

BIOKKER®

Science and Research

biosintel



Research Centers

Indoor Air Quality is a fast growing health problem

There is great concern today that LAA (Laboratory Animal Allergy) levels are too high. This is resulting in much higher levels of sensitization in technicians and staff over recent years. Many laboratory technicians, prefer not to wear personal protection equipment as it hinders their work, so the only alternative is to ensure the air around them is clean.

Symptoms such as frequent nasal and throat irritation, constant allergies, sinusitis, red itchy eyes, or end of day "fatigue" can be brought on by constantly breathing in day to day "Allergens", and be the result of sensitization to MUP or RUP (Mouse or Rat Urinary Proteins). The level of exposure to indoor pollutants is especially high in animal rooms where cages are regularly changed and checked, and due to the nature of the work itself, the close proximity to the animals, the procedures and the use of chemicals that emit high levels of VOCs, the risk is very high. At low levels, most VOCs produce unpleasant smells and are highly irritating to mucous membranes and respiratory tract; at higher levels, VOCs are toxic and potentially carcinogenic.

Biokker reduces the use of animals and consequently, leads to better science. It is suitable to reduce the incidence of respiratory infections and cross-contamination within an adequate research framework.

Biokker eliminates the volatile organic compounds while reducing the triggers that cause allergies and asthma, with a substantial increase in air quality, the eradication of odours and consequently the disease. Our technology guarantees the constant cleaning of the interior air of the surgical rooms, and in the same action the reduction of the levels of smell and ammonia existing in the animal storage areas, because to keep the animals free of odours and protected from infections it is an important part of any self-respecting research center.

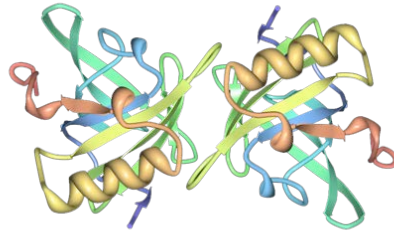
Biokker is indicated to reduce the incidence of respiratory infections and cross contamination within an adequate research framework and it also decreases the need for the use of animals and consequently, it leads to better science.

Airborne Allergens and Particulates: The most dangerous airborne particles are the microorganisms small enough to be inhaled into the lungs. Indoor air may contain bacteria, virus and fungi which can cause infectious and allergic illnesses.

VOCs: In a LA facility, there are dozens of different chemicals being used and emitting VOCs into the air to be inhaled. Low levels of most VOCs produce objectionable odours and different sorts of irritation. At high levels, they are toxic and potentially carcinogenic.

Odours: This working environment cannot certainly be "odour-free". If you sense odours in the atmosphere you have already potentially breathed in harmful pathogens. The gases emitted from moulds and fungi are also harmful VOCs.

Photo - Catalysis - AAI



The major rodent Laboratory Animal Allergens are small protein molecules.

Mus m1 (prealbumin) has a molecular weight of 19 kD (kiloDalton), Rat n1A & 1B range from 16-21 kD.

Photo – Catalytic
Oxidation



Carbon Dioxide & Water Vapour

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