

**Acrylic paint –
the largest source
of microplastics
in our waters**



Paint and plastic

A staggering 58% of microplastics leaked into the world's oceans and waterways annually comes from paint. This covers a wide range of everyday items including buildings, boats, cars and almost all types of infrastructure. Until now, this statistic has been largely underreported. The findings from the Swiss research group, Environment Action, reveal that, despite paint's irrefutable qualities, the substance has a significant negative impact on the planet, marine life, and ultimately human health, if it is not disposed of and managed cleanly, safely and sustainably.

So, what do we do with this knowledge?

Enlisting the support of Parsons School of Design in New York is one place Hauser & Wirth started as they run a Healthy Materials Lab. They are reviewing our material choices to support our shift to sustainable alternatives across our galleries, where possible. We have learnt there are several mineral based paints on the market, some of which include Graphenstone, Keim and Edward Bulmer, and we are testing these options.





Our team in Menorca are leading the way

Supported by architect Luis Laplace, our gallery in Menorca has been using natural, mineral based paint on our interior and exterior walls since we opened in 2021. The paint is an updated traditional lime paint formula with the addition of graphene, a material made from carbon. Graphene lends the paint extreme strength, durability, and washability. Additionally, the use of lime creates a paint that is not only free of harmful substances, but one that also actively improves indoor air quality by absorbing toxins, CO₂ and has trace volatile organic compounds (VOC). The product has low embodied carbon in part because of its use of renewable energy and CO₂ absorbing ingredients. It also has zero added micro-plastics.



Local traditions inform innovation

Lime paint has a deeply rooted history as one of the first-ever house paints emerging from the Mediterranean region. We learnt from local artisans in Menorca that lime extraction was used up until 2020, when the last lime oven ceased activity. This local tradition has been used to inform the production of commercially available lime-based paint which has a range of natural benefits; it is breathable, non-toxic and the high alkaline levels mean it's mold-resistant, helping to control the impacts of humidity.



LET'S GET TECHNICAL



According to our friends at the Healthy Materials Lab (HML), mineral-based paints tend to avoid VOCs and hazardous additives. Most mineral-based paints also absorb impurities from the air, actively improving indoor air quality. When switching to mineral based paint HML recommend:

- Look for paints that meet the Green Seal-11 (GS-11) standard from 2010 or later. This certification limits the content of VOCs and prohibits other potential hazards such as heavy metals, carcinogens, mutagens, and reproductive toxins.
- Specify paints with a VOC content of 10g/L or less. Note VOCs in colourants.
- Avoid specifying acrylic paint due to the recent research.
- Avoid paints that contain alkylphenol ethoxylates (AEPs). Look for nonylphenol ethoxylates (NPEs), which are surfactants commonly added to paints to help the pigments stay evenly spread throughout the paint base. These chemicals break down into harmful endocrine disruptors. They have been banned in the EU, Denmark and Japan.
- Limit titanium dioxide contents. This is a whitening aggregate added to many paints, titanium dioxide is a possible endocrine disruptor and carcinogen. The more titanium dioxide used, the whiter the paint.

If you have questions, please contact sustainability@hauserwirth.com

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