



PİMLAB LABORATUVAR HİZMETLERİ
PİMGRUP DANIŞMANLIK A.Ş.
Göktürk Merkez Mah. Göktürk Cad. Neo Yaşam Sit.
No:9/20
Eyüpsultan / İSTANBUL

AB-1743-T
04078-PIM22-EN
01/11/2022

CHALLENGE ANALYSIS REPORT

Report No / Sample Accept No : 04078-PIM22-EN
Contract / Offer No : PIM22/0849
The Purpose of The Analysis : Special Request
Customer Name : İPEKLİ TEMİZLİK MADDELERİ VE KOZMETİK ÜRÜNLERİ DIŞ TİCARET VE SANAYİ LİMİTED ŞİRKETİ
Address : BOSTANLI MH. 6353 SK. NO:11 35 560 - - / - KARŞIYAKA / İZMİR
Sample's ;
Name : BİTKİSEL KATI ŞAMPUAN
Serial / Batch No : -
Packing Type : Original Packaging
Sample Quantity : 2x95 GR
Temperature of Sample : 19.7°C
Ambient/Delivery Temperature : 22.8°C
Sample Image :

Date of Manufacture : 2022
Expiration Date : 2023
Sample Acceptance Date : 27/09/2022
Analysis Start Date : 30/09/2022
Analysis End Date : 31/10/2022
Report Release Date : 01/11/2022
Report Approval Date : 01/11/2022

Analysis Time : 28 days
Incubation Conditions : Bacteria 48-72 h, *Candida albicans* 3 days, *Aspergillus brasiliensis* 5 days
Neutralizan Composition : Eugon LT 100 Liquid Broth.
Incubation Temperature : Bacteria (32,5±2,5 °C), *Candida albicans* and *Aspergillus brasiliensis* (22,5±2,5 °C).
Medium : TSA for Bacteria, SDA for *Candida albicans*, PDA for *Aspergillus brasiliensis*.
Mass/Product Formulation Volume : For bacteria (10⁵ - 10⁶ cfu/g), For fungi (10⁴ - 10⁵ cfu/g)
Calibration Suspension Volume : For bacteria (10⁷ - 10⁸ cfu/g), *Candida albicans* and *Aspergillus brasiliensis* (10⁶ - 10⁷ cfu/g)

The Turkish Accreditation Agency(TURKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation(EA) and of the International Laboratory Accreditation(ILAC) for the Mutual recognition of test reports.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.

Microorganisms	T7			T14			T28			Compliance Status**	Analysis Method
	N	N ₀	R	N	N ₀	R	N	N ₀	R		
<i>Pseudomonas aeruginosa</i> ATCC 9027 *	7x10 ²	3.9x10 ⁶	3.75	<10	3.9x10 ⁶	6.59	<10	3.9x10 ⁶	6.59	ACCEPTABLE	TS EN ISO 11930
<i>Staphylococcus aureus</i> ATCC 6538 *	2.5x10 ³	3.5x10 ⁶	3.15	<10	3.5x10 ⁶	6.54	<10	3.5x10 ⁶	6.54	ACCEPTABLE	TS EN ISO 11930
<i>Escherichia coli</i> ATCC 8739 *	5x10 ²	3.6x10 ⁶	3.86	<10	3.6x10 ⁶	6.55	<10	3.6x10 ⁶	6.55	ACCEPTABLE	TS EN ISO 11930
<i>Candida albicans</i> ATCC 10231 *	3x10 ²	4.5x10 ⁴	2.18	<10	4.5x10 ⁴	4.65	<10	4.5x10 ⁴	4.65	ACCEPTABLE	TS EN ISO 11930
<i>Aspergillus brasiliensis</i> ATCC 16404 *	1.4x10 ⁴	4.5x10 ⁴	0.51	<10	4.5x10 ⁴	4.65	<10	4.5x10 ⁴	4.65	ACCEPTABLE	TS EN ISO 11930

(**) Compliance Status: A: Acceptable, NA: Non Acceptable, NE: No Evaluation For Not Having Limit Value.

According to the assessment criteria recommended by the ISO 11930, the preservative system of the the test cosmetics product called BİTKİSEL KATI ŞAMPUAN in conforming to the criterion A and is ACCEPTABLE and preservative systems shows efficacy against test microorganisms.

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CHALLENGE ANALYSIS REPORT LIMITS

Log Reduction Values ($R_x = I_g N_0 - I_g N_x$) required^a

Microorganisms	Bacteria			Candida albicans			Aspergillus brasiliensis	
	T7	T14	T28	T7	T14	T28	T14	T28
Criteria A	≥3	≥3 and NI ^b	≥3 and NI	≥1	≥1 and NI	≥1 and NI	≥0 ^c	≥1 and NI
Criteria B	Not Performed	≥3	≥3 and NI	Not Performed	≥1	≥1 and NI	≥0	≥0 and NI

a : In this test, on acceptable range of deviation 0,5 log is accepted.
b NI : No increase in the count from the previous contact time.
c : $R_x=0$ when $\log N_0 = \log N_x$ (no increase from the initial count).
 N_0 : number of microorganisms inoculated at time T_0
 N_x : number of surviving microorganisms at each sampling time T_x

Instructions:

- 1- No part of this analysis report may be used alone or separately.
- 2- Analysis results relate to the sample(s) described above.
- 3- Measurement Uncertainty (M.U.) is given with the Analysis result when necessary. Measurement Uncertainty (M.U.) is not taken into account in microbiological analysis. Measurement Uncertainty (M.U.) is not taken into account in chemical and physical analysis. If the Measurement Uncertainty (M.U.) is used in the calculations, it is stated in the "Instructions".
- 4- This report may not be copied or reproduced in whole or in part without the written permission of the laboratory.
- 5- Measurement Uncertainty was calculated using $k=2$ at the 95% confidence interval.
- 6- Unsigned custom request reports are invalid.
- 7- Additional information given by the customer is indicated in the "Instructions".
- 8- **Decision Rule:** When a declaration of conformity (suitable or unsuitable) is given regarding the test results, if there is a valid decision rule in the legislation, this decision rule is applied. If there is no valid decision rule in the legislation, the measurement uncertainty value is evaluated according to the 'Simple Decision Rule' and the results are reliable. It is reported as is, without adding or subtracting the level and uncertainty of measurement.
- 9- Analyzes marked with (*) are within the scope of TÜRKAK accreditation.
- 10- (***) signed analysis were performed in the accredited supplier laboratory.
- 11- (#) signed analysis were performed in a supplier laboratory.
- 12- **Statement of Renounce:** "Our laboratory is not responsible for the deviations in the sample results accepted under the conditions of, in agreement with the customer." statement is added.
- 13- **Judgment and comment:** When applicable/necessary
- 14- **Additions, deletions, and deviations to the test method:** When applicable/necessary

END OF REPORT

E-signed

Yağmur BULAT

Microbiology Laboratory Department Responsible

E-signed

Feyza ÇALGERİŞ

Sample Acceptance and Reporting Department
Responsible

E-signed

Yağmur BULAT

Laboratory Manager