



BSN CHEMISTRY
COSMETIC ANALYSIS LABORATORY



Test
TS EN ISO /IEC 17025
AB-QA 147902

EXAMINATION AND ANALYSIS REPORT

Report Type: Special Request Details of the Firm sending sample;	Report No :20042016 Reporting Date :25.05.2020
Firm Name : OLCE KOZMETIK LTD ŞTI Address : Yıldırım mah ali Fuat Başgil cad No145 /A BAYRAMPAŞA İSTANBUL Contact Detai : 532 610 10 09 Name of the Official :HUZEYFE İSLAMOĞLU	Sample; Name : BIOFLEX ANTIBACTERIAL WET WIPES SOLUTION Quantity of Product : 1lt x 6 pcs (Wet wipes solution) Package Type :Glass Container Lot No :001 Active content of the sample : Quaternary ammonium compounds, benzyl (C12 - C16) alkyl dimethyl, chlorides Arrival Date :20.04.2020 Starting Date :20.04.2020 Ending Date :12.05.2020

RESULT

The result of the analysis made on the sample of BIOFLEX ANTIBACTERIAL WET WIPES sent by you are presented below for your information.

ANALYSIS RESULTS

2.1 ANTIVIRAL ACTIVITY TRIAL METHOD APPLICATION DETAILS

Virus and strain tested	Trial Method	Starting and Ending Date of Trial	Features of Virus and Strain	Dose of application	Contact Form	Waiting Time	Clean ambient conditions of trail	Dirty ambient conditions of trail	Cell Culture and Dilution Buffer
Virucidal analysis of disinfectants -Poliovirus Type 1	TS EN 14476	20.04.2020 12.05.2020	ATCC 's reference strain with VR-192 code	Direct 1/1	Liquid Mixture	1 min	Environment including BSA (20°C)	Environment including BSA and Sheep erythrocyte(20°C)	Hep-2 cell culture (ATCC CCL-23)MEM, PBS ,Hard water
Virucidal analysis of disinfectants -Human Adenovirus Type 5	TS EN 14476	20.04.2020 12.05.2020	ATCC's reference strain with VR-5 code	Direct 1/1	Liquid Mixture	1 min	Environment including BSA (20°C)	Environment including BSA and Sheep erythrocyte(20°C)	Hep-2 cell culture (ATCC CCL-23)MEM, PBS ,Hard water
Virucidal analysis of disinfectants -Murine norovirus	TS EN 14476	20.04.2020 12.05.2020	ATCC's reference strain with PTA-5935 code	Direct 1/1	Liquid Mixture	1 min	Environment including BSA (20°C)	Environment including BSA and Sheep erythrocyte(20°C)	Hep-2 cell culture (ATCC TIB 71)MEM, PBS ,Hard water

2.2. TRIAL RESULTS AND EVALUATION TABLE

Virus Name	Usage Area of Product	Reference virus titer ⁽¹⁾	Disinfectant virus titer ⁽²⁾		Rate of reduction in virus titer ⁽³⁾		Method of Effect Assessment	D
			Clean Environment	Dirty Environment	Clean Environment	Dirty Environment		
Virucidal analysis of disinfectant s-Poliovirus Type 1	Public and Usage Area	5.0	1.0	1.0	4.0	4.0	Instruction on Biocidal Product Analysis TS EN 14476	U
Virucidal analysis of disinfectants -Human Adenovirus Type 5	Public and Usage Area	5.0	1.0	1.0	4.0	4.0	Instruction on Biocidal Product Analysis TS EN 14476	U
Virucidal analysis of disinfectants -Murine norovirus	Public and Usage Area	5.0	1.0	1.0	4.0	4.0	Instruction on Biocidal Product Analysis TS EN 14476	U

2.3 ANTIVIRAL ACTIVITY TRIAL METHOD DETAILS

PARAMETER OF TRIAL	METHOD / TECHNIQUE	SUMMARY OF METHOD
Virucidal analysis of disinfectants-Poliovirus Type 1	Cell Culture – Sperman Karber Method	The non-toxic concentration of the samples in liquid form is determined in the cell culture. After inoculation of reference viruses with cells, a non-toxic sample is tested. Compared with virus controls, It is compared with virus controls and virus titer is calculated according to the Sperman-carber method.
Virucidal analysis of disinfectants-Human Adenovirus Type 5	Cell Culture – Sperman Karber Method	The non-toxic concentration of the samples in liquid form is determined in the cell culture. After inoculation of reference viruses with cells, a non-toxic sample is tested. Compared with virus controls, It is compared with virus controls and virus titer is calculated according to the Sperman-carber method.
Virucidal analysis of disinfectants-Murine norovirus	Cell Culture – Sperman Karber Method	The non-toxic concentration of the samples in liquid form is determined in the cell culture. After inoculation of reference viruses with cells, a non-toxic sample is tested. Compared with virus controls, It is compared with virus controls and virus titer is calculated according to the Sperman-carber method.
REMARK / EXPRESSION	<p>Different suspensions of the tested product of BIOFLEX ANTIBACTERIAL WET WIPES SOLUTION were first tested for cytopathic effect and the lowest rate of the aforementioned disinfectant solution without cytopathic effect was 0.1% because 1/1, 10% and 1% suspensions of the product show cytopathic effects on cells in cell culture. When the product of BIOFLEX ANTIBACTERIAL WET WIPES SOLUTION was used at a ratio of 1/1 (directly without solution), it was determined in the calculations made at the end of test that it leads to at least 4 log decrease in the virus titer in all experimental conditions (see result table) as a result of 1 minute application time at room temperature (20 °C) under clean and dirty conditions.</p> <p>According to TS EN 14476;2014-02, TS EN 14675 and OECD ENV/JM/MONO(2012)15 standards and the Regulations on Biocidal, virus titer should be reduced to 4 log (3 log for pool water) or much more for virucidal activities of disinfectants with product types 1,2,3 and 4.</p> <p>As a result, when BIOFLEX ANTIBACTERIAL WET WIPES SOLUTION is used at a ratio of 1/1 (directly without dilution), results of the experiment suggest that it is effective at a ratio of 99.99% against Poliovirus Type 1 virus, Human Adenovirus Type 5 virus and Murine Norovirus at room temperature (20 °C) for 1 min application time.</p>	



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GENERAL EVALUATION: As a result of the examination and analyzes carried out, the values stated above have been determined.

**Suitability status ; U:Suitable , DU:Unsuitable , DY:No evaluation was made because there is no limit value D:Evaluation

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Abbreviations: (1) Logarithmic TCID₅₀ value of the virus in ml

(2) Logarithmic TCID₅₀ value of the virus treated with disinfectant in different time and environments

(3) Logarithmic TCID₅₀ ratio between virus titer and disinfectant virus titer

END OF THE REPORT

HAKKI AYDEMİR
Biology Lab
Department Head

EMRE AKÇA
Chemistry Lab
Department Head

APPROVAL

BSN KİMYA Emre AKÇA
Kozmetik, Dermatolojik, Laboratuvar Hizmetleri
Akşemsettin Mah. Meşeler Sk. No.13/A
Tel: 0332 247 17 50 / Fax: 0332 247 17 60
Meram V.D. 282 0701 8848 - Selçuklu/KONYA

BSN CHEMISTRY COSMETIC CONSULTANCY ANALYSIS LABORATORY
AKŞEMSETTİN MAH MEŞELER SK 13/A SELÇUKLU / KONYA

T:0332 247 17 50 F:0332 247 17 60

info@bsnkimya.com www.bsnkimya.com