

ECO-FRIENDLY PAINT



Many designers suggest that a quick and simple way to change the look of anything from a room to a side table is to [change its color](#). But when you head to the local hardware store, you'll not only see hundreds of brands and shades to pick from but also a wide variety sub-options – including eco-friendly paint. If you're looking to protect your health and the environment, than choosing eco-friendly paint could be the best option.

What Is Eco-Friendly Paint?

Eco-friendly paint, or natural paint, is paint that has been specially designed to have lower levels of volatile organic chemicals (VOCs, for short). You know that generic paint smell you get when you open a new can or walk into a freshly painted room? It's the VOCs you're smelling. According to the [Environmental Protection Agency](#), VOCs “may have short- and longer-term adverse health effects,” and “while people are using products containing organic chemicals, they can expose themselves and others to very high pollutant levels, and elevated concentrations can persist in the air long after the activity is completed.” VOCs are the main reason painting instructions advise that you only work in well-ventilated areas.

Most of traditional paint products that are latex- or oil-based as household hazardous waste and have a special service for disposing of them. The pigments used to create the colors can also be hazardous at certain levels since many are made from heavy metals. Outdoor paints and paints designed for bathrooms or kitchens may also contain fungicides, while many paint brands include biocide to increase the product's shelf life. That said, traditional paints have to abide by specific legal requirements for toxic ingredients to be considered safe for human use. However, if you're looking for more natural alternatives, you have some options.

Benefits of Eco-Friendly Paint

Environmentally friendly paint is made from a variety of natural materials, including clay, milk proteins, citrus, balsam and other minerals. One example is milk paint, which is made from the milk protein such as casein and a little lime. Milk paints have been used for hundreds of year and usually come in powder form. When mixed with water before use, it emits little to no order. However, it is intended only for internal use and doesn't weather well if used outside.

Since eco-friendly paints are low in VOC chemicals, they're much safer to use in your home. Additionally, the EPA and nonprofit groups like the GREENGUARD Environmental Institute set specific standards that environmentally friend paints must meet to qualify for the term.

Remember, when you're at the store or looking online for eco-friendly paints, pay attention to these things:

- Check that it's labeled low or no VOC
- See if it's certified by GREENGUARD Environmental Institute
- Look for a certified organic label
- Check out what ingredients are listed (like heavy metal pigments or petroleum)

The potent health effects of these paints have made paint companies reconsider the composition of their products. This has led to the development of a new range of Environmentally Friendly non-toxic paints. They aim to reinvent paints so that serious health and environment problems can be prevented.

Eco-friendly paints available in India can be classified into three types:

1. **Zero-VOC paints:** The level of VOCs in these paints is so low that they can be termed as 'zero-VOC paints'. As per the EPA* standard, the total VOC content should be less than 5 gram per liter of paint.
2. **Low-VOC paints:** As specified by the EPA, these paints can have VOC concentrations ranging from 5 to 200 gram per liter of paint.

3. **Natural paints:** These paints are made of natural compounds such as tree resins, water, plant oil, essential oil and natural dyes. They do not contain any VOCs. Water-based paints do not have an odor, while oil-based paints have a smell.



The shift to low/zero-VOC paints is seen not only because of an environmentally conscious industry but with an industry that understands that consumers are increasingly buying green-labelled products. Thus, it is necessary that consumers understand what a green label means. Green Seal Certifications (International), EcoMark Scheme (in India) are standards prevalent in the market for green paints. The EcoMark, conferred by Bureau of Indian Standards (BIS), has the following standards for water-based coatings:

- 5% or less VOC
- Absence of metals like Mercury and its compounds, Lead, Cadmium, Chromium VI and their oxides
- Less than 10 milligrams per kilogram free formaldehyde
- Absence of chemicals like halogenated solvents, benzene, poly-aromatic hydrocarbons and other aromatic hydrocarbons

Benefits of using eco-friendly paint

1. Minimal Environmental Impact

Mostly all eco-friendly paints are water-based and do not leave harmful footprints at all. Moreover, natural components present in these paints are biodegradable. Over time they have been functionally improved and are currently being offered in a variety of shades.

2. No or less VOCs

Almost every chemical paint comprises of VOC or Volatile Organic Compounds. These are emitted especially when such chemical paints are produced in the factories. They are also emitted when you use them to paint walls. VOC leaves behind chemical waste that is non biodegradable and non-recyclable. Eco friendly paints are superior in comparison and either contains no VOC at all or only just a slight amount of it, which will cause relatively lesser damage.

3. Health Benefits

VOC in paints remains active up to five years after application, even when the paint has dried up completely. People, who are continually exposed to VOC in paints are 40 percent more prone to lung cancer. A VOC free eco friendly paint prevents you from a variety of infections.

4. Naturally produced

Every component used in eco friendly paints is natural. Thus, plant extracts like lemon peel extract, seed oil bee wax, etc. are the primary components of these green paints. They do not lead to any unsafe emission either during the process of manufacturing or while applying at home.

5. Cost efficient

You might find that eco-friendly paints are costlier than most of the chemical paints. But, despite this, the health-conscious generation is upbeat about using eco-friendly paints. To tell you the truth, apparently they may seem expensive but they are cost effective options. They safeguard your health protect the environment from pollution.

6. Low odor

You might feel suffocated by the unpleasant odor emitted by the chemical paints. The major culprits are ammonia and formaldehyde found in paints. They often leave you coughing madly after you get your house painted. But, eco-friendly paints are devoid of any odor due to the presence of natural ingredients in them.

7. Efficient painting results in few coats

Eco friendly paints do not only work towards reducing the impact of harmful emissions on the environment, but they are also qualitatively more superior to their chemical counterparts. So, you can be assured that eco friendly paints will give your walls a superior coverage, improved color retention capacity, viscosity, greater choice of shades, minimal abrasion, etc.

8. Nontoxic

These all-natural earth-friendly paints curb the chances of releasing toxins in the environment that subsequently cause health hazards. As compared to the conventional chemical paints they do not contain harmful chemicals like benzene, toluene, naphthalene, methyl chloroform they are far better and greener options for you.

9. Suitable for anyone

The natural ingredients in these eco-friendly paints guarantee that they are totally safe for everybody. So feel safe with eco-friendly paints whether you are pregnant, or a kid, old person, asthma patient or anybody else.

10. Reduced waste

Judging from the point of reduced waste production, eco-friendly paints score over conventional chemical-based paints. Chemical paints emit toxic chemical compounds when they are manufactured. Even more threatening is that they continue leaving harmful footprints years after they have already been used to paint homes. But, natural paints are devoid of any such by products

How is it different from normal paints?

Paints have harmful chemicals, collectively known as VOC or Volatile Organic Compounds. These VOCs easily vaporize upon coming in contact with air and when inhaled start creating

minute but toxic reactions inside our body. Heavy metals such as Lead, Chromium and Arsenic are also used generously in conventional paints. Depending on duration of exposure, quantity and proximity, these chemicals will have wide range of short and long-term impact on humans- beginning with minor things like irritation, headache, skin issues to long term side effects including respiratory disorders, kidney damage or even cancer. Often when we face health issues we may not even realize that it is due to harmful paint that was used.

Conventional paints will have anywhere between 250 to 800 grams of VOCs per liter of paint. This is a dangerous quantity. The new eco-friendly or green paints claim to have a VOC of 50 or less. 50 is international upper limit for a paint to be called green/eco-friendly. This is achieved by not using lead and replacing various other metals and chemicals with more eco-friendly alternatives. Another technique is usage of water as main solvent, instead of chemical solvents (Solvent is used to dilute thick paint into thinner liquid, so that it can be easily applied on a surface by a brush (the exact compositions of eco-friendly paint are not in public domain yet and are maintained as business secret).

Eco friendly typically cost 1.5 to 2x of what regular paint. But then, they payback almost immediately- while regular paints need 4-5 coatings, eco-friendly paints do the job with just one or two coatings (claimed). This means you will need less quantity of eco-friendly paint to paint same surface. Eco-friendly paints won't have the pungent smell of conventional paints- it will be lot safe for kids or others to hang around while painting is in progress.