

TEST REPORT No.: Ł/0/08/2021/292/M/1/EN

Order No.: Ł/0/08/2021/292


- A - accredited methodology (AB 1095); reference – if the law so provides (the result can be used to assess compliance in the legally regulated area).
 AE - accredited methodology (AB 1095) of flexible scope – reference if the law so provides / equivalent to reference (the result can be used to assess compliance in the legally regulated area).
 AR - accredited methodology (AB 1095) equivalent to reference (the result can be used to assess compliance in the legally regulated area).
 MON - methodology accredited in terms of "OIB"
 GMP+ - methodology registered in the scope of GMP+ B11 protocol (feed testing)
 A/P - accredited methodology of the subcontractor
 P - non-accredited methodology of the subcontractor

Material/product tested: Cosmetics								
Product name: PROPARIN - Shampoo Hair Growth System	Date: 5 sierpnia 2021							
Producer: own production	Date of production: no data							
Lot number: 06.2021 / 344	Notes on the sample: Preserving system: - Phenoxyethanol - 0.8235% - Ethylhexylglycerin - 0.1035%							
Samples collected according to: Samples transported by: Shipping	Sample receiver: JARS employee no.: 2533							
Sample no.: 4855/08/21	Sample evaluation: unreservedly							
Analysis start date: 11-08-2021	Analysis end date: 13-09-2021							
Lab.	Analyzed parameter	Unit	Accred.	Test method	Requirement	Result	MU**	N
Ł	Preservation efficiency - challenge test	-	AE	PN-EN ISO 11930:2019-03		in Attachment		

** - expanded measurement uncertainty at the level of confidence app. 95% and the coverage factor k=2, does not take into account the sampling uncertainty, except when indicated in the remarks.
 Measurement uncertainty of the test results is presented when: it is relevant to the validity or application of the test results, it affects conformity to a specification limit, or a customer's instruction so requires.
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 Customer may file complains within 14 days from receiving the report.
 The laboratory does not store the samples after testing, unless otherwise agreed with the customer.
 Place of performance of the tests (location codes): Ł - Łajski, M - Mysłowice, PS - in situ measurement.

Remarks:

NOTE: The original test reports are issued as PDF file, signed with a qualified electronic signature. Therefore, all prints are copies, unless certified to be true to the original PDF file.

Report prepared in a single copy		The end of the Report		Original of PDF: Customer, copy of PDF to: Laboratory archive	
Created on: 08-10-2021	Authorized by: JARS employee no.: 2275	Approved by: Specjalista ds. Kosmetyków	Signed with a qualified electronic signature		
		JARS employee no.: 2098			



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Attachment no M/4855/08/21 to Test Report

Preservative Test according to PN-EN ISO 11930:2019-03

Sample number: 4855/08/21

Microbial strain	Number of microorganisms in standardized suspension	Contamination level	Results unit		
			After 7 days	After 14 days	After 28 days
Pseudomonas aeruginosa ATCC 9027	N=1,6x10 ⁸ cfu/ml	N ₀ =1,6x10 ⁵ cfu/g	N _x <1,0x10 ¹ cfu/g Log R = ≥4,2	N _x <1,0x10 ¹ cfu/g Log R = ≥4,2	N _x <1,0x10 ¹ cfu/g Log R = ≥4,2
Staphylococcus aureus ATCC 6538	N=1,8x10 ⁸ cfu/ml	N ₀ =1,8x10 ⁵ cfu/g	N _x <1,0x10 ¹ cfu/g Log R = ≥4,3	N _x <1,0x10 ¹ cfu/g Log R = ≥4,3	N _x <1,0x10 ¹ cfu/g Log R = ≥4,3
Escherichia coli ATCC 8739	N=1,7x10 ⁸ cfu/ml	N ₀ =1,7x10 ⁵ cfu/g	N _x <1,0x10 ¹ cfu/g Log R = ≥4,2	N _x <1,0x10 ¹ cfu/g Log R = ≥4,2	N _x <1,0x10 ¹ cfu/g Log R = ≥4,2
Candida albicans ATCC 10231	N=6,0x10 ⁷ cfu/ml	N ₀ =6,0x10 ⁴ cfu/g	N _x <1,0x10 ¹ cfu/g Log R = ≥3,8	N _x <1,0x10 ¹ cfu/g Log R = ≥3,8	N _x <1,0x10 ¹ cfu/g Log R = ≥3,8
Aspergillus brasiliensis ATCC 16404	N=6,6x10 ⁷ cfu/ml	N ₀ =6,6x10 ⁴ cfu/g	x	N _x <1,0x10 ¹ cfu/g Log R = ≥3,8	N _x <1,0x10 ¹ cfu/g Log R = ≥3,8
Requirements ^a	Log reduction values (A)	Bacteria	≥3	≥3 and NI	≥3 and NI
		Candida albicans	≥1	≥1 and NI	≥1 and NI
		Aspergillus brasiliensis	x	≥0 ^b	≥1 and NI

a - acceptable aberrance from acceptable value degree reduction number of microorganisms is 0,5 log , cfu- colony forming unit, NI- no increase from the previous count; N₀=number of cfu in 1g of sample after contamination, N_x= number of cfu in standardized suspension, N_x – number of cfu in 1 g sample after a certain time; Log R= Reduction values in Log where R= N₀- N_x, x- not performed, NI- the number of microorganisms no increase in the count from the previous contact time, b- the number of microorganisms no increase in the count from the initial contact time

Demonstration of the neutralizer efficacy

Microbial strain	Results			Requirements
	Nvf / Nvn	Nvn	Nv	
Pseudomonas aeruginosa ATCC 9027	0,70	111	113	Nvf / Nvn ≥ 0,5 Nvn = Nv
Staphylococcus aureus ATCC 6538	0,71	122	128	
Escherichia coli ATCC 8739	0,77	117	123	
Candida albicans ATCC 10231	0,77	52	58	
Aspergillus brasiliensis ATCC 16404	0,70	57	61	

Nv- counts of the bacteria performer on the inoculum, Nvn – counts of the bacteria performed on the mixture of the neutralizer and diluents, Nvf - counts of the bacteria performed on the mixture of the neutralizer and the formulation

Comments:

ADDITIONAL INFORMATION:

- Preliminary tests: microbiologically pure product
- Neutralizer: D/E broth
- Tryptic soy agar 32,5°C±2,5°C/ 3 days (bacteria), Sabouraud dextrose agar 32,5°C±2,5°C/ 3 days (Candida albicans), Potatoe Dextrose Agar 22,5°C±2,5°C/ 5 days (Aspergillus brasiliensis)

END of Attachment

Prepared on: 8.10.2021	Prepared by: JARS employee no 2408	Authorized by: JARS employee no 2275
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Attachment No. F/12435/07 to the Test report

Product name: PROPARIN - Shampoo Har Growth System
Sample number: 12435/07/21
Test type: Dermatological (patch test)
Date of test start: 21.07.2021
Date of test end: 28.07.2021

Qualitative product composition:

INCI composition (*): *Aqua, Sodium Coco-Sulfate, Sodium Cocoamphoacetate, Cocamidopropyl Betaine, Glycerin, Polysorbate 80, Sodium Chloride, Sodium Lauroyl Sarcosinate, Cetrimonium Chloride, Polyquaternium-10, Betaine, Ecklonia Cava Extract, Larix Europaea Wood Extract, Camellia Sinensis Leaf Extract, Biotinoyl Tripeptide-1, Apigenin, Glycine, Coffea Arabica Seed Extract, Ethoxydiglycol, Zinc Chloride, Oleanolic Acid, Panthenol, Pantolactone, Parfum, Hydroxypropyl Methylcellulose, Potassium Sorbate, Lactic Acid, Butylene Glycol, 1,2-Hexanediol, Sodium Benzoate, PEG-40 Hydrogenated Castor Oil, PPG-26-Buteth-26, Phenoxyethanol, Ethylhexylglycerin, Disodium EDTA.*

(*) - The Customer bears full responsibility for compliance of samples delivered for testing with the declared qualitative composition. The Laboratory does not analyse the composition in regard to the current regulatory requirements.

Microbial purity testing

Microbiologically approved product.
The microbiological purity tests carried out in JARS Laboratory / ~~delivered by the Customer.~~

Dermatological tests

Patch dermatological tests / contact tests are used to detect contact allergy (delayed type allergy) to small molecule compounds (haptens). Sensitization occurs through contact with the antigen that penetrates the skin. The antigen is recognized by Langerhans cells and presented to T lymphocytes. Specifically sensitized lymphocytes multiply in the regional lymph node. After re-penetration of the antigen, there is a rapid proliferation of specifically sensitized lymphocytes, which releases pro-inflammatory substances (lymphokines), causing an inflammatory process at the place where the skin contacts the sensitizing substance. The changes usually concern the surface layers of the skin (epidermis and skin warts) and are characterized by erythema, presence of blisters and exfoliation.

The scope of tests in accordance with:

- » Regulation of the European Parliament and of the Council (WE) No. 1223/2009 dated 30.11.2009 regarding cosmetic products
- » COLIPA Guidelines
- „Product test Guidelines for the Assessment of Human Skin Compatibility 1997“
- „Guidelines for the Evaluation of the Efficacy of Cosmetic Products 2008“

Product characteristics

Appearance:	Gelled solution
Color:	Colorless
Fragrance:	Perceptible smell of fragrance composition
Purpose:	Hair cleansing
How to use:	Apply the shampoo to wet hair, massage it in, leave it for 2 minutes, then rinse thoroughly. In case of contact with eyes, immediately rinse with water.
Packaging	Commercial packaging

Selection of Study Participants

The selection of Study Participants was carried out in accordance with the Research Procedure, taking into account:

- »Helsinki Declaration of 1964 (with later additions)
- »Current Polish and European legal regulations
- »Cosmetics Europe guidelines using the inclusion and exclusion criteria

Twenty volunteers (women and men aged 27 to 59) were selected for the study. Volunteers filled out a detailed survey regarding their lifestyle, current state of health, past illnesses, eating habits, medicines and the use of stimulants. All volunteers selected for the study met the requirements for inclusion in the study and signed consent for conscious participation in the study, and were informed about the purpose of the study, how it was conducted and about possible side effects. 90% of people participating in the study reported a history of adverse reactions caused by the use of certain cosmetics and detergents (including allergic reactions). 10% of people participating in the study did not have hypersensitivity and did not report a tendency to adverse reactions in the interview. The skin at the test site was normal, without lesions.

Testing methodology

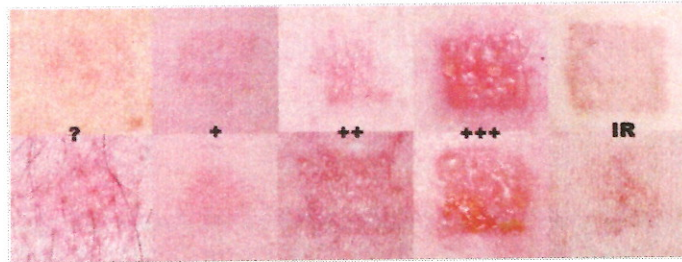
The study was conducted in accordance with the Research Procedure.

The test substance (10% water solution) is applied to the skin using special chambers fixed on a hypoallergenic adhesive. The chambers are filled with the substances being tested, and then affixed to the skin of the back in the shoulder blade area. During the tests one cannot soak his/her back and should avoid sudden movements and sweating. Patches with test substances are left on the test skin for 48 hours. After removal of the adhesives with the chambers, the excess of test substances is removed by pressing a paper towel onto the skin. The skin reaction is assessed immediately after removing the adhesives, after 72 hours, after 96 hours and after 7 days according to a scale that is consistent with the scale generally accepted in dermatological tests

TEST RESULTS

The patch test readings were made according to the International Contact Dermatitis Research Group (ICDRG)

Graphical scale of the ICDRG patch test reading



(-) negative reaction	no reaction
(?) doubtful reaction	subtle erythema, palpably undetectable erythematous spot
(+) weak reaction	palpable erythema, suggestive of mild edema / infiltration, clumping may occur, no blisters
(++) strong reaction	increased swelling, infiltration, clots, blisters
(+++) very strong reaction	blisters, erosions, ulceration
(IR) irritative reaction	shiny skin, dry skin, pimples, erythema

In the group of 20 people who underwent the study, no positive contact allergy or irritant reaction was observed after using the product.

SUMMARY

The lack of positive reactions indicates that the tested product does not show irritating and sensitizing effects in contact with the skin.

Additional information

The issued opinion does not apply to people who are allergic to any of the components of the product under evaluation.

The test sample was prepared by making a 10% water solution specific to rinsed products.

THE END of the Attachment

Prepared on: 30-07-2021	Prepared by: JARS Employee no.: 2477	Authorized by: JARS Employee no.: 2427
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TEST REPORT No.: K/0/07/2021/209/F/8/EN

Order No.: K/0/07/2021/209


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Material/product tested: Cosmetics								
Product name: PROPARIN - Shampoo Hair Growth System	Date: 13.07.2021							
Producer:	no data							
Date of production:	no data							
Lot number:	352							
Notes on the sample:	lack							
Samples collected according to:	Sample receiver: JARS employee no.: 2098							
Samples transported by: Shipping								
Sample no.: 12438/07/21	Sample evaluation: unreservedly							
	Analysis start date: 13-07-2021							
	Analysis end date: 14-09-2021							
Lab.	Analyzed parameter	Unit	Accred.	Test method	Requirement	Result	MU**	N
Ł	Application study - panel, subjective	-		PB-34/LK ed. 1 dated 17.12.2020	no requirements	in Attachment		

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Report prepared in a single copy		The end of the Report		Original of PDF: Customer, copy of PDF to: Laboratory archive	
Created on: 27-09-2021	Authorized by: JARS employee no.: 2426	Approved by: Specjalista ds.Kosmetyków	Signed with a qualified electronic signature		
		JARS employee no.: 2098			



Attachment No. F/12438/07 to the Study Report

Product name:	PROPARIN - Shampoo Hair Growth System
Sample number:	12438/07/21
Test type:	Application study – panel, subjective
Study start date:	12.08.2021
Study end date:	09.09.2021

Aim of the study

The aim of the research was to evaluate and verify the product's performance (properties) declared by the Manufacturer.

Methodology

Application tests were carried out on a group of 20 study subjects at home. The tested product was used in accordance with the Manufacturer's directions. After 4 weeks of use, the participants were asked to complete (anonymously) the assessment card accordingly to their own feelings.

Suggested usage

Apply the shampoo to wet hair, massage it in, leave it for 2 minutes, then rinse thoroughly. In case of contact with eyes, immediately rinse with water.

Manufacturer's declarations of the product's properties

The declarations and properties of the product are included in the questions of the questionnaire.

Characteristics and composition of the group taking part in the study

Total number of people: **20**

Sex distribution:	Female	90%	Male	10%
Age distribution:	18-30 years old	30%		
	31-40 years old	35%		
	41-50 years old	20%		
	51-60 years old	10%		
	> 61 years old	5%		

RESULTS

Tested feature/property	Possible responses	Number of people
Efficiency	very high	15%
	high	65%
	average	20%
	low	0%
	very low	0%
Fragrance	very pleasant	20%
	pleasant	50%
	neutral	30%
	unpleasant	0%
	very unpleasant	0%
Fragrance intensity	proper	100%
	too intense	0%
	not intense enough	0%
Application	very easy	30%
	easy	70%
	average	0%
	difficult	0%
	very difficult	0%
Rinsing	very good	30%
	good	70%
	average	0%
	bad	0%
	very bad	0%
Hair conditioning effect	very clear	0%
	clear	70%
	average	25%
	low	0%
	none	5%
Nourishing effect	very clear	0%
	clear	65%
	average	30%
	low	0%
	none	5%
Hair cleansing effect	very clear	10%
	clear	80%
	average	10%
	low	0%
	none	0%
Ability of the product to reduce hair loss	very high	5%
	high	50%
	average	30%
	low	15%
	none	0%
Effect of thicker hair	very clear	0%
	clear	60%
	average	25%
	low	10%
	none	5%
Effect of healthier hair	very clear	5%
	clear	65%
	average	20%
	low	5%
	none	5%

Tested feature/property	Possible responses	Number of people
Improvement of hair hydration	very clear	15%
	clear	55%
	average	10%
	low	15%
	none	5%
Improvement of hair smoothness	very clear	10%
	clear	55%
	average	10%
	low	20%
	none	5%
Improvement of hair softness	very clear	10%
	clear	65%
	average	10%
	low	10%
	none	5%
Improvement of hair elasticity	very clear	15%
	clear	45%
	average	30%
	low	5%
	none	5%
Overall improvement of hair condition	very clear	15%
	clear	60%
	average	15%
	low	5%
	none	5%

Tested feature/property	Number of people [%]	
	NO	TAK
Did you experience any side effects after using the product? Irritation, redness, itching etc.?	100	0

Tested feature/property	Number of people [%]		
	YES	UNDECIDED	NO
Would you buy the product in the future?	80	5	15

Tested feature/property	Number of people [%]		
	All right	During illness	After illness
Health status during the course of study	100	0	0

Tested feature/property	Number of people [%]	
	NO	YES
Did you take any medicine during the during the course of the study?	95	5

SUMMARY

PROPARIN - Shampoo Hair Growth System has been evaluated by the study participants positively. The product has a high and very high efficiency (80% of responses) and it has a properly intense (100% of responses), pleasant and very pleasant fragrance (70% of responses). The shampoo has a clear and very clear hair cleansing, nourishing and conditioning effect (80%, 65% and 70% of the responses respectively). Moreover, the product has a clear and very clear effect of healthier (70% of responses) as well as thicker hair (60% of responses). The product clearly and very clearly improved the overall condition of the hair (75% of responses). No one noticed any side effects after using it.

THE END of the Attachment

Prepared on: 14-09-2021	Prepared by: JARS Employee no.: 2477	Authorized by: JARS Employee no.: 2426
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