



EINGEGANGEN 22. Dez. 1994

CHEMISCH-PHARMAZEUTISCHES LABORATORIUM ISNY/ALLGÄU G. M. B. H.

Untersuchungen · Beratungen · Entwicklungen

Chemisch-pharmazeut. Laboratorium Isny GmbH · 88316 Isny im Allgäu

PROAIR GmbH
Leutkircher Straße 24
z. H. Herrn Grassinger

88316 Isny

Prof. Dr. W. Brunn
Zugelassener Gegenprobensachverständiger
für die Untersuchung von Lebensmitteln nach
§ 42 LMBG

Von der IHK Bodensee-Oberschwaben
öffentlich bestellter und vereidigter Sach-
verständiger für Chemische Untersuchung von
Lebensmitteln.

Ihre Zeichen

Unser Zeichen

88316 ISNY IM ALLGÄU 21.12.94
Seidenstraße 12-35

Kurzfassung bzw. Auszug aus der Untersuchung

Examination No.: 1740

dated 6.12.1994

Examination of mode of operation of the air washer Delphin

Terms of reference:

- Judgement of cleaning power of air washer as far as reduction of mould spores / yeasts in the room air is concerned.
- Judgement of cleaning power when appliance is used for cleaning of mattresses.

The examinations are carried out at the home of family Milz, Bottentann, community Friesenhofen. It's a matter of a farm (agricultural property). The bedroom is on the 1st floor and looks out on the south side.

Furnishings: wooden floor, carpet, double bed, cupboard, chest of drawers;

Date of sample taking: 1994-12-06, 9⁰⁰ - 11⁰⁰ o'clock

Blatt:

an:

PROAIR GmbH, Isny

am:

20.12.1994

Summary

By means of **series of measurements N° 1**, the ability of the air washer to remove air ingredients from the room which contaminate the human organism, in this case mould and yeasts, shall be examined.

The result of this series of measurements clearly shows a **great decrease in mould spores and yeast cells in the room air after switching on of the air washer**. Whereas the quantity of KBE (cfu = colony forming units) increased from 32 to 44 after shaking up of the duvets, a clear reduction to 8 KBE per m³ could be achieved by the use of the air washer (running time approx. 15 minutes)

A comparative measurement, which was taken to consider the pollution of the air outside with mould and yeast, shows that the pollution in the living space is comparable to that one in the air outside. This corresponds well to bibliographical references which are assuming that there is a little concentration of fungi spores in the air outside between November and April. It is around an average of 40 KBE/m³.

Therefore, already after a short running time of the Delphin, not only the increased quantity of KBE of mould and yeast that emerge because of making beds is decreased, but these KBE are even less than the germ contamination in the air outside.

Series of measurements N° 2 shall examine the efficiency of the air washer regarding cleaning of mattresses.

The result of the series of measurements clearly shows a **great decrease of the number of mould spores and yeast cells** in vacuum samples after a careful cleaning of the mattresses and thus demonstrates the outstanding suitability of the air washer to reduce mould spores and yeast cells which are in a large number in mattresses, in some cases even to the power of ten.

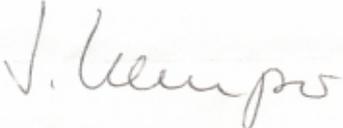
At this point we want to point out that in both series of measurements, it was only tested for mould spores and yeast cells, not for bacteria, though. As the examinations have shown, the air washer seems to be equally suitable for bacteria, too. However, this ought to be examined in a separate series of experiments as we tested selectively for mould and yeast during the series of measurement we carried out here within the scope of laboratory tests. As a result, the development of bacteria was hampered so that no well-founded statement can be made about the latter.

CHEMICAL-PHARMACEUTICAL
LABORATORY ISNY/ALLGÄU



Prof. Dr. W. Brunn
(staatl. gepr. Lebensmittelchemiker)

(officially tested food analyst)



S. Kemper
(Diplombiologin)

(qualified biologist)



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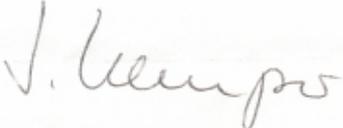
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