

Nanotechnology protects Horses from lung diseases.

A coating which clears up the air in stables can be purchased from Nanovations Pty Ltd in Sydney. Already widely used in Europe, the paint reduces the risk for horses from cough allergies and lung diseases.

Horses are physically designed to live in the open, so keeping them in a stable is going very much against what their bodies were designed to cope with. When a horse is stabled it is exposed to a far higher concentration of airborne particles than it would encounter in the field, this puts a strain on the house keeping mechanisms of the lungs and can eventually cause permanent damage. Chronic Obstructive Pulmonary Disease (C.O.P.D) in horses can be compared with asthma.

Dust from the environment, feed, fungal spores from walls, from the bedding material and the horse itself builds up in the atmosphere and is inhaled, the smaller the particle the further into the lung it is carried. COPD is an allergic response to these particles. (Farmers Lung is a disease caused by fungal spores in humans)

The most important factor to control in the stable of a horse with COPD is the quality of the air that horse is breathing while it is stabled.

A significant reduction in fungus spores can be achieved by painting the walls and the wood with Bioni Nature. The coating contains a special nanoscale formulation against fungal spores. As soon the spores come in contact with Bioni Nature they will be completely destroyed.



The product was tested against *Aspergillus Niger* which is the bench mark of all ant-fungus coatings. It is known that a product working against this kind of fungus will work well against most other fungi.

The solid nature of the particles and because they are chained to other molecule combinations makes it impossible that the particles can be released into the environment. The paint has been tested as emission free and contains no VOC and no biocides.

Even if a horse would chew on a painted surface, there is no reason to believe that some mechanism within the horse could separate the particles from the adhering paint molecules.

To maintain the surface and to make sure dirt build-ups are removed, there is no problem to use a high pressure cleaner.

At the moment the paint comes with a 5 year warranty against fungus and mildew. Theoretically the paint should remain this function forever. Long term testing and studies are under way and the developing scientists are optimistic that this will be the case.

For anyone interested in long term multifunctional coating solutions that can do more than look good please contact Nanovations.

Nanovations Pty Ltd with headquarters in Sydney specializes in Nanotechnology solutions for the construction industry.

For more information, please check out <http://www.nanovations.com.au> or contact us via email at info@nanovations.com.au