ASBP The Alliance for Sustainable Building Products

> "Why are natural paints the most appropriate choice for sufferers of allergies and multiple chemical sensitivity?"

Anton Boekhoudt

Keim Mineral Paints Ltd





Thursday 15th June 2023





What is Multiple Chemical Sensitivity?

- "Multiple Chemical Sensitivity Syndrome (MCS) is a condition that can cause an allergic-like reaction to everyday chemicals."
- MCS sufferers are often sensitive to chemicals like formaldehyde, benzene, pesticides, perfumes, paint fumes and other solvents.
- The symptoms of MCS can vary from person to person and depend on the type of chemical they are allergic to. They may experience fatigue, headaches or nausea when exposed.

WHAT IS MULTIPLE CHEMICAL SENSITIVITY?

Definition

Multiple chemical sensitivities (MCS) is a chronic condition where the patient will experience an inflammatory reaction to various chemicals. These chemicals may include fragrances, volatile organic compounds (VOCs), foods and common household products. Patients typically become more sensitive to various chemicals over time, even to products that previously did not cause them any problems.

ARE YOU SENSITIVE TO ANY OF THESE SUBSTANCES?



WHAT ARE THE SYMPTOMS OF MULTIPLE CHEMICAL SENSITIVITY?

For building Owners /Occupants

We spend more and more time living and working in enclosed buildings. Allergy sufferers and chemically sensitive building occupants or building owners must consider natural paints as a healthy choice to protect occupants immune systems, and also to combat effects which can trigger allergies and reactions for human health and wellbeing.



Mould growth and in particular mould spores are a very problematic issue which can cause extreme health issues and very sadly in extreme cases even loss of life as seen in recent news articles.

Natural paints will generally contain no ingredients that promote or feed mould spores. Some natural paints contain ingredients that increase PH levels to effectively repel these type of spores so they can not grow to begin with. As well as the correct paint system, adequate ventilation is also recommended.

Non breathable film forming paints will stop or limit breathability (moisture vapour transfer) of a surface and can increase the build up of surface condensation which helps mould to thrive and expand and contaminate the indoor air that we breathe. Natural paints can allow the passage of moisture vapour which will stop the build up of condensation.

For building Owners /Occupants

The largest contributor to indoor air quality issues is VOC (volatile organic compounds). VOC stands for "volatile organic compound".

The term refers to a class of chemicals that begin to vaporise under typical indoor temperature and pressure conditions. Common VOCs include :

Benzene, formaldehyde, toluene, flammable alcohols, household cleaning solvents, gasoline, and other liquid combustion fuels.

Conventional paints may contain different levels of solvents, acrylics, plasticiser and preservatives. Essentially a lot of plastic. Man made resins and binders may also be present along with man made colourants which can all have an impact on indoor air quality and can aggravate reactions for the chemically sensitive.

For building Owners /Occupants

Natural paints are generally Low VOC, odour free, plastic free, breathable (moisture vapour transfer) and will be good for human health.

Natural paint manufacturers will declare their VOC levels and ingredients so the information is all available and transparent.

There may also be independent certification associated with the paint system such as Naturplus and Cradle to Cradle for example which can help to confirm the natural health benefits to humans (Material Health Gold with Cradle to Cradle for example).

There are even natural paints that can improve indoor air quality by converting nitrogen oxides into harmless nitrates.

Please don't forget the applicator / decorator / planet :



By using natural paints

. Decorators are not breathing in any unpleasant odours or off gassing chemicals which can happen with some conventional paints

- . Generally brushes and rollers and any other painting equipment can be cleaned with just clean water
- . No solvents or 'specialist' cleaners required to clean decorating tools
- . No VOC (Volatile Organic Compounds) or plastics will be getting washed into waterways so no plastic contamination into our oceans

Thank you

Anton.boekhoudt@keimpaints.co.uk





DGNB Deutsche Gesellschaft für Nachhaltiges Bauen German Sustainable Building Council



