

## Slapping on a new coat of paint can be immensely satisfying, but how 'fresh' that coat is depends entirely on which paint you select.

People have been using paint to transform and protect our built environment for centuries. A fresh coat of paint brings new colour and life to spaces and objects, delighting its audience and facilitating processes of re-interpretation and reuse. Paint also increases the longevity and integrity of surfaces by providing a protective barrier against moisture, solar exposure and insect infestation. We are all familiar with the age-old adage: "... nothing that a fresh coat of paint can't fix!"

It may come as a surprise, however, that the impact of paint extends far beyond the aesthetic and the protective. Believe it or not, paint has an important, yet often misconceived, role to play in sustainable design. It is now understood that the most important quality to consider when picking your perfect palette is not the aesthetic or the protective but rather the paints' chemical composition.

Many standard commercial paints are composed of pigments, binders and a range of petroleum-based additives and solvents. It is those compounds that give paint its revered qualities: vibrant colours, fast drying and easy application to name a few. The same compounds give a freshly painted room its familiar and intoxicating smell. This sensory assault, traditionally associated with rejuvenation and renovation, is a telling indicator of an insidious reality – that the paint used is, more likely than not, a cocktail of toxic substances harmful to your health and that of our environment.

For the more scientifically minded, the high toxicity of these paints can be attributed, in part, to petrochemical-based substances known as volatile organic compounds (VOCs). The VOCs from commercial paints are continually released into our living spaces and atmosphere in a process called "off gassing" which can continue for years after paint is applied. It is now understood that VOCs can have long-term detrimental effects on the health of consumers. The side-effects include irritation to the eyes, nose, throat and skin, headaches, asthma and dizziness. Alarmingly, many of these compounds are also classified as potential carcinogens.

But the problem does not stop there. The impact of the toxic solvents extends to the environment. In fact, the paint industry is one of the highest contributors to pollution in the construction industry, being responsible for up to 16 per cent of VOC emissions Australia wide.

Production of these paints is resource intensive, for example, one tonne of solvent-based paint produces approximately 10–30 tonnes of toxic waste – much of which is non-degradable and ends up contributing to environmental smog, greenhouse gases and the contamination of our soils and waterways. All things considered, these paints can do a great deal of damage throughout their lifecycle from manufacture through to application and disposal.

Fortunately, there are alternatives to solvent-based paint products. Several paint companies now manufacture and sell non-toxic, environmentally friendly paint and surface treatments, and have been doing so for many years. Thankfully, this sector of the paint industry is rapidly expanding fuelled by the growth in awareness about paint toxicity and the more general concern for public health.

Nonetheless, it is vital for consumers to be aware of and educated about the products they purchase. It is our responsibility to be mindful

of misleading advertising and companies who "greenwash" their products. Consumers must research and consult the experts in this industry to ensure that what they purchase is right for the job. The health of our family, pets, employees and environment depends on it.

### Here to help

GreenPainters is one such company you should seek to consult about sustainable and eco-friendly painting options. Founded by painter Daniel Wurm, GreenPainters is an initiative that offers advice and recommends green painting products to consumers. GreenPainters also provides professional painters with education and training opportunities in sustainable painting practices from selection through to application and disposal. On top of this they offer a comprehensive database of certified GreenPainters and additional resources to consumers. The organisation is leading the charge in the sustainable paint sector.

GECA (Good Environmental Choice Australia) is another not-for-profit organisation. It runs the Environmental Choice Australia Ecolabelling Program which aims to provide consumers with transparent certification and labeling of environmentally sustainable products. Under GECA's supervision, paint products and services undergo rigorous voluntary lifecycle assessment and environmental review in order to receive a certification, setting these products apart from ones monitored by the standard APAS (Australian Paint Approval Scheme). Consumers can be assured that products and services that meet GECA's high standards of assessment are safe and environmentally friendly from manufacture to disposal. Likewise, Ecospecifier's Global Green Tag is a third party, green building product rating and certification system approved by the Australian Competition and Consumer Commission. A Green Tag-certified product has been assessed on many levels and has scores for Toxicity and Life Cycle Impact Analysis amongst others.

At this stage, these assessments are voluntary, so chances are that many alternative products exist on the market that may not yet be certified. Says Wurm, "Since the government won't regulate VOC levels, consumers and business need to vote with their feet and choose zero-VOC paints now. Zero-VOC paints are now the same price as normal paint and available all around Australia, including hundreds of paint stores and on-line – so there is no excuse."

### Questions to ask

As recommended by Wurm, before you purchase a paint product, even if it is labelled as being "green" or "natural", you should ask yourself:

- What are the ingredients?
- Does the manufacturer supply this information freely?
- Are the ingredients sourced from a renewable or highly abundant resource?
- Is the manufacturing plant third party-certified?
- Does the manufacturer recycle waste water?
- Is the packaging recycled?

By asking yourself these questions and doing a bit of background reading you can help ensure that the product you purchase is safe for all of us and the environment. →

opposite page Natural "Uber" lime paint, from Bauwerk.

## The options

### Low VOC

Selecting and purchasing paint with reduced levels of VOCs is a great start to a greener solution. While low-VOC paints may still contain some petroleum-based additives, the amount will be fractional when compared to the levels found in standard commercial products. Most low-VOC paints contain 1–75 grams/litre of these toxins compared to 350–450 grams/litre.

#### Resene

The average per litre VOC levels of Resene decorative paint has dropped by over 90% in the last two decades. They now have both low-VOC and no-VOC paints and have recently released a range of no-VOC tints. GECA certified.

[resene.com.au](http://resene.com.au)

#### Wattyl

Wattyl offer a range of low-VOC products with less than 1 gram/litre VOCs in tinted and non-tinted states. Their Low Sheen Interior Wall paints are odourless, scuff resistant, and are well suited to living, bedroom, and kitchen environments. They offer a range of over nine interior paint products that are GECA certified, ensuring that these products have minimal environmental impact throughout their entire lifecycle and manufacturing process.

[wattyl.com.au](http://wattyl.com.au)

#### Porter's Paints

Porter's has a range of low-VOC paints for interior and exterior application. Its water-based paints contain as little as 0.07 per cent VOCs. However, bear in mind that tinting and attempting to achieve a certain finish often means you will have to increase the nasty contaminants in the paints.

[porterspains.com](http://porterspains.com)

### No VOC

Some companies are now producing no-VOC paints. They are harnessing the latest technologies and innovations to produce a range of exciting products that match petrochemical-based products in price, performance and colour range. Watch this space.

#### Livos

Livos Australia's entire range of paints is based on renewable raw materials. Its ingredients are completely biodegradable and are harmless to humans, animals and plants, even in direct contact. All Livos products are certified by Ecospecifier.

[livos.com.au](http://livos.com.au)

#### Ecolour

Ecolour produces a no-VOC paint; the harmful compounds are removed from their paints and replaced with re-refined and recycled engine oil. This resource would otherwise be disposed of and result in environmental damage and pollution.

Ecolour's innovative product does not "off-gas" and therefore avoids the detrimental health issues associated with standard petrochemical paints.

Ecolour products are GECA certified, and the company has been awarded carbon neutral status.

[ecolour.com.au](http://ecolour.com.au)

#### Mythic Paint

Mythic Paint produces the newest no-VOC product on the market. The company boasts a wide range of paints suited for interior and exterior application with a selection of finishes, all of which are "zero VOC, zero carcinogenic, premium quality latex paint".

Their paints are low odour, durable, washable, mould and mildew resistant.

[mythicpaint.com.au](http://mythicpaint.com.au)

### Natural Paints

Natural paints are made from renewable resources and contain plant-derived solvents and binders instead of synthetic solvents. These paints require less processing during production and are not harmful to our health or environment.

They gradually wear thinner over time rather than blistering and peeling, require less management and easier re-application. Furthermore, they are recognised for allowing substrates to "breathe", discouraging mould growth and increasing their lifespan. It is not, however, that they are not as stain resistant as their competitors, but offer unique textures and finishes from natural ingredients.

#### Bauwerk

Bauwerk Lime Paint Range is composed of clays, minerals and natural pigments. Bauwerk products are also naturally antibacterial and available in over 1500 colours.

They are GECA certified and come complete with recyclable packaging.

[bauwerk.com.au](http://bauwerk.com.au)

#### Porter's Paints

Porter's Natural Paints are derived from a myriad of ingredients such as milk, lime and clay. Refer to specification sheets as some of these products may still contain low levels of VOC.

However so, these paints are low odour and manufactured under zero waste conditions.

[porterspains.com](http://porterspains.com)

### Info:

[greenpainters.org.au](http://greenpainters.org.au)

[geca.org.au](http://geca.org.au)

[ecospecifier.com.au](http://ecospecifier.com.au)

[globalgreentag.com](http://globalgreentag.com)