



National Institute for NBC Protection (SÚJCHBO, v.v.i.)

PŘÍBRAM - KAMENNÁ, 262 31 MILÍN, CZECH REPUBLIC

Laboratory of Toxic Compounds

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Test report No. 56/2015/LTL

Testing of CLEANER2015001 focused on antibacterial and antiseptic effects						
Ordered by:						
Company name	EXAKT, spol. s r.o.					
Address	Žižkova 150, 261 01 Příbram IX, Czechia					
Order number/date	Ech 09-2015-01R/ 6.9.2015					
Pretender	Mr. Václav Ryčl Managing Director					
Specification of tested mixture/composition						
Trade name	CLEANER2015001					
Producer	Jaroslav Straňavský M.M. – System					
Producer address	976 34 Tajov 242					
Country of origin	Slovakia					
Test provider						
	National Institute for NBC Protection (SÚJCHBO) Laboratory of Toxic Compounds Laboratory of Biological Monitoring and Protection					
Address	Kamenná 71, 262 31 Milín, Czechia					
Date of testing	October 2015					
Responsible staff	Tomáš Dropa, MSc. Hana Placáková, MSc.					
Report issued by	Tomáš Dropa, MSc.					
Date of report issue	5.11.2015					
Distribution	Number of Issues	2	Issue No.	1: EXAKT 2: SÚJCHBO	Number of Pages	3
Customer Ref. No.:	Ech 09-2015-01R					
Test Provider Ref. No.:	SÚJCHBO/2762/CH-2.2.2/15/Dro					



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Testing focus

The aim of the tests described below was to check the antibacterial and disinfectant properties of CLEANER2015001 which was used for the treatment of heavily contaminated solid surface. For that purpose, defined contamination by means of two bacterial cultures was provided on glass surfaces of Petri dishes. After certain time period for cultures contact, the contaminated surfaces were treated with tested product CLEANER2015001.

Verification of residual bacteria contamination on the glass surfaces was performed using selective culture media. The samples from treated sites were taken by direct imprinting of culture media and the occurrence of live bacterial strains was verified.

Testing protocol

- sterilize Petri dish by immersion into 100 % ethanol
- after drying, contaminate the Petri dish by solution of bacterial culture (20 drops by 2 µL each; total amount 40 µL)
- let the solution of bacterial culture to dry in 30 min.
- apply by spraying the tested product CLEANER2015001; time of exposure on the surface 5 min.
- take the samples from treated surface by means of selective culture media
- put the Petri dishes into thermostat and read results of cultivation after 24 hrs.
(An example of media cultivation, **Fig. 1**)

Surface contamination was performed using two bacterial cultures:

1. *Bacillus anthracis* (BA)
2. *Escherichia coli* (EC)

Petri dish	contamination	Cleaner	CFU
1	BA	+	1
2	EC	+	0
3	BA	CTRL	164
4	EC	CTRL	39

CFU – Colony Forming Unit

CTRL – control sample, untreated surface

Test evaluation

The test surfaces were contaminated by means of two bacterial cultures. Every surface, after a specified time period, was treated by CLEANER2015001 product (dilution ratio CLEANER / dist. water – 1:30; v/v). The identical glass surfaces were compared in the test, the surfaces treated with the test agent and the untreated surfaces.

The test results show a high antibacterial activity of CLEANER2015001 product used. The efficacy of the surface decontamination in that case was close to 100 %, i.e. surface treatment led to complete removal of the bacterial culture used. The same antibacterial activity was confirmed at higher dilution ratios, i.e. 1:40 and 1:50 (CLEANER2015001 / dist. water; v/v).

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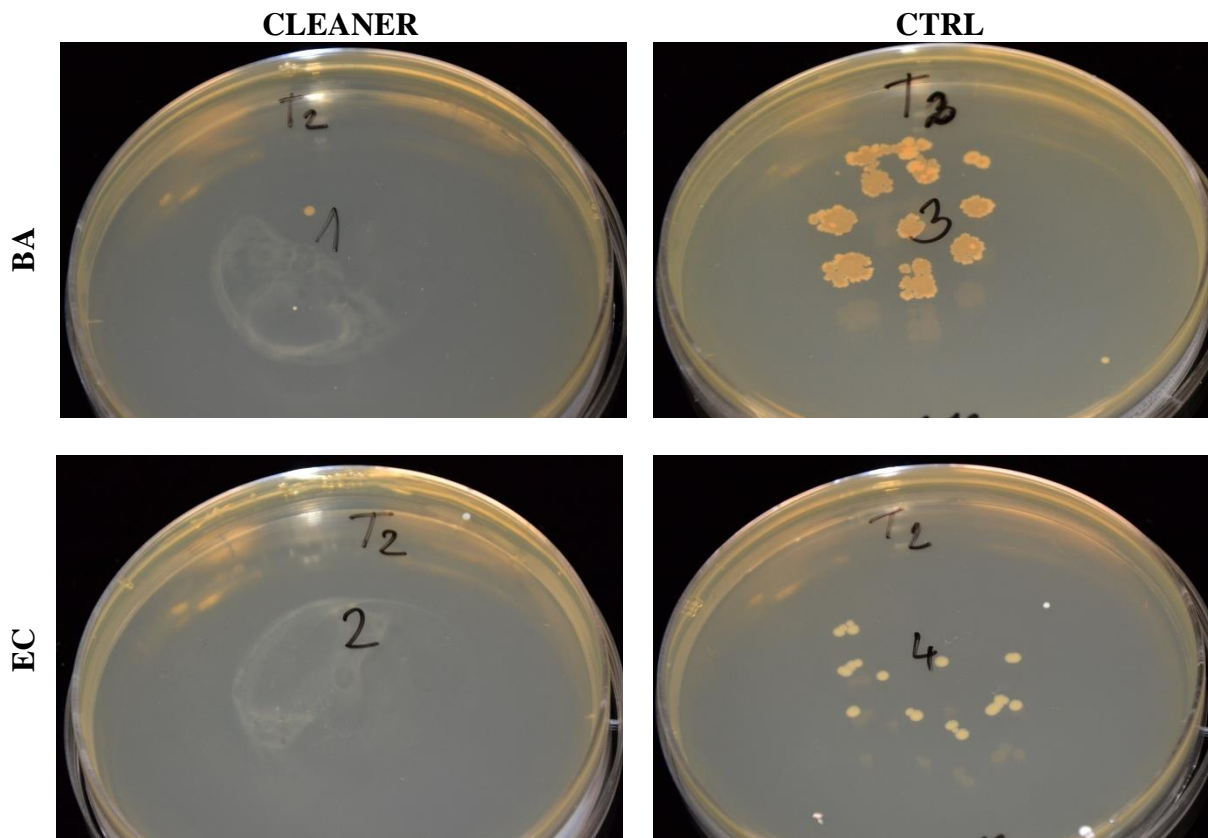


Fig. 1: Selective culture media used with the product CLEANER2015001; media after cultivation of treated (CLEANER) and untreated (CTRL) surfaces

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