

Johnstone's Air Pure FAQ

What does bio-based mean?

A bio-based paint product means that the paint is produced with use of renewable raw materials instead of fossil raw materials.

How can you determine whether a product is bio-based?

The way to determine the bio-based content of a product is according to the international standard ASTM D6866. Johnstone's Air Pure is tested according to this standard at an external laboratory. Here it was determined that Johnstone's Air Pure has a bio-based content of 45%. You can view the full report at johnstonestrade.com

What is the advantage of using bio-based paint?

Using renewable raw materials reduces the use of fossil raw materials. Bio-based products are increasingly important for the paint and construction industry. They make a contribution to a more sustainable and healthier world.

What is formaldehyde?

Formaldehyde is one of the most damaging Volatile Organic Compounds (VOCs) that is present in all homes and public spaces. The concentration of formaldehyde in indoor air is different in every space, just like the effect on health is different from person to person. On the one hand, there is long-term exposure to relatively low concentrations of formaldehyde, which can cause irritation to the eyes, nose and throat. On the other hand, there may be peak moments due to daily activities.

Where is formaldehyde found?

Particle boards and fibreboards, furniture, carpets, glue and interior fabrics are the biggest sources, causing constant emissions of formaldehyde in the long term. There are activities too like cooking, smoking and cleaning, which can also cause a peak in emissions of formaldehyde. The concentration can be up to 10 times higher in indoor air than in outdoor air.

Is formaldehyde damaging to health?

Various scientific studies show that formaldehyde is damaging for health. In addition to odour problems, formaldehyde can also result in complaints like headaches, tiredness and irritation of the nose, throat and eyes.

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When is there an increased risk?

In homes, the average concentration is 22.2 µg/m³. At a concentration higher than 10 µg/m³ there is an increased risk. Each reduction contributes to a healthier living environment. Source: World Health Organisation (WHO) Guidelines for indoor air quality, 2010

Is it necessary to use Johnstone's Air Pure in all living spaces?

Using Johnstone's Air Pure in rooms that you spend time in often or for long periods, such as the living room, kitchen and bedroom, is sufficient.

What can I do in addition to using Johnstone's Air Pure to improve the indoor air quality?

Ensure sufficient ventilation, clean regularly, do not smoke and choose to add a protective layer to wooden materials where possible.

How many layers of Johnstone's Air Pure do I have to apply for optimal functionality?

For optimal functionality, two layers of Johnstone's Air Pure are required. For more information on how long Johnstone's Air Pure retains its purifying effect, please contact our technical services team at ppgextra.com

What happens to the indoor air technology if I paint over Johnstone's Air Pure?

The purifying effect is significantly reduced. To retain the function, Johnstone's Air Pure should be painted on top.

Can I measure the effect of Johnstone's Air Pure on the formaldehyde content myself?

Measuring yourself is possible. Various meters are available to purchase.

What is the largest source of formaldehyde emissions?

This is sheet material or soft flooring [both a continuous load] and cooking [peak load]. But CE guidelines have ensured that the concentration of formaldehyde being released in homes is currently under the applicable maximum values in terms of continuous load.



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**After how many years of exposure to formaldehyde do health problems start to arise? What are these?
Can we also distinguish between groups of consumers here: babies, children, asthma patients, elderly people, pregnant women etc.?**

You can't put a number of years on it. In the case of a low long-term concentration, damage can develop but the same is true of a high short-term concentration. This applies for all groups.

Is the quality of indoor air worse or better than outdoor air and, if so, to what extent?

The indoor air is 3 to 5 times more contaminated than the outdoor air. The percentage of formaldehyde can be up to 10 times higher than in outdoor air.

What is the cause of poor quality indoor air?

An indoor space is a "closed" environment. The air is refreshed by ventilation. There are all kinds of ways you can be exposed to substances, such as cooking, smoking, furniture etc. On average, moderate ventilation is carried out, so these substances build up.

Which components is air made up of?

21% oxygen, 78% nitrogen and 1% other gases.

Where does the attention for the indoor environment come from?

There is a worldwide trend towards the reduction in environmental impact and increased sense of health and well being and therefore looking after the earth.

Is there a difference between the indoor air quality in old and new buildings?

Yes, there is. You can distinguish between buildings with and without mechanical ventilation. Homes without mechanical ventilation may have somewhat less clean indoor air. But it all depends on the building owner priorities and the type of ventilation installed.

Are there certain rooms where the air quality is worse/better than average?

Yes, there are. Think of rooms without ventilation or without wooden furniture and/or soft flooring. In kitchen areas there is a peak load of formaldehyde, in the bedroom for example there is a low, continuous load of formaldehyde.

Can you do something to counteract the formaldehyde that comes in with the ventilation?

No, but the origins of formaldehyde are in indoor spaces. So only a limited percentage comes in from outside. The percentage of formaldehyde indoors is an average of 22.2 $\mu\text{g}/\text{m}^3$, outdoors it is an average of 3 $\mu\text{g}/\text{m}^3$.

Is formaldehyde in the air measurable and how does this work?

Yes. It is measurable with testing equipment and using air measurements by a laboratory.