24. september 2009

BiolytiQs GmbH, Merowingerplatz 1a, 40225

Mier
Reinigungstechnik
Am Alten Brunnen 8b

Sampling date: 12. / 13. september 2009
Sampling received: 15. september 2009
Internal sampling number: 0909_0443
Client: Mier Reinigungstechnik
Client project: Molds versa IonFlow

Pos.	number	Typ	point of measurement	sample number
1	-	Foilcontact	-	-
2	-	Direct contact	-	-
3	-	Swap sample	-	-
4	-	Material sample direct	-	-
5	-	material microscopy of 4.1	-	-
6	-	total particle count	-	-
7	4	Air sample	Sample 1(after ventilation) and 2 (after 1 hour IonFlow operation). Sample 3 (after ventilation) and 4 (after 3 hours IonFlow operation)	0909_0443.1 0909_0443.2
8	-	determination of salt	-	-

Request: cultivation and analysis of mold and spores before and after the IonFlow operation.

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Anne Klein-Vehne,
Dipl.-Ing. Adriane Aust

Kreissparkasse Düsseldorf
BLZ 301 502 00
Kontonummer 2031276
HRB 54588, Amtsgericht Düsseldorf
Steuernummer: 106\5702\4368

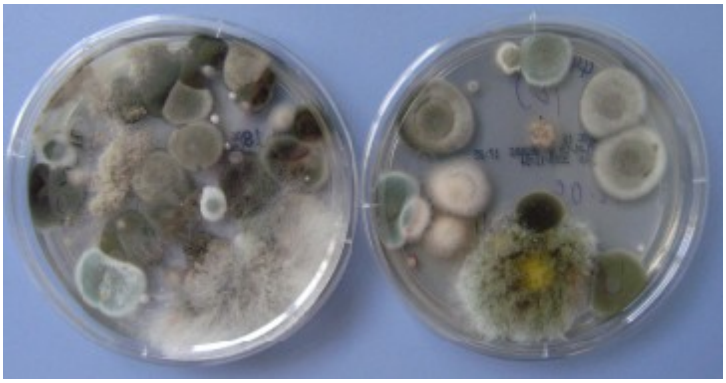
to pos. 7 air sample

Method

The collected Dichloran-Glycerin-(DG 18) agar plates were incubated at 24°C ± 1°C .

After 3 and 6 days the agar plates were analysed. The colony count was determined and they were differentiated.

Foilcontact preparations were made, stained with a blue lactophenol solution and microscopical analyzed.



Sample 1, left (after ventilation) and 2 right (after 1 hour IonFlow operation)
0909_0443.1 100 liters sample volume after 5 days incubation

DG 18 24°C sample 1
DG 18 24°C sample 2

Sample 3, left (after ventilation) and 4, right (after 3 hours IonFlow operation)
0909_0443.2

100 liters sample volume after 5 days incubation

DG 18 24°C sample 3
DG 18 24°C sample 4

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Sample form	Agar / Temperatur	Analysis	Colony / Agar plate	Colony/ m3 air*
Air sample **Sample 1, left (after ventilation) and 2 right (after 1 hour IonFlow operation)** 0909_0443.1 100 liters	DG 18 24°C Sample 1	Cladosporium spp. Penicillium spp. (3 types) Wallemia sebi sterile colonies red yeast white yeast	35 4 1 3 2 1	350 40 10 30 20 10
		total:	46	460
	DG 18 24°C Sample 2	Cladosporium spp. Penicillium spp. Eurotium sp. Aspergillus versicolor sterile colonies red yeast white yeast	5 1 1 1 4 1 3	50 10 10 10 40 10 30
		total:	16	160

Sample form	Agar / Temperatur	Analysis	Colony / Agar plate	Colony/ m3 air*
Air sample **Sample 3, left (after ventilation) and 4 right (after 3 hours IonFlow operation)** 0909_0443.2 100 liters	DG 18 24°C Sample 3	Cladosporium spp. Eurotium sp. Penicillium spp. (2 types) Wallemia sebi	45 3 2 2	450 30 20 20
		total:	52	520
	DG 18 24°C Sample 4	Cladosporium sp Wallemia sebi Aspergillus versicolor	3 1 1	30 10 10
		total:	5	50

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Bacteria are not calculated in the colony amount

spp. =	more species of one category, the species is not identified
sp. =	species of one category which is not identifie
*	calculated value
Sterile colonies	not definable molds, they only build mycelium in the lab culture but no fruitbodys or spores

Extract of the original german report number 0909_0443

24 september 2009 Mrs. Klein-Vehne (manager laboratory analysis)

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To: KK Holistic Holdings

Test report

Feb. 4, 2011/02/16

Issued No. 10-3181

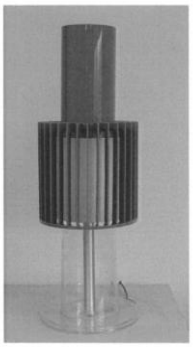
Approved and registered environmental measuring agency for
Tokyo Metropolitan Government
Ministry of Welfare and Health, Labor
Ministry of Environment
ISO/IEC7025

Analysis Center Co., Ltd. Japan

Head Office 3-4-9 Misaki-cho Chiyoda-ku, Tokyo
#1 Tech Lab. 1-12-2 Higashi Mukoujima Sumida-ku, Tokyo

Upon a request by KK Holistic Holdings, ACL has tested the particle reduction performance. We report here the test method and the results.

1. Testing Objective



LightAir Ionizer, IonFlow50 Surface
(see as the left image)

2. Testing items and procedure

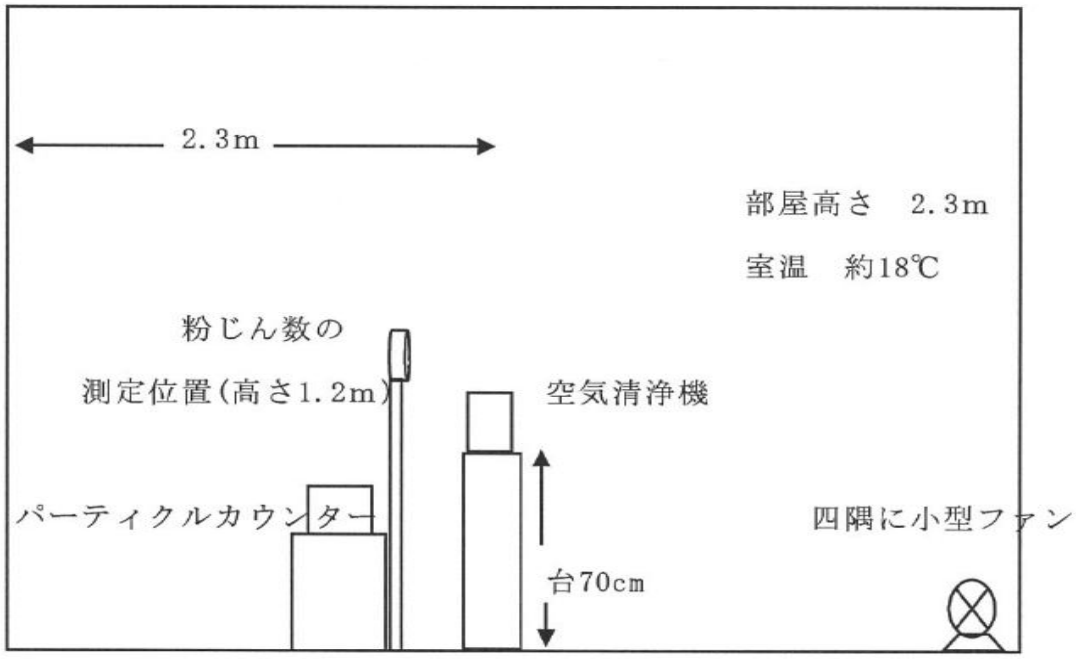
/ Reduction performance of airborne particles by air-purifier

The objective of this test was to measure an efficacy of airborne particle reduction by the air-purifier. Prior to a measurement test, a candle-light were used as the source of pollution, to give an initial particle count of the size of 0.3 micron or more above 1.6million particles/L. As the particle concentration reached to it, the candle light was removed and the air-purifier was turned on. Measurements of the particle concentration was started and continued until when the particle concentrations decreased to about 5% of the starting concentrations. Also, we measured the natural decline in the same manner. Air-purifier was placed in the middle of the testing chamber, 70cm above the floor, the particle counter was also placed in the middle of the chamber, 50cm away from the air-purifier, 120cm above the floor. During the testing, small fans were located at the each of four corners of the testing room and running throughout the testing operation in order to beat up the air.

The candle used in the testing was No. 20 made by Akatsuki Fuji Candle. The figure below shows a layout of the testing chamber.

The testing chamber

(W 4.5m x D 2.3m = 10.3 square meters, almost relevant to 6 mats of Tatami)



Particle was measured by a particle counter and the particle counter is :
KC-01C Ri-on Co., Ltd.(Semi conductor laser)
Measured in five particle size rebels over 0.3 micron

3. Results

Table 1, also Graph 1 show results of airborne particle variations and reduction rate of the particle variation by time. The attached table at the end of this report shows the amount of each particle sizes by every 20 minutes.

Table 1:

Particle amount of the sizes of 0.3 micron and more by time with/without air-purifier

Duration (min.) after start	With IonFlow50 Amount/Littre	Natural Decay Amount/Littre	Particle Reduction Rate by IonFlow50
0	1,797,418	1,863,765	-
20	1,658,544	1,814,485	7.7%

40	1,128,155	1,792,123	37.2%
60	604,384	1,769,912	66.4%
80	298,248	1,757,880	83.4%
100	150,265	1,708,019	91.6%
120	84,125	1,682,032	95.3%
140	52,999	1,670,228	97.1%
160	36,495	-	98.0%
180	28,840	-	98.4%

As a result of the particle reduction testing, the airborne particles of the sizes of 0.3 micron and more in the testing room have been reduced 66% after 60 minutes operation of the air-purifier, over 90% after 100 minutes, more than 98% after 180 minutes. The results prove an efficacy of the airborne particle reduction by the air purifier which was utilized in the testing in the above described circumstances. Although it will vary the clinical environments in real rooms due to movements of living persons and/or opening and closing doors/windows, with/without the air ventilation systems and conditions of air circulations, this results suggest the air purifier used in this testing has an exact efficacy of particle reduction in a room.