

MASKING TOXIC PAINT: BUYER BEWARE

Livos co-director **Angela Petruzzi** from Bayswater, Victoria, argues that paint manufacturers should list all their paint ingredients to help consumers avoid toxic volatile organic compounds (VOCs), which cause health and indoor air pollution problems. An odour-free house paint can still contain harmful levels of VOCs.

RENOVATING OR JUST PAINTING A ROOM

According to the CSIRO we spend more time indoors than out, so why wouldn't we want to ensure our indoor air quality is as healthy as possible? Volatile organic compounds (VOCs) are chemical solvents that release gases into the air and contribute to indoor air pollution. A build-up of toxic VOCs can cause significant health issues.

However 'VOCs' does not mean harmful and 'no VOCs' does not mean harmless. The issue is the type of VOC, not how much VOC. What is the point of knowing the proportion of VOCs in a tin of paint? What we need to know is how it affects the indoor air quality, the air we and our families breathe.

TYPES OF VOC

There are several categories of VOCs: very volatile (VVOC), semi- (SVOC), and microbial (MVOC). These are defined by their solvents' boiling point, not their smell or toxicity. Just because something is odourless doesn't mean that there are no harmful VOCs. To evaluate the possibility of harm, one must know exactly which ingredients are contained in a product.

Not all VOCs are the same; if they were we would ban oranges and pine forests. There is a large amount of research and scientific evidence indicating significant distinctions, in terms of health impacts, between naturally occurring VOCs such as orange oil and synthetic VOCs.

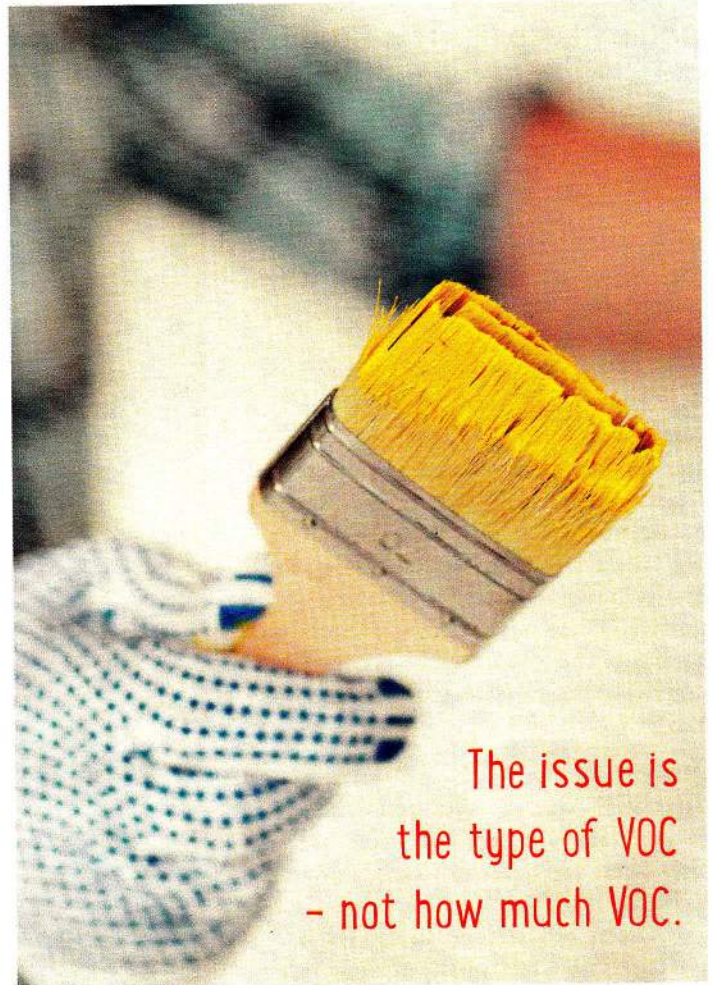
NOT JUST NUMBERS

Although a product's label may state 'No VOCs' or 'Free of VOCs', masking agents and biocides below a certain percentage of the whole do not have to be listed and can make up a large volume of the actual product.

CHOOSING PAINTS AND COATINGS

The building industry should follow the food industry and declare all ingredients in their products. It's not sufficient for manufacturers to hide behind 'trade secrets'. Without accurate information, especially full declarations, it is nearly impossible to know how components of a product will react with each other, let alone how they react with humans and the environment. Many manufacturers of natural paint products have fully declared all the ingredients of their products for decades.

Many water-based products use a multitude of auxiliary substances and preservatives to make them stable. While oil and water do not mix, strong emulsifiers are needed to blend these substances together.



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- not how much VOC.

TYPE MORE IMPORTANT THAN AMOUNT

Small quantities of solvents can be toxic and may avoid labelling requirements, but can be a source of potentially hazardous off-gassing, which is not assessed. Toxicity and VOC content are not automatically related. Oranges are not defined as toxic, yet orange oil is a VOC. Low VOC does not inevitably mean a lower toxicity than a high VOC product or *vice versa*. Toxicity depends on the type of solvent, the percentage of the solvent in the wet product and how it influences the air we breathe. It is not simply a number on a tin.

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