastic covering from your dry cleaning clothing when you get home, clothes coming back from the dry cleaner should not smell of solvent or perc. If they do, that’s a sign the dry cleaner is not properly cleaning or filtering the solvent they are using. And it’s a sign you need to find another dry cleaner!Jodhaira RodriguezReviews AnalystFrom 2021 to 2023, Jodhaira (she/her) was a product reviews analyst in the Good Housekeeping Institute’s Home Care & Cleaning Lab, where she tested and wrote about home appliances, cleaning products and cleaning tips. Prior to joining GH, she graduated from Hofstra University with a bachelor’s degree in forensic science and spent two years as an analyst in an environmental lab in Queens. Most of us have dropped something off to be dry-cleaned, from everyday clothing like work uniforms or dress shirts to special occasion items like wedding dresses or tuxedos. One of the great benefits of outsourcing laundry to a dry cleaner is not having to think about how it gets cleaned. But as a result, the how of dry cleaning can be a bit of a mystery. Maybe you've wondered what goes on

cleaning. From a customer standpoint, dry cleaning is fairly simple — you just drop off dirty garments and then go back and pick them up when they're freshly cleaned and wrapped in those plastic garment bags. But what exactly is dry cleaning? Unlike throwing your clothes in a washing machine with some laundry detergent, dry cleaning is a bit more involved and is often used to clean more delicate pieces and fabrics that might get damaged if washed more traditionally. For a better understanding of the entire process, we turned to dry cleaning and textile experts to explain exactly what goes on when you drop your clothes off — plus, they recommend which items are worth dry cleaning and tips on how to ensure your garments are cleaned properly.SKIP AHEAD What is dry cleaning? | How does dry cleaning work? | What types of items should be dry cleaned? | How to maximize your dry cleaning experience | Why Trust NBC Select?A washing machine uses water, detergent and motion to get clothes clean. "But dry cleaning is a cleaning process that uses a liquid solvent instead of water to remove dirt, stains, and oils from fabric," says James Joun, co-founder and chief operating officer of Rinse, an on-demand laundry and dry cleaning pickup and delivery company. "It is a process that is gentler on delicate materials and helps maintain a garment's original shape, texture, and longevity."The solvents used in dry cleaning are made of fabric-safe chemicals. "When applied, they clean the surface of the garment by dissolving and lifting dirt, oils, and stains without soaking into the fibers like water," says Frej Lewenhaupt, co-founder and chief product officer of textile care company Steamery. Dry cleaning is a multistep process that gently cleans a garment and removes any stains. According to Joun, when you drop off your items to be dry-cleaned, here's what happens: Garment inspection and tagging: Your item should be carefully inspected for stains, loose buttons, missing embellishments, or damage. Then, a tracking tag is attached to ensure the garment is processed correctly and can be reassembled after cleaning. Pre-treatment spotting (stain removal): Any visible stains are pre-treated using specialized stain-removal techniques based on the type of fabric and stain composition. For example, dry cleaners will use tannin removers for wine stains or will use enzymes for certain food stains. Dry cleaning: Garments are placed in a large dry-cleaning machine, which uses a solvent that removes dirt and oils. While normal washing uses water to flush out dirt, the dry cleaning solvent cleans without saturating the fabric with water. The solvent is continuously filtered and purified to ensure the best cleaning results. The same machine can remove the solvent through heating, and the garments emerge from the machine completely dry.Post-treatment and pressing: Any remaining stains are treated again using spotting methods and potentially dry cleaned. Most garments, however, emerge completely clean and are then pressed, steamed, or reshaped to restore its original look and remove wrinkles.Final inspection, assembly and bagging: The garment undergoes a final quality check before assembly. Once the garment is cleaned, it's placed in protective packaging that shields it from debris during handling and delivery.The easiest way to determine if clothing should be dry cleaned is to look at its care tag. If it says "dry clean only," you should follow those instructions. "Garments that say this tend to feature fabrics that have difficulty maintaining their texture when they absorb water and then are exposed to high heat (i.e. machine dried)," says Joun. "Items that say 'dry clean recommended,' can be washed at home. However, we recommend professional cleaning to help maintain their look for much longer."Have items that don't have tags? Or perhaps you just want a basic understanding of the types of items that dry cleaning is best for. You should dry clean wool, velvet, silk, leather suede or fur garments, as well as suits or items made with intricate beading or embellishments, says Lewenhaupt."Washing a garment that should be dry cleaned can lead to shrinkage, a distorted shape, and changes to the fabric's texture," says Lewenhaupt. "For example, a wool sweater might lose its shape and size due to the fibers tightening." Skipping the proper cleaning technique can also alter the color of your items. "Some dyes used in professional garments are not water soluble and can lead to color loss," Joun says. "Washing them incorrectly can cause colors to fade unevenly or bleed onto other fabrics." Trying to clean an item at home that should be dry-cleaned can also lock in stains. "If a stain isn't treated properly, washing in hot water or drying can cause it to permanently set into the fabric, making removal nearly impossible," says Joun. "Oil-based stains — like salad dressing or makeup — are non water-soluble and instead require oil-based solvents which dry cleaning provides." And if you accidentally wash a "dry clean only" item at home, avoid putting it in the dryer. "Instead, bring it to a professional dry cleaner as soon as possible to see if they can reverse some of the damage," Joun adds. A few tricks can help you get the most out of your dry cleaning experience and ensure your garments are cared for as well as possible. Both of our experts agreed that communicating with your dry cleaner is key. Here are the things they suggest you chat about when dropping off an item: Point out stains: "Let your cleaner know if there are specific stains on the garment and what caused them," says Joun. "Different stains require different treatments, and some stains can become invisible over time but darken later." By giving them more details, your dry cleaner can customize stain treatment to remove the spot best. Mention delicate fabrics or special features: Though it may seem like they can just look at whatever you bring in, it's helpful to let them know if your garment is made of silk, cashmere, or has beading, lace, or embroidery. This will flag to the cleaner that they may need to take extra precautions, says Joun.Note any loose buttons, tears or repairs needed: "Dry cleaners often offer minor repairs, so letting them know about a loose hem, missing button, or small tear allows them to fix it during the cleaning process," says Joun. Even if they don't provide repairs, it lets them know to be extra careful around those areas. Fess up to at-home attempts: Don't feel bashful if you tried to clean an item at home or treat a stain. Be honest and mention what products you used, says Joun. "Some DIY stain removers can react with dry cleaning solvents, leading to unexpected discoloration."At NBC Select, we work with experts with specialized knowledge and authority based on relevant training and experience. We also ensure all expert advice and recommendations are made independently and without undisclosed financial conflicts of interest.James Joun is the co-founder and chief operating officer of Rinse, an on-demand laundry and dry cleaning pickup and delivery company.Frej Lewenhaupt is the co-founder and chief product officer of textile care company Steamery. Bethany Heitman is a contributor at NBC Select and a journalist who regularly covers beauty, home and lifestyle. For this story, she interviewed experts on the process of dry cleaning.Catch up on NBC Select's in-depth coverage of tech and tools, wellness and more, and follow us on Facebook, Instagram, Twitter and TikTok to stay up to date.Bethany Heitman Dry cleaning is a process used to clean clothing and other textiles using a solvent other than water. Contrary to what the name suggests, dry cleaning isn't actually dry. Clothes are soaked in a liquid solvent, agitated, and spun to remove the solvent. The process is much like what occurs using a regular commercial washing machine, with a few differences that mainly have to do with recycling the solvent so it can be reused rather than released into the environment. Dry cleaning is a somewhat controversial process because the chlorocarbons used as modern solvents can affect the environment if they are released. Some solvents are toxic or flammable. Water is often called the universal solvent, but it doesn't really dissolve everything. Detergents and enzymes are used to lift greasy and protein-based stains. Yet, even though water can be the basis for a good all-purpose cleaner, it has one property that makes it undesirable for use on delicate fabrics and natural fibers. Water is a polar molecule, so it interacts with polar groups in fabrics, causing the fibers to swell and stretch during laundering. While drying the fabric removes the water, the fiber may be unable to return to its original shape. Another problem with water is that high temperatures (hot water) may be needed to extract some stains, potentially damaging the fabric. Dry cleaning solvents, on the other hand, are nonpolar molecules. These molecules interact with stains without affecting the fibers. As with washing in water, mechanical agitation and friction lift the stains away from the fabric, so they are removed with the solvent. In the 19th century, petroleum-based solvents were used for commercial dry cleaning, including gasoline, turpentine, and mineral spirits. While these chemicals were effective, they were also flammable. Although it wasn't known at the time, the petroleum-based chemicals also presented a health risk. In the mid-1930s, chlorinated solvents began to replace petroleum solvents. Perchloroethylene (PCE, "perc," or tetrachloroethylene) came into use. PCE is a stable, nonflammable, cost-effective chemical, compatible with most fibers and easy to recycle. PCE is superior to water for oily stains, but it can cause color bleeding and loss. The toxicity of PCE is relatively low, but it is classified as a toxic chemical by the state of California and is being phased out of use. PCE remains in use by much of the industry today. Other solvents are also in use. About 10 percent of the market uses hydrocarbons (e.g., DF-2000, EcoSolv, Pure Dry), which are flammable and less effective than PCE, but less likely to damage textiles. Approximately 10-15 percent of the market uses trichloroethane, which is carcinogenic and also more aggressive than PCE. Supercritical carbon dioxide is nontoxic and less active as a greenhouse gas, but not as effective at removing stains as PCE. Freon-113, brominated solvents, (DrySolv, Fabrisolv), liquid silicone, and dibutoxymethane (SolvonK4) are other solvents that may be used for dry cleaning. When you drop off clothes at the dry cleaner, a lot happens before you pick them up all fresh and clean in their individual plastic bags. First, garments are examined. Some stains may require pre-treatment. Pockets are checked for loose items. Sometimes buttons and trim need to be removed before washing because they are too delicate for the process or would be damaged by the solvent. Coatings on sequins, for example, may be removed by organic solvents. Perchloroethylene is about 70 percent heavier than water (density of 1.7 g/cm3), so dry cleaning clothes isn't gentle. Textiles that are very delicate, loose, or liable to shed fibers or dye are placed into mesh bags to support and protect them. A modern dry cleaning machine looks a lot like a normal washing machine. Clothes are loaded into the machine. The solvent is added to the machine, sometimes containing an additional surfactant "soap" to aid stain removal. The length of the wash cycle depends on the solvent and soiling, typically ranging from 8-15 minutes for PCE and at least 25 minutes for a hydrocarbon solvent. When the wash cycle is completed, the washing solvent is removed and a rinse cycle starts with fresh solvent. The rinse helps prevent dye and soil particles from depositing back onto the garments. The extraction process follows the rinse cycle. Most of the solvent drains from the washing chamber. The basket is spun at about 350-450 rpm to spin out most of the remaining liquid. Up to this point, dry cleaning occurs at room temperature. However, the drying cycle introduces heat. Garments are tumble dried in warm air (60–63 °C/140–145 °F). The exhaust air is passed through a chiller to condense out residual solvent vapor. In this way, about 99.99 percent of solvent is recovered and recycled to be used again. Before closed air systems came into use, the solvent was vented to the environment. After drying there is an aeration cycle using cool outside air. This air passes through an activated carbon and resin filter to capture any leftover solvent. Finally, trim is reattached, as needed, and clothes are pressed and placed in thin plastic garment bags. For stubborn stains and delicate fabrics, dry cleaning can be a lifesaver. But how does dry cleaning work exactly? Dry cleaning is a cleaning process that uses a liquid solvent instead of water and detergent to clean clothes. Whether you have clothes with stains that won't come out in the regular wash or delicate fabrics that require waterless cleaning, dry cleaning is an excellent option. This guide will cover all the basics of what you need to know about the benefits of dry cleaning and how it works. Matt Connelly, CEO and founder of the I Hate Ironing network of dry cleaning experts Angela Rubin, cleaning professional from Hellamaid As the name suggests, dry cleaning is a process that cleans clothes without water. Dry cleaners use a special solvent that lifts dirt and stains from clothes. Clothes are washed together in a large machine that uses solvent instead of water and detergent. "The main advantage of dry cleaning is that it is gentler on delicate materials which can be damaged by traditional washing processes and detergents," says Matt Connelly. "The solvents used in dry cleaning are also more targeted at treating stains that water alone cannot remove, such as oil-based stains." Dry cleaners vary in the solvents they use, but many employ tetrachloroethylene, often called perchloroethylene or "perc." Perc comes with health and environmental risks and is regulated by the EPA. In response, many dry cleaners now offer alternative solvents that are more eco-friendly, such as synthetic petroleum, siloxane (Green Earth), and liquid carbon dioxide. Dry cleaning usually takes between 24 and 48 hours for regular items. For special stains or delicate fabrics, it may take longer. So, how does dry cleaning work? The dry cleaning process generally involves these steps: Tagging clothes. First, dry cleaners place identifying tags on your clothes. They may use paper tags or iron-on strips. Tags allow the cleaners to determine whose clothes are whose and to wash clothes with similar stains together. Garment inspection. Cleaners inspect clothes to ensure the items are in good condition and no items are left in pockets. Pre-treatment of stains. Dry cleaners mark and spot treat any stains with formulas to address specific issues. If you have details about any stains in your clothes, let your cleaner know so they can use the best treatment solution for that particular stain. Cleaning in the machine. Clothes go through the wash process in special dry cleaning machines. The machines use a gentle agitation process and clean using solvents. Extraction of solvent. The next phase of the dry cleaning cycle involves extracting the solvent from the clothing and the machine. The solvent can then be reused. Modern machines recover approximately 99.99% of solvents for reuse. Aeration. After the cleaning process, clothes are cooled and filtered with outside air and a vapor recovery filter to remove any traces of solvent. Finishing touches. The final stage is pressing, steaming, and ironing garments so they're crisp and ready to go. If you're wondering why you should consider dry cleaning, you should know that there are a few benefits to the specialized cleaning process. This waterless cleaning method is especially helpful for delicate fabrics that may be damaged by traditional washes or for items with oil-based stains. "Dry cleaning is gentler on delicate fabrics, preserving their quality and extending their lifespan," says cleaning professional Angela Rubin. "It effectively removes stubborn stains, such as oil-based or grease stains, that may not come out with regular washing." Another advantage of dry cleaning is that it can preserve the color, shape, and texture of clothing. Water, especially hot water, can be harsh on clothes and cause colors to fade. Since dry cleaning is waterless, it helps preserve colors and fabrics. "Dry cleaning eliminates the risk of drinking or color fading as your items aren't washed in hot water or dried at high temperatures," Connelly says. Fabrics that usually do well with dry cleaning include: SilkCashmereWoolVelvetSuede Some fabrics can be washed in a regular machine or dry cleaned. See your clothing's cleaning label for the recommended cleaning methods. For some items that would normally go in a regular washing machine, such as denim, if you have unique embellishments, treatments, or stubborn stains, dry cleaning can be a great option. Through its use of high heat (up to 160 degrees Fahrenheit) and chemical processing, dry cleaning can eradicate bacteria, microorganisms, and viruses that may be clinging to your clothing and other textiles. While it's possible for your home washer and dryer to disinfect your clothing—especially if you have a sanitize setting—dry cleaning is a far more effective way to kill living organisms. While dry cleaning may be the best solution for specific fabrics and stains, it does not work well for every situation. Dry cleaning excels at removing oil-based stains but may not treat some other blemishes. Cleaners can use spot treatments for some stains before dry cleaning. Talk with your cleaner to make sure the stains on your items can be removed. Additionally, not all clothing is made of materials that do well with dry cleaning. Fabrics that generally do not do well with dry cleaning include: SequinsRayonMaterials made with plastic, PVC, or polyurethane "The chemical solvent in dry cleaning can cause damage to the adhesives used to hold together sequined or beaded items, causing the embellishments to fall away," Connelly says. "Plastic-coated items such as raincoats or gym clothes can be damaged by dry cleaning solvents and should be washed per their care label instead." If you're in doubt whether an item can be dry cleaned, check the label for cleaning instructions. You can also consult with your cleaner to ensure you choose the best option for your clothing. Since the common dry cleaning solution of perc has raised environmental and health concerns, eco-friendly and healthy alternatives are increasingly popular. "Dry cleaning traditionally used perchloroethylene (perc), a potentially harmful chemical," Rubin says. "However, the industry has evolved to adopt more eco-friendly practices. Many modern dry cleaners use environmentally friendly solvents, such as hydrocarbon-based or silicone-based solutions, which are less harmful to both the environment and human health." Modern dry cleaning machines are also more energy efficient, as they're better equipped to reuse cleaning solvents so they are not released into the environment. There are a variety of eco-friendly dry cleaning solutions now available, including: Liquid carbon dioxide cleaning uses carbon dioxide under high pressure and other cleaning agents to offer an eco-friendly cleaning with specialized equipment. Silicone-based solvent uses a chemical-free, odorless solution to remove stains. DF-2000 hydrocarbon solvent is a petroleum-based cleaning solvent that is extolled as a better alternative to perc. However, the DF-2000 still comes with some health warnings. Wet cleaning involves using water to clean with specific machine settings and cycles to minimize wear. This option can work well for some fabrics but not for those that can't get wet. Frequently Asked Questions Dry cleaning costs vary based on the location. In general, dry cleaning usually ranges between $3 and $10 to dry clean a shirt and averages $25 to $50 per visit. Contrary to what may seem logical, there is a difference between dry clean versus dry clean-only clothing. While dry cleaning is the recommended method of cleaning for some fabrics, you can sometimes get away with washing them at home.However, dry-clean-only materials are not meant to be submerged in water, ever. Doing so can damage the item, including dye bleeding, fading, shrinking, loss of shape, and fabric distortion, ultimately ruining the piece. If your clothing is marked as dry clean only, do yourself a favor and take it to the dry cleaner so you don't risk your investment. Dry cleaning may use heat, but for delicate items, cleaners do not use heat. Talk with your cleaning professional about any special care instructions or stains that your clothing has. kzenon//Getty ImagesFor a lot of folks, doing laundry isn't one of the most exciting parts of the day. As lucky as some are to have a laundry room in their home or a washing machine and dryer in their apartment, the process of folding and putting away laundry after the dryer sings its little tune to let you know it's finished is definitely a chore. However, there are some items that need cleaning that you simply can't—or shouldn't—throw in the washer, and when that's the case, you need to make a stop at the dry cleaner. Many of us are familiar with the concept of dry cleaning, especially when it comes to a silk blouse or linen tablecloth. But how does dry cleaning work? We're curious people, so we asked an expert to walk us through what dry cleaning is and why some of your favorite pieces need it. What Exactly Is Dry Cleaning?In short, dry cleaning is the process of laundering clothing or home items without the use of water. Liquid solvents and chemicals are used in the process, but they don't penetrate and soak into the fibers the way water does in your at-home machine. People turn to dry cleaning to remove stains from clothing or to clean pieces that can't be submerged in water, like specific wools and silks, for example. Dry cleaning prevents shrinkage in fabrics and won't ruin the material the way washing in your at-home machine might. Sal Fernandez, vice president of operations at Cameo by Copeland Cleaners, adds, "Dry cleaning will preserve your item's colors and texture longer than regular home washing." The dry cleaning process is actually quite simple.Step One: Examine and Classify the ItemFirst, the dry cleaner classifies whether your item is delicate, a specific color, or has any special details that could be affected by the process (such as fur trim or buttons). The dry cleaner then tags your piece of clothing with information to help them find it for you when it's ready. Step Two: Inspect and Pretreat StainsThe dry cleaner examines the item all over whether or not you point out a stain. If there's one you forgot to mention, the dry cleaner will try to classify what kind of stain it is and tag it to be treated it according to that classification before starting the dry cleaning process. At this point, the cleaner will remove or cover up delicate buttons and/or embellishments. Step Three: Put Items in the Dry Cleaning MachineDry cleaners use machines that look and spin like a bigger version of the washing machines we have at home. The big difference is these machines don't use water. Instead, they agitate the fibers with a "nonhazardous solvent," in Fernandez's case, to remove stains and clean. The solvent still a liquid, but it doesn't soak into the material the way water does; dry cleaners can use different solvents (more on those in a minute). Step Four: Second InspectionTo make sure that pesky stain has been removed, dry cleaners check each item again. If the stain isn't gone, they'll try treating it with different methods—for instance, steaming. Step Five: Finish the ItemThis is when the dry cleaner adds back any buttons and/or embellishments that have been removed. They also take steps to ensure it's ready for its next wear. At Cameo by Copeland, Fernandez says, they "finish the garment by hand pressing or steaming, replace any broken buttons, and package the item with fine stuffing tissue, if needed, to preserve the finish." They then "cover [the garment] with poly plastic, heat sealing the top/bottom to protect the garment until its worn again by the client."artwell//Getty ImagesWhat Chemicals Are Used in the Dry Cleaning Process?"There are multiple solvents used in dry cleaning," explains Fernandez. "The most common was perchloroethylene, which is now used much less in the industry. As a high-end cleaning establishment, Cameo by Copeland uses an environmentally friendly solvent called Sensene, which is alcohol based." According to the SafeChem website, Sensene is "particularly effective on oil, fat, lanoline, sebum, milk, lipstick and motor oil." It's also approved as an additive for GOTS-certified textiles, the highest standard for certified organic fibers.Perchloroethylene, more commonly referred to as PERC, is a carcinogen, and it can cause a myriad of health issues. Because it is so unhealthy, the federal Environmental Protection Agency actually proposed a ban on this substance in June 2023. Before choosing a dry cleaner, we recommend making sure they use other solvents to clean your clothes, like some greener alternatives. While the Société Générale de Surveillance states that any dry cleaner who doesn't use PERC is taking part in green dry cleaning, there are a few solvent alternatives and dry cleaning options to look at that are more eco friendly. The SGS suggests professional wet cleaning, which "uses water and special equipment that gently washes, dries and restores fabrics." They also suggest liquid carbon dioxide (CO_2), which is pressurized CO_2 that turns into a liquid solvent that can be used to clean clothing. However, using liquid silicone, called D5 from its chemical name, seems to be the best green alternative. D5 is nonhazardous, nontoxic, biodegradable, and odorless. "[D5] simply degrades into sand (SiO_2), water, and carbon dioxide, leaving no toxic residue if released into the atmosphere, making it safe for air, water and soil," states the SGS.What Products Should You Definitely Dry Clean?You should dry-clean wool and silk since they're both such temperamental materials when it comes to water. "You do not want to wash your favorite Yves Saint Laurent blouse at home," as Fernandez puts it. Other fabrics to dry-clean are leather, cashmere, linen, fur, and sometimes cotton. Many everyday fabrics can simply be thrown in the wash, but these are some you definitely want to treat delicately. When it comes to the frequency of dry cleaning, it depends on what you're looking to clean. "Everyday business shirts we recommend cleaning once a week," says Fernandez. "The more delicate fabrics like silks and cashmeres need more attention. Cleaning them after one wear is recommended to preserve their texture." He also suggests cleaning wool and cotton after two wears. Business or formal garments, like suits, don't need to be dry cleaned as often. Every four or five wears is sufficient for a business jacket, according to the menswear company Flex Suits. For a formal jacket, it suggests every two to three wears; formal pants require less frequent cleaning, after five to seven wears. However, there are some who believe that you should dry clean your jacket and slacks at the same time in case any fading occurs. That way, your jacket and pants will match. Romi Georgiadis//Getty ImagesHow Should You Prepare Your Item For Dry Cleaning?"There is really no preparation necessary on the client's side," says Fernandez. "The only thing we ask is, if a garment is stained, not to treat with any home products or water. When a stain is tampered with, it makes it much more difficult to remove. Just make us aware of the stain." If you have any special requests or other damage to point out—like a broken button—tell your dry cleaner upfront. Efforts to clean clothing without soap and water go back a long time. One early pioneer was Thomas Jennings, a black freedman who was a tailor in New York City. He wasn't satisfied with laundry methods of the day, and in 1821 was granted a patent for a process called dry scouring, which was advertised as being able to remove dirt and grease from clothing while allowing garments to retain their original shape. The details of his method, sadly, are lost to history, due to an 1836 fire that destroyed the paperwork for scores of patents. Jennings apparently used his earnings from his invention to support the abolitionist movement, and helped to organize the Legal Rights Association, a group that raised court challenges to discrimination [sources: Matchar, NIHF]. In 1855, Jean Baptiste Jolly, a French dye-works owner, noticed that his tablecloth became cleaner after his maid accidentally overturned a kerosene lamp on it. Operating through his dye-works company, Jolly offered a new service and called it "dry cleaning." Early dry cleaners used a variety of solvents including kerosene — to clean clothes and fabrics. In the United States, the dry-cleaning industry is fairly new and has developed only during the past 75 years. After World War II, the volatile synthetic solvents carbon tetrachloride and trichlorethylene gave way to a product known as perchlorethylene (perc), which became the prevalent solvent choice for the industry. It was safer to handle, but did a much better job of cleaning, required less massive equipment and floor space, and could be utilized in retail locations offering one-hour service. Perc is still widely used in the dry cleaning industry, but there's been increasing attention to its potential health risks. Short-term inhalation exposure can result in upper-respiratory tract and eye irritation, kidney dysfunction and neurological effects, among other health concerns, and exposure to perc been associated with several types of cancers in workers [source: EPA, Erickson]. EPA required dry cleaning facilities located in residential buildings had to stop using the chemical in December 2020 [source: Burke]. California's ban on perc goes into effect in 2023 and several other states are studying bans on the chemical as well [source: EPA]. In New York state, managers of dry cleaning businesses are required to receive special safety training, machines that use perc must be certified, and the businesses must document the use of perc and other hazardous substances [source: NYC Business]. In California, concerns about perc contaminating the air led the state to phase out its use by 2023 [source: California Air Resources Board]. In a March 2021 article in the journal Frontiers in Public Health, several public health and environmental experts called for the industry to move to different solvents, while cautioning that more evaluation of those alternatives is needed to determine their long-term health effects as well [source: Ceballos].