



## THORNDOWN

### WATER-BASED VS OIL-BASED PAINT

The best protective wood paint is normally a film of long-chain organic molecules that create a coating.

In order for a paint to work it uses a 'carrier' that helps keep all of the ingredients in a liquid solution, and carries it onto the surface you're painting.

A water-based paint uses water as the carrier and an oil-based uses a light oil as a carrier, both of which evaporate off as the paint dries.

When you paint a water-based paint on to a surface, as it dries the water evaporates out leaving behind all of the ingredients that makes a paint coating.

With Thorndown Wood Paint the water evaporates and the acrylic resin dries creating a film. We use a modified acrylic resin that makes the paint film coating even more water-repellent, flexible and hard-wearing.

All of our raw materials are selected with no or virtually no VOCs (volatile organic compounds) so during the drying process virtually no VOCs are emitted into the environment. Not all water-based paints are created the same!

The other most important ingredient left in the coating are the colour pigments. Thorndown Wood Paints uses VOC free colour pigments that are of the highest quality and perform at the top of light fast and weather-resistance tests.

With linseed and other natural oil-based products the small oil molecules that evaporate off are nearly all VOC which is a pollutant and can react with other pollutants in the environment making 'super pollutants' that can be harmful. This is true for linseed oil-based products and ones derived from petro-chemicals. Linseed oil also doesn't form a film of its own accord so has to be further processed in order for it to work as a paint product, and often needs turpentine added to it which is poisonous.

Decades ago when water-based products first came on the market they were sold as a cheap alternative to oil-based and perhaps didn't perform as well. Technology has changed and now they are much easier to use, quicker to dry and nowadays you can get better results from a water-based product without the environmental impact. Some oil-based products can take days or weeks to dry, whereas Thorndown Wood Paint can dry in 30 minutes on a nice hot dry day.

Thorndown Wood Paint has been designed to work really well, protecting and extending the life of wood products with minimal negative effect on the environment.