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TÜKETİCİ VE KOZMETİK LABORATUVARI

NANOLAB LABORATORY SERVICES

MICROBIOLOGICAL ACTIVITY TEST REPORT

Report Registration Number/Rev.No/Report Date	T21-1488/1/24.03.2021
Sample Name	SMART HERBAL CLEANER EFFECTIVE ON ALL SURFACE
Product / License Holder	ÖZDEN KİMYA VE PLASTİK SAN.TİC.A.Ş.
Active Substances and Ratios	
Sample Arrival Date	12.03.2021
Sample From,Date and Number	12.03.2021 -
Sample Arrival, Seal Status	Biocidal Special Request , Unsealed
Address From The Sample	SARAY MAH. 191.CAD. NO:4, KAZAN/ANKARA
Production Address	
Sample Serial Number	
Test Start and End Date	17.03.2021 - 23.03.2021
Sample Package	Original
Production - Expiry Date	10.01.2021 - 10.01.2024
Sample Quantity	500 ML
Formulation Form	SIVI / Liquid

1. No part of the analysis report can not be used alone or separately.
2. This report can not be used in judicial-administrative proceedings and for advertising purposes.
3. Analysis results are valid for the above mentioned sample.
4. This report may not be partially copied or reproduced without the written permission of the laboratory.
5. Unsigned and unsealed reports are not valid.
6. The above mentioned values were determined as the result of the examination and analysis.
7. Abbreviations; E : Evaluation, P : Pass, F : Fail, N.I. : Not Interpreted, R : Recovery, E.U. : Expanded Uncertainty, LOQ : Limit of Quantification
8. The analysis signed with "*" are in the scope of accreditation.
9. Based on customer request, Last User. The report was revised by updating the date and adding the English version. Report number "00" revision number T21-1488 dated 23.03.2021 is invalid.

Analysis Personnel

Feray METİN

e-imzalıdır

NANOLAB LABORATUVAR HİZMETLERİ NANOLAB MERKEZ

Confirm

Adem ÖDEKBAŞ

Lab. Manager

e-imzalıdır

Date

24.03.2021

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This document has been electronically signed in accordance with the Electronic Signature Law No. 5070.

Microbiological Parameters Examined	Method	Plate Count method (number of plates used)	Test temperature	Incubation temperature	Blocking Substance	Testing Organism	Neutralizer used
SMART HERBAL CLEANER EFFECTIVE ON ALL SURFACE	TS EN 1276	Bulk / 2	20°C	37°C	3 g/L bovine albumin	*S. aureus ATCC 6538*	Sodium thiosulphate 10 g/L + polysorbate 80 30 g/L + lecithin 3 g/L
	TS EN 1276	Bulk / 2	20°C	37°C	3 g/L bovine albumin	*P. aeruginosa ATCC 15442*	Sodium thiosulphate 10 g/L + polysorbate 80 30 g/L + lecithin 3 g/L
	TS EN 1276	Bulk / 2	20°C	37°C	3 g/L bovine albumin	*E. hirae ATCC 10541*	Sodium thiosulphate 10 g/L + polysorbate 80 30 g/L + lecithin 3 g/L
	TS EN 1276	Bulk / 2	20°C	37°C	3 g/L bovine albumin	*E. coli ATCC 10536*	Sodium thiosulphate 10 g/L + polysorbate 80 30 g/L + lecithin 3 g/L

Testing Organism: *S. aureus ATCC 6538*

Validation suspension (Nv0)	Control of experimental conditions (A)	Neutralizer / filtration control (B)	Method validation (C)
			Product concentration: %80
V_c 80, 90 $\bar{x} = 85$	V_c 82, 86 $\bar{x} = 84$	V_c 80, 92 $\bar{x} = 86$	V_c 80, 76 $\bar{x} = 78$
$30 \le \bar{x} \le 160$?	*A's* $\bar{x} \ge 0{,}5 \times Nv0\ \bar{x}$?	*B's* $\bar{x} \ge 0{,}5 \times Nv0\ \bar{x}$?	*C's* $\bar{x} \ge 0{,}5 \times Nv0\ \bar{x}$?
[X] Yes [ ] NO	[X] Yes [ ] NO	[X] Yes [ ] NO	[X] Yes [ ] NO

Test suspension and test

Test suspension (N ve N0)	N	Vc		N = 2,9 x10⁸	logN = 8,47
	10^6	290	300	N_0 = 2,9 x10⁷	$\log N_0$ = 7,47
	10^7	31	27	$7{,}17 \le \log N_0 \le 7{,}70$?	[X] Yes [ ] NO

% (v/v) Product concentration	Vc		Na (kob/ml)	log Na	log R ($\log N_0 - \log Na$)	Contact Time
% 80,00	<14	<14	<140	<2,15	>5,32	5 min

Testing Organism: *P. aeruginosa ATCC 15442*

Validation suspension (Nv0)	Control of experimental conditions (A)	Neutralizer / filtration control (B)	Method validation (C)
			Product concentration: %80
V_c 44, 48 $\bar{x} = 46$	V_c 45, 53 $\bar{x} = 49$	V_c 40, 54 $\bar{x} = 47$	V_c 42, 54 $\bar{x} = 48$
$30 \le \bar{x} \le 160$?	*A's* $\bar{x} \ge 0{,}5 \times Nv0\ \bar{x}$?	*B's* $\bar{x} \ge 0{,}5 \times Nv0\ \bar{x}$?	*C's* $\bar{x} \ge 0{,}5 \times Nv0\ \bar{x}$?
[X] Yes [ ] NO	[X] Yes [ ] NO	[X] Yes [ ] NO	[X] Yes [ ] NO

Test suspension and test

Test suspension (N ve N0)	N	Vc		N = 2,8 x10⁸	logN = 8,44
	10^6	280	284	N_0 = 2,8 x10⁷	$\log N_0$ = 7,44
	10^7	26	22	$7{,}17 \le \log N_0 \le 7{,}70$?	[X] Yes [ ] NO

% (v/v) Product concentration	Vc		Na (kob/ml)	log Na	log R ($\log N_0 - \log Na$)	Contact Time
% 80,00	<14	<14	<140	<2,15	>5,29	5 min

Bu belge 5070 sayılı Elektronik Imza Kanunu uyarınca elektronik olarak imzalanmıstır.

Testing Organism:	*E. hirae ATCC 10541*											
Validation suspension (Nv0)				Control of experimental conditions (A)				Neutralizer / filtration control (B)			Method validation (C) Product concentration: %80			
V_c	84 90	$\bar{x} = 87$		V_c	80 84	$\bar{x} = 82$		V_c	80 86	$\bar{x} = 83$	V_c	63 71	$\bar{x} = 67$	
$30 \le \bar{x} \le 160$? [X] Yes [ ] NO				*A's* $\bar{x} \ge 0,5 \times Nv0\ \bar{x}$? [X] Yes [ ] NO				*B's* $\bar{x} \ge 0,5 \times Nv0\ \bar{x}$? [X] Yes [ ] NO			*C's* $\bar{x} \ge 0,5 \times Nv0\ \bar{x}$? [X] Yes [ ] NO			
Test suspension and test														
Test suspension (N ve N0)	*N*	*Vc*		$N =$ $2,7 \times 10^8$ $N_0 =$ $2,7 \times 10^7$ $7,17 \le \log N_0 \le 7,70$? [X] Yes [ ] NO				$\log N =$ 8,43 $\log N_0 =$ 7,43						
	10^6	260	272											
	10^7	31	25											
% (v/v) Product concentration		*Vc*		*Na* (kob/ml)		log *Na*		log R ($\log N_0$ - $\log Na$)			Contact Time			
% 80,00		<14	<14	<140		<2,15		>5,28			5 min			

Testing Organism:	*E. coli ATCC 10536*											
Validation suspension (Nv0)				Control of experimental conditions (A)				Neutralizer / filtration control (B)			Method validation (C) Product concentration: %80			
V_c	62 74	$\bar{x} = 68$		V_c	60 56	$\bar{x} = 58$		V_c	62 64	$\bar{x} = 63$	V_c	52 60	$\bar{x} = 56$	
$30 \le \bar{x} \le 160$? [X] Yes [ ] NO				*A's* $\bar{x} \ge 0,5 \times Nv0\ \bar{x}$? [X] Yes [ ] NO				*B's* $\bar{x} \ge 0,5 \times Nv0\ \bar{x}$? [X] Yes [ ] NO			*C's* $\bar{x} \ge 0,5 \times Nv0\ \bar{x}$? [X] Yes [ ] NO			
Test suspension and test														
Test suspension (N ve N0)	*N*	*Vc*		$N =$ $2,5 \times 10^8$ $N_0 =$ $2,5 \times 10^7$ $7,17 \le \log N_0 \le 7,70$? [X] Yes [ ] NO				$\log N =$ 8,39 $\log N_0 =$ 7,39						
	10^6	238	254											
	10^7	28	24											
% (v/v) Product concentration		*Vc*		*Na* (kob/ml)		log *Na*		log R ($\log N_0$ - $\log Na$)			Contact Time			
% 80,00		<14	<14	<140		<2,15		>5,24			5 min			

Evaluation:
The product demonstrated 5 log reduction within the test conditions, and was evaluated EFFECTIVE against the S. aureus ATCC 6538 microorganism.
The product demonstrated 5 log reduction within the test conditions, and was evaluated EFFECTIVE against the P. aeruginosa ATCC 15442 microorganism.
The product demonstrated 5 log reduction within the test conditions, and was evaluated EFFECTIVE against the E. hirae ATCC 10541 microorganism.
The product demonstrated 5 log reduction within the test conditions, and was evaluated EFFECTIVE against the E. coli ATCC 10536 microorganism.

Bu belge 5070 sayılı Elektronik Imza Kanunu uyarınca elektronik olarak imzalanmıştır.