

6 Natural, Safe Mold Treatment Solutions to use Instead of Bleach

How to Address a Minor Mold Issue at Home in a Health-Conscious (and Environmentally-Conscious) Manner

old is a common problem in buildings, especially in areas where humidity and moisture may be high and where air flow may be limited. Bathrooms, for example, can be a problematic area when it comes to mold. Basements are traditionally an issue as well. However, mold can



grow on almost any surface including plastics, ceramic tile, brick and cement, wallboard, cloth, and ceilings. Depending on the size of the area involved and the severity of the issue, mold can often be cleaned up as a do-it-yourself project. Those attempting the cleanup, however, should avoid using toxic chemical cleaning solutions, take appropriate precautions and follow cleaning tips for the particular type of material being cleaned.

Of course, it is best to prevent mold before it has a chance to take hold. That is why when it is discovered, mold should be addressed appropriately and swiftly. This guide will help in providing a better understanding on why toxic cleaning solutions should be avoided, the tools one will need for mold cleanup and some natural mold cleaners that can be used in mold remediation. We also include tips for cleaning various types of materials, how to prevent mildew and mold and, perhaps most importantly, outlining when it is time to call in the professionals.

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Why Avoid Toxic Cleaning Solutions

Some cleaning solutions may be great at eradicating all kinds of messes, but they are not always made with the user's (or the rest of the household's) health in mind. **Many of these products contain chemicals that can be harmful when inhaled and toxic if ingested.** They can also be damaging to the skin and eyes. Some of these chemicals may have their place in certain major cleanup situations, but many would rather avoid them when they are not absolutely necessary.

The list of potentially toxic chemicals in cleaning solutions is long, including:

- Formaldehyde
- Ammonia
- Quaternary Ammonium Compounds
- Antibacterials
- Butoxyethanol
- Chlorine Bleach
- · Diethylene Glycol Monomethyl Ether
- · And more...

These toxic chemicals may not only be harmful to users, their households and their pets — they can also be damagi the environment. When these products are rinsed down a drain or otherwise disposed of they can leach into groundwater, causing further issues.

The answer is sometimes using natural mold cleaners that will do the job without creating even more problems.

Natural cleaners are generally safe and environmentally friendly. They are often easily accessible and easy and affordable to use to boot. When deciding on a cleaning solution for a minor mold problem, consider the use of natural cleaners before taking more drastic measures.

Helpful Tools for Mold Cleanup



The tools needed for mold removal will depend on the size of the problem and the materials/surfaces being cleaned.

Larger areas may need to be isolated to keep mold from spreading from room to room. In this case, plastic sheets or drop cloths can be effective. Larger indoor projects could also benefit from a dehumidifier. For smaller projects, the tools required are fairly simple and straightforward.

Most projects will require some form of

a brush. For mold on wood, for example, a metal brush may be required to better treat the mold. On materials that require more gentle cleaning like fabrics, a soft brush may perform better. For small areas in corners, a toothbrush may be perfect.

No matter what natural non-toxic mold cleaner you choose, a spray bottle is almost always helpful to have. Choose a spray bottle that allows users to adjust the spray from a fine mist to a stronger, targeted spray. Measuring cups, spoons, and a funnel can be used to mix and fill the spray bottle with the natural cleaning solution. Of course, towels, rags or even paper towels can help with any spills that occur.

Keep in mind, while the cleaner you are using may be non-toxic, the mold you are treating can cause

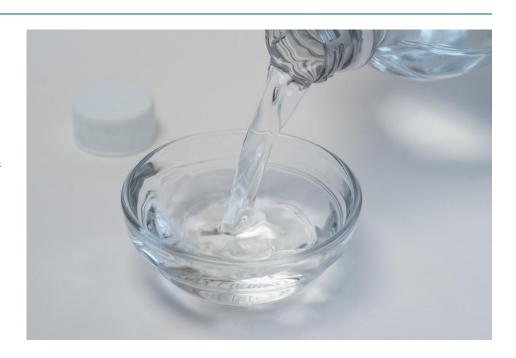
If mold has penetrated deep into materials like wallboard or reclining tiles, they will likely have to replaced. This will take additional tools appropriate to the task and hand. Extensive repairs like the will take the assistance of a professional.

Natural Mold Cleaning Solutions

Vinegar

One of the most effective, natural and non-toxic mold cleaners is vinegar, specifically distilled white vinegar.

Vinegar is a by-product of diluted alcohol products. White vinegar is actually mildly acidic and has been shown to be effective in treating over 80% of mold species. White vinegar is very safe, affordable and available at just about any grocery store. Arguably, the only negative of vinegar is its odor, which is strong but harmless. The odor also dissipates quickly.



While vinegar is extremely safe to use, when using it to clean mold, users should still wear protective gloves a breathing mask and goggles to minimize the body's exposure to the mold spores.

Vinegar typically performs best on mold when it is used undiluted in full strength. Simply transfer the white vinegar into a spray bottle. Spray the vinegar directly onto the mold. Do not rinse or scrub. Instead, let the vinegar sit for a minimum of one hour. This will allow the mold to absorb the vinegar.

If after an hour it still appears scrubbing is necessary, a baking soda solution can be made to brush into the stain. Mix one teaspoon of baking soda along with two cups of water and shake in a spray bottle. When thoroughly dissolved spray the solution onto the mold and scrub with a brush. Repeat if necessary. Once cleaned, wipe the area with a wet, clean cloth to remove the solution.

Vinegar can be safely used with other natural cleaning solutions like hydrogen peroxide, salt, and

lemon juice. Be cautious, however, and never mix vinegar with bleach as that will create a toxic solution.

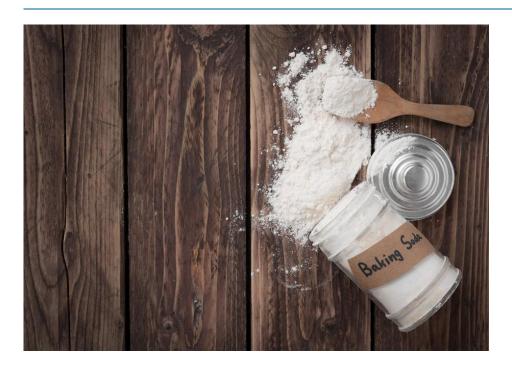
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The effectiveness and affordability of white vinegar makes it an excellent choice for use on just about any surface. I also effective to use to prevent mold from returning to problem areas. Simply spray the problem area lightly every 1 days and wipe.

When treating a larger indoor area, a room dehumidifier and/or fans can be helpful. The strong vinegar smell will fade in a relatively short period of time. Be cautious when using fans so they do not potentially blow mold spores into other areas of the house.

Moldy clothing can be soaked in a 50/50 white vinegar/water solution overnight and then rinsed the following day. Wash the clothes in a washing machine using regular laundry detergent before wearing. Vinegar is safe to use on a variety of fabrics and will not impact colors. Versatile, affordable and effective. Vinegar is a must have in any home's natural cleaning toolbox.

Baking Soda



NaHCO3 or sodium bicarbonate can be found in nature in the form of
Nahcolite. It is more commonly known as baking soda and it is found in just about every kitchen. Baking soda is an extremely versatile product and is used in baking, cleaning, deodorizing and even in toothpaste. It also can be used as a natural non-toxic treatment solution for getting rid of mold.

Baking soda is an alkaline compound that when exposed with an acid like vinegar, produces carbon dioxide. These

bubbles make baking soda popular as a leavening agent in breads. To work at its best, baking soda should be fresh. This can be tested by putting a drop of vinegar on a pinch of baking soda. If it bubbles vigorously it should work on the mold. When cleaning the mold, baking soda can work with or without vinegar.

There are three basic ways to use baking soda on mold.

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- 2. Create and apply a paste treatment
- 3. Use a combination of liquid spray and paste treatments

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To make a baking soda spray solution, combine two tablespoons of baking soda with two cups of war in a spray bottle and shake until it is completely dissolved. Spray on the mold and scrub with a brush or complete the area and spray again, this time letting it air dry.

To create a paste, mix a 50/50 solution of baking soda and water in a bowl. Apply the paste onto the mold and let dry. Scrub the area with a brush until the mold is cleared away. If the area needs additional attention, follow the paste treatment with the spray solution.

Baking soda is milder than vinegar and may not work on more aggressive forms of mold. It does, however, have the added benefit of absorbing odors and any remaining residue can help prevent the mold from recurring. Since baking soda is slightly gritty it can help serve as a scrub for the affected area. Baking soda meets all the criteria for an excellent non-toxic mold cleaner. It is safe for humans and pets, inexpensive, and easily available. It is environmentally-friendly and, unlike some other options, it is odor free. I fact, since it absorbs odors it can leave an area fresh smelling.

Baking soda is also a superb way to rid clothing of mold or mildew. Simply add a ½ cup to your machine's wash cycle and ½ cup to the rinse cycle. Not only will clothes be fresher smelling but whites can be whiter. You'll have the additional benefit of having a cleaner, fresher washing machine.

Hydrogen Peroxide

Hydrogen peroxide is another natural, non-toxic cleaner that many already have in their home. With a chemical makeup of H₂O₂, it is slightly thicker than water and is pale blue in its purest form. Although the name might sound like a synthetic creation, it can be found in nature as a part of rain (in trace but not insignificant amounts). Hydrogen peroxide is often used as an antiseptic, oxidizer and bleaching agent. It is also effective in removing various forms of mold.

Hydrogen peroxide bubbles when it comes in contact with bacteria. This bubbling action shows that the hydrogen peroxide is working in mitigating the mold.

Hydrogen peroxide can be used on both porous and non-porous surfaces. Three percent hydrogen peroxide can be sprayed directly on the porous material. It should be allowed to sit for 15 minutes before wiping off with a clean, damp cloth. This process should be repeated as necessary. When the mold is removed, dry the area with a clean cloth or paper towel. On non-porous material, a 50/50 solution of hydrogen peroxide and water should be mixed in a spray bottle and applied to the surface. After allowing it to sit for 15 minutes it can be washed with warm, soapy water and then rinsed and dried.

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Full-strength hydrogen peroxide should never be poured directly onto colored clothes unless they have been tested first for color-fastness. The safest and easiest way to use hydrogen peroxide in a washer is to pour a cup into the bleach dispenser in the machine. This will assure it will be added only when the washer is full of water during the wash cyc

While hydrogen peroxide is a natural mold-cleaner, care should be taken to protect oneself from contact with the skin and eyes. Hydrogen peroxide can cause redness or blotches on the skin and can cause irritation and pain in the eyes. Ingestion can cause a sore throat, abdominal pain, and nausea. Goggles and rubber gloves are recommended when using hydrogen peroxide.

Hydrogen peroxide is a safer more effective alternative to bleach. It can reach deeper into porous materials than bleach and its fumes are much less potent. It is available readily in almost health and beauty department and is cost-effective.

Lemon Juice

Lemon juice is a natural, non-toxic mold cleaner that leaves behind a refreshing, clean aroma. Its 5% acid content makes it effective in eliminating mold. Lemon juice can be freshly squeezed or purchased as a concentrate. To clean mold, it should be used full strength. It can be applied using a spray bottle or by soaking with a scrubber sponge.

Lemon juice treatment of mold should start by using simple soap and water to begin the cleaning process. Once rinsed,



apply the lemon juice directly to the mold. Scrub the area immediately with a brush or scrub sponge. As with other treatments, the process should be repeated until satisfactory results are achieved.

Used as a daily cleaner, lemon juice can help prevent mold in a variety of areas in the home, particularly on kitchen, shower and bathroom tile. It is popular because it leaves a clean fresh natural scent. Lemon juice is also valuable in ridding the mildew smell and mold from clothing. Add ½ cup to a load of laundry with regular laundry detergent. Keep in mind that lemon juice can fade some colors on some fabrics, so lemon juice should only be used when washing whites or after testing for color-fastness.

Many households appreciate lemon juice as a natural all-purpose cleaner and natural mold cleaner because it is harmless to people, pets and the environment. It can even be combined with other natural cleaners like vinegar to improve odor and effectiveness

Tea Tree Oil

Oil from the Australian Melaleuca Alternifolia tree is an all natural essential oil that has antimicrobial properties at has been effective in removing various types of mold, fungi, and mildew. Look for tea tree oil that contains Terpinen-4-ol at no less than 30% and Cineole at no more than 10-15%.

One can create a natural mold cleaning solution by mixing 2 teaspoons of tea tree oil with either two cups of water or two cups of distilled white vinegar. Be prepared, as both the tea tree oil and vinegar can have a strong odor that can last for hours. The odor, however, is not harmful.

Once the solution is measured and mixed in a spray bottle, spray directly on the area affected until wet. This will allow the mixture to soak into more porous material and deep clean the mold. After the solution has set for at least an hour wipe or scrub the area as needed.

Stubborn areas may take multiple applications and some elbow grease to get rid of the mold stain. In some cases, a surface cleaner may be needed to clean the stain completely.

Tea tree oil can be used on both solid and porous material but seems to be more effective on solid surfaces. The exception may be fabrics. Clothes can be cleaned by adding a few drops of tree oil to the washing machine during the rinse cycle. This is also an excellent way to clean mold and mildew from a washing machine itself and to refresh clothes that may have been left damp in the washer too long.

In the case of tree oil, natural does not necessarily mean non-toxic. In fact, tea tree oil can be poisonous if swallowed. Care should be taken in both its use and storage. Any bottle containing tree oil or a mixture using it should be clearly labeled and safely stored. With this in mind, pet owners or people with children should be careful when using this as a cleaning solution.

Because of its strong odor, it may not be best for larger areas affected by mold. If used in a small area like a bathroom, users may be more comfortable with a window open.

Grapefruit Seed Extract



Grapefruit seed extract (GSE) is rich in essential oils and antioxidants. It is an environmentally-friendly choice as a cleaning agent, similar to tea tree oil but without the strong scent. It is a microbial that has been shown to be



effective in eliminating 60 types of bacteria and yeasts. It is also a deodorizer. It is most effective on n porous surfaces but can also be use porous ones.

Making a grapefruit seed extract solution to clean mold is as simple as mixing ten drops of the extract in a cup of water and putting it

into a spray bottle. Spray the solution on the mold and let set for 10 to 15 minutes. Use a brush to clear the mold and repeat as necessary. While you can wipe away any stain, leave any remaining liquid on the area to dry. This will continue to impact the mold and help prevent its return.

Users should be aware that some commercially produced grapefruit seed extracts are less natural than others. Many are highly processed. Some are produced by mixing seed and pulp powder with glycerin. It is then heated with ammonium chloride along with Vitamin C. Enzymes and hydrochloric acid are often added and the final product is sold as GSE. Users may want to perform due diligence if they are truly looking for an "all natural" grapefruit seed extract. Grapefruit seed extract can often be found in health food and supplement stores which may be a helpful source in verifying the purity of the GSE they offer.

Cleaning Tips by Surface

Mildew and mold can form on just about any surface — both porous and non-porous. Some porous materials with severe mold issues like carpeting, drywall, and ceiling tiles may have to be replaced. How others are cleaned will depend on the type of material involved. Keep in mind, mold spores can travel by air so if it is possible to remove items from the home for cleaning, that is often a wise choice.

Here are some common surfaces found around the home and tips on how to rid them of mold:



- Leather Accessories and Furniture: The best natural, non-toxic cleaner for mildew and mold on leather items may be distilled white vinegar. Wipe down all of the leather surfaces with a towel or rag dipped in distilled white vinegar. If there are any concerns this process should be repeated. Follow thi with a leather cleaner with warm water. Once the leather completely dries, use a leather conditioner to into the leather.
- Clothing: Clothing that has severe mold may not be salvageable. Others may be cleaned by brushing off visible mold from the clothing outside the home and placing in a washing machine. Clothing can be treated in a washing machine using a variety of natural products including vinegar, hydrogen peroxide, lemon juice, tea tree oil and more. For specific steps, review these natural mold cleaners' sections and how they can be used to clean mildew and mold from clothing.
- **Books:** The pages and covers of a book will need to be completely dry before cleaning and mold or mildew should be attempted. This can be done in the sun or in a container with a moisture absorbing substance like silica gel. Cleaning books is a tedious process and each page must first be cleaned by brushing it with a paintbrush or soft cloth. Place a piece of wax paper between the page to be cleaned and the next one, use a rag dampened in hydrogen peroxide to gently clean the page and let it air dry. You can then move onto the next page.
- **Ceramic Tile:** Tile is one of the easiest surfaces to clean and can generally be done with nearly any choice of natural products and a good scrubbing. Depending on the extent of the mold, multiple treatments may be necessary. It is often recommended that cleaners be left on the surface for some time to serve as a deterrent to mold recurring.
- **Appliances:** Appliances like clothing washers, dishwashers, refrigerators, and coffeemakers are susceptible to mold. Clothing washers should be routinely cleaned by running an empty load using a ½ cup of distilled white vinegar, lemon juice, or a tea tree oil solution. Washer gaskets may be a breeding ground for mold and mildew. Refrigerators can be cleaned with distilled white vinegar or a baking soda solution. Distilled white vinegar and lemon juice is effective on coffeemakers. Dishwashers should be run empty with a solution of vinegar or lemon juice and hot water to remove mold.
- **Walls:** Unfortunately, walls with heavy black or brown mold may have to be taken apart, inspected and affected materials replaced. Surface mold may be cleaned with a choice of one of these natural solutions. Repeated applications may be required depending on the extent of the mold. Wall damage from mold is often when professional help may be required.
- Carpeting & Flooring: Carpeting is often not salvageable when it comes to mold damage. It must be carefully (usually professionally) removed from the home and disposed of. It is important that the subfloor is spore and mold-free before carpeting is replaced. This can be done with a water and white vinegar solution, or by using one of the other cleaning solutions listed here.
- Exterior Surfaces: When treating outside siding, brick and other surfaces it is a good idea to protect nearby plants and vegetation by soaking them down with water and even covering them briefly in plastic. Outside surfaces will frequently take multiple applications and aggressive scrubbing, especially when concrete surfaces are concerned. Brick and concrete block may benefit from the use of a metal brush. For hard to reach areas, professional assistance can be crucial for completing a job safely and effectively.

Make sure you take appropriate steps to protect yourself from breathing in airborne mold spores when scrubbing surfaces. Rubber gloves, breathing masks and even goggles can make the process safer.

Tips for Preventing Mold



Mold can grow both inside and outside at home. It can be found frequently in basements and bathrooms. It may be found in closets and attics. Mildew and mold is found in kitchens and on mattresses. It can even be found in boxes that you may have thought were safely and securely stored away.

Darkness, moisture and lack of airflow are all conducive to the growth of mold and mildew. These issues, if left uncorrected, can cause physical damage to a structure and be

hazardous to one's health.

Like most problems, it is typically easier to prevent mold than it can be to correct it. Here are some tips for preventing mold:

- Check for mold frequently: While mold or mildew may be easy to spot in the bath or shower, many times it occurs in areas that are hidden. This means you may have to proactively look for it. Be sure to check dark, damp places like basements.
- Pay attention to leaks: Mold will seek out moisture and leaking faucets and pipes need to be fixed
 promptly. When a leak has occurred make sure the area is cleaned and dried completely. Check drain pipes
 and the areas underneath them.
- Check areas where powders and liquids are stored: Under sinks and laundry rooms are prime
 examples. Powders can absorb moisture but then transfer it to the bottom of the box. Liquids from
 containers can drip or leak.
- Clean with natural cleaners that can prevent mold: Cleaning surfaces with citrus-based cleaners or
 even a white vinegar solution can help prevent mold. Natural lemon is a terrific fresh smelling solution
 that can prevent mildew and mold growth. Leaving cleaning solution residue on the surface can help deter
 mildew and mold.
- Let the sunshine in: Sunshine can be the enemy of mold, so open up your windows, curtains, and blinds

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and let some natural light in.

- Let the fresh air in: Moving fresh air is also unfriendly to mildew and mold growth. A fresh breeze through an area or air movement from ceiling fans can minimize mildew and mold growth.
- Use a dehumidifier: If you have a problem in a specific room or area, a portable dehumidifier can be solution. If you live in an area where humidity or moisture is a problem overall, consider a whole-hour solution.
- Install (or upgrade) ventilation fans in bathrooms: Since moisture in bathrooms is often a source of mold, a ventilation fan can help minimize the problem. Use the fan whenever taking a hot shower that adds moisture to the air. It can also help to dry surfaces following a shower including the shower, sinks mirrors, and countertops.
- **Check around windows:** Mold can be a problem in homes with older windows that may let moisture in or that may fog up in extreme weather changes. Check under windows and in the window corners for mold growth. Using a vinegar window cleaner can help prevent mildew on older windows.
- Pay attention to musty odors: This is a warning sign that mildew or mold is developing.
- Give your home a thorough Spring and Fall cleaning: One of the best ways to prevent mold is to give your home a deep cleaning twice a year. This will give you an opportunity to get into closets, under sinks and through cabinets and drawers. You can act promptly and a solid cleaning will help prevent mold from finding a home.

Signs It's Time to Call a Professional

Mold can be a scary problem, but in many cases, there is no reason to panic. Using one of the natural mold cleaners in this guide will take care of most mildew and mold problems safely. However, there are situations when it may be time to call in the professionals. When do you know when its time to call in help for a mold problem?

One clue is the size of the problem area. The EPA (Environmental Protection Agency) suggests that if an area is larger than 10 feet by 10 feet, it probably should be handled by a professional. There are a variety of reasons for this including the amount of cleaner that may be needed and the potential issue of removing moldy material.

Another indication that the mold may need professional remediation is if it is deeply rooted into wallboard or even the attached 2x4's. This material must be carefully and safely disposed of and a professional can ensure removal is handled properly.

Finally, the intensity of a mold problem and the type of mold you have may be the deciding factor. **Black mold that is fuzzy and appears almost dirt-like can be problematic to get rid of as a do-it-yourself project.** It can be well worth the time and expense of getting professional assistance in this type of mold.

Look for a professional who is certified in mold remediation and who is licensed and bonded. You will also want to pay particular attention to any guarantees provided to make sure work performed meets your expectations.

Knowing your limits can be a valuable instinct when taking on a project to clean up mold. You can feel confident, however, that a natural, non-toxic solution is more preferable to a toxic, chemical solution that may harm you, you household and the environment.