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RECORD OF ANALYSIS No: 64S/2021

Date of issue:	16.7. 2021
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Client:	Mekem.cz, s.r.o. Lidická 700/19 Veveří, Brno 602 00 Brno
Date of receiving the sample:	31.5.2021
Place of analysis:	UCT TL DBM, Technická 1903/3, 166 28 Prague 6 Department of biotechnology, Technická 1905/5, 166 28 Prague 6 *
Date of analysis start:	8.6.2021
Date of realisation:	8.6. - 9.7.2021
Sample:	
Object of testing: +	ANNIHILATOR LUMENMAX typ PL/CL 24 COB LED UVC
Purpose of analysis:	Antimicrobial activity - detecting the presence of bacteria and molds Testing of antiviral activity (including SARS-CoV-2)*
Methods of testing:	SOP 3 (ČSN 56 0100) - Antimicrobial activity Annex * - Antiviral activity
Place of sampling: +	client
Sample taken by: +	client

Explanations: + Information provided by the customer
** Results relate to the received sample
Methods labelled by sign * are not accredited
cfu colony-forming unit

Test microorganisms:			Concentration of tested suspension cfu/ml
bacteria	<i>Staphylococcus aureus</i>	ATCC 25923	5,9.10 ⁵
	<i>Escherichia coli</i>	ATCC 25922	4,7.10 ⁵
	<i>Salmonella enterica</i> spp. <i>Enterica</i> serovar Typhimurium	ATCC 14028	4,7.10 ⁵
molds	<i>Aspergillus brasiliensis</i>	ATCC 16404	2,0.10 ⁶
	<i>Penicillium chrysogenum</i>	ATCC 10106	1,0.10 ⁶
	<i>Cladosporium</i> sp.	collection of DBM	3,0.10 ⁶

Results of analysis: **				
Media used:	PCA	Plate Count Agar		
	YGC	Yeast Glucose Chloramphenicol Agar		
	PSS	Physiological saline solution		
Exposure time	Bacteria	30 and 45 min	test distance 2,5 m	
	Molds	1 and 6 hours	test distance 2,5 m	
Test microorganisms:	Cultivation conditions	Degree of the cells number reduction		
		30 min	45 min	
<i>Staphylococcus aureus</i>	37 °C 24, 48 h	100 %	100 %	
<i>Escherichia coli</i>		100 %	100 %	
<i>Salmonella enterica</i> spp. <i>Enterica</i> serovar Typhimurium		100 %	100 %	
		1 h	6 h	
<i>Aspergillus brasiliensis</i>	25 °C 7 dní	Reduction 3 log	Reduction 4 log	
<i>Penicillium chrysogenum</i>		Reduction 4 log	Reduction 4 log	
<i>Cladosporium</i> sp.		Reduction 3 log	Reduction 3 log	

Conclusion:

- The obtained data show that the growth of selected bacteria is inhibited by tested device at chosen times.
- The obtained data show that the tested device is able decreasing the growth of micromycetes by 3-4 logs, depending of tested time

Annex:

*No.1 - antiviral activity testing **

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Head of the laboratory

End of Record
