

TEST REPORT No.: K/0/05/2024/198/F/1/EN

Customer: EVLY PHARMA KOZMETİK SANAYİ VE TİC. A.Ş. - Serifali Umraniye-Istanbul, ul. Soylesi Sk. No:41/A
Order No.: K/0/05/2024/198


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).
NA - non-accredited method
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									
Sample collection address:			- Güzelbahçe / İzmir 35310, ul.Yelki mahallesi, 2245 sokak No:8, Kapı no2						
Product name:			The Purest Solutions Invisible UV Protection +50 SPF (Daily Ultimate Moisturizer)					Date*: 13.05.2024	
Producer:			no data						
Date of production:			04/2024						
Lot number:			Exp.Date:04/2027 Lot No: 0394/1						
Notes on the sample:			lack						
Samples collected according to:						Sample receiver:		GBA POLSKA employee no.: 2744	
Samples transported by: Shipping									
Sample no.: 15577/05/24		Sample evaluation:		unreservedly		Analysis start date:		21-05-2024 Analysis end date: 22-05-2024	
Lab.	Analyzed parameter	Unit	Accred.	Test method	Requirement	Result	MU**	N	
	Close IR + Bluelight + UVA + UVB research (in vitro)		P	Spectrophotometric method - measurement of absorbance in the wavelength range 290-1100 nm	no requirements	in Attachment			

Date* - depending on the method of obtaining the sample by GBA Polska, it is the date of: collection (when the sample is collected only by a GBA Polska employee) or collection (when the sample is collected from customer by a GBA Polska employee, is delivered by a courier company or delivered personally by the customer).
MU** - 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 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.
The test results lower or higher than the measuring ranges of the methods are presented as "<value of the lower limit of the measuring range" or "> value of the upper limit of the measuring range", respectively. These values provide information about the research results. If expanded uncertainties are given with these test results, they apply to the lower or upper limit of the measuring range of the method. In such a case, if the test results meet the requirements of PCA Communication No. 353 of August 24, 2021, the determination of compliance will be made as part of the opinion and interpretation.
The results relate to the tested samples (sampled or received - as reported in the test report).
The underlined information included in the report was provided by the Client. The Laboratory is not responsible for this information. The laboratory is not responsible for the method of sampling and the representativeness of the samples provided by the customer for testing.
The test report without the written approval of the Laboratory shall not be reproduced except in full.
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 ("Lab."): Ł - Łajski, L - Lublin, 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.

Created on: 28-05-2024	Authorized result: GBA POLSKA employee no.: 2797	Authorized raport Cosmetics and food specialist GBA POLSKA employee no.: 2550	Signed with a qualified electronic signature 
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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

Annex No. BF/20/2024 to the Research Report

Product name: The Purest Solutions Invisible UV Protection +50 SPF (Daily Ultimate Moisturizer)
Sample number: 15577/05/24
Test type: Spectrophotometric method-measurement of the absorbance in the range of $\lambda=290-1100\text{nm}$
Test start date: 21.05.2024
Test end date: 22.05.2024

Product quality composition

Ingredients INCI: AQUA, ETHYLHEXYLMETHOXYCINNAMATE, DIETHYLAMINO HYDROXYBENZOYL HEXYL BENZOATE, BIS ETHYLHEXYLOXYPHENOL METHOXYPHENYL TRIAZINE, OCTOCRYLENE, CAPRYLIC/CAPRIC TRIGLYCERIDE, GLYCERIN, C12-15 ALKYL BENZOATE, CYCLOPENTASILOXANE, DIMETHICONOL, SCENEDESMUS RUBESCENS EXTRACT, GLYCERYL STEARATE, CETEARETH-20, CETEARETH-12, CETEARYL ALCOHOL, CETYL PALMITATE, PEG-100 STEARATE, POTASSIUM CETYL PHOSPHATE, ZINC OXIDE, TITANIUM DIOXIDE, DIMETHICONE, SODIUM PCA, SACCHARIDE ISOMERATE, SODIUM HYALURONATE CROSSPOLYMER, SODIUM HYALURONATE, SODIUM ACETYLATED HYALURONATE, HYDROLYZED SODIUM HYALURONATE, ERYTHRITOL, CHONDRUS CRISPUS, HYDROGENATED STARCH HYDROLYSATE, ASCOPHYLLUM NODOSUM EXTRACT, ASPARAGOPSIS ARMATA EXTRACT, TOCOPHERYL ACETATE, BISABOLOL, CENTELLA ASIATICA EXTRACT, CAMELLIA SINENSIS LEAF EXTRACT, BUTYROSPERMUM PARKII BUTTER, PANTHENOL, GLYCINE SOJA SEED EXTRACT, XANTHAN GUM, DISODIUM EDTA, POLYHYDROXYSTEARIC ACID, PHENOXYETHANOL, ETHYLHEXYLGLYCERIN, CITRIC ACID, PARFUM, SODIUM CITRATE.

The principal takes full responsibility for the compatibility of the samples supplied for testing with the declared quality composition.

Product characteristics

Appearance: emulsion

Color: light yellow/white

Fragrance: characteristic

Method of research

The radiation absorption ability was determined by spectrophotometric method. The cream sample was dissolved in three organic solvents: acetone, ethyl acetate and methanol. For the tests was used 10% solutions of the cosmetic sample (500 mg of the sample was dissolved in 4500 μl of solvent and vortexed for 3 minutes, the samples were then centrifuged on a laboratory centrifuge). For each solvent, it was prepared 3 independent solutions of the cosmetic sample, for which absorbance was next measured in the wavelength range 290-1000 nm (290-320 nm - UVB radiation, 320-400 nm - UVA radiation, 400-470 nm blue light radiation, 750-1100 nm - near IR radiation), using quartz cuvettes and reading every 0.1 nm. The final result was taken as the arithmetic mean of the measurements, for 3 independently prepared solutions. The results are presented graphically and

in the Table 1. In the table are included the results of absorbance measurements for wavelengths every 5 nm.

RESULTS OF RESEARCH

The final results of the study are the parameters shown in Table 1, while the graphical presentation can be seen in Figures 1-4.

Figures 1-4. Absorbance at the selected wavelengths λ .

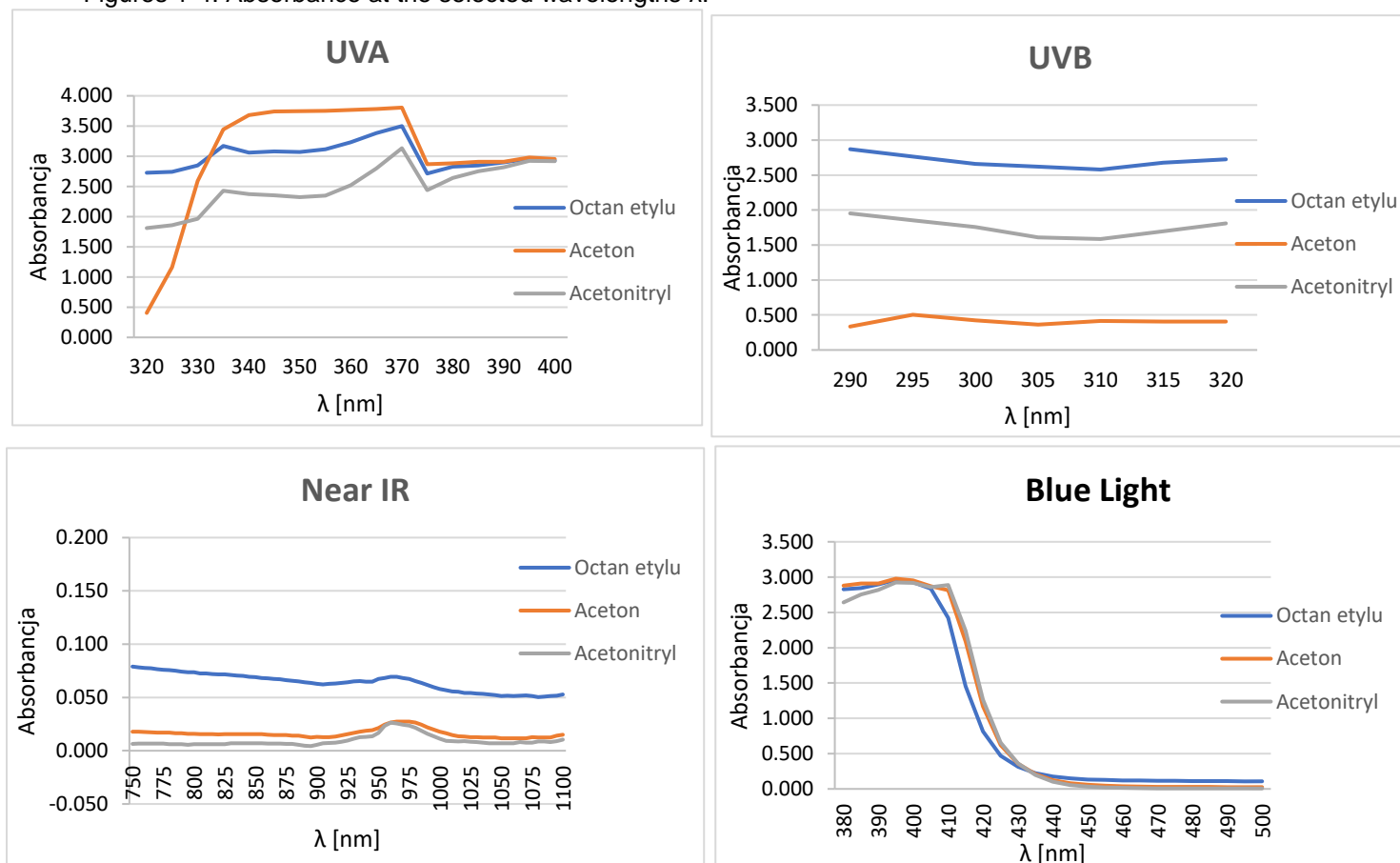


Table 1. Summary of absorbance at different ranges of wavelength λ .

The color in the table indicates the values for each range of radiation: orange-UVA; green-UVB; yellow-near IR; red-Blue Light.

λ [nm]	Ethyl acetate	Acetone	Acetonitrile	Radiation
290	2.870	0.335	1.952	UVB
295	2.766	0.503	1.853	
300	2.658	0.424	1.756	
305	2.621	0.364	1.610	
310	2.578	0.413	1.586	
315	2.676	0.406	1.696	
320	2.724	0.405	1.810	UVA
325	2.743	1.159	1.856	
330	2.847	2.590	1.964	
335	3.169	3.445	2.431	
340	3.060	3.679	2.375	

345	3.082	3.739	2.351	
350	3.068	3.747	2.322	
355	3.116	3.753	2.347	
360	3.230	3.764	2.518	
365	3.385	3.783	2.796	
370	3.499	3.805	3.133	
375	2.713	2.869	2.439	
380	2.829	2.880	2.642	
385	2.846	2.908	2.752	
390	2.896	2.910	2.817	
395	2.960	2.978	2.924	
400	2.927	2.951	2.920	Blue Light
405	2.838	2.870	2.857	
410	2.421	2.815	2.886	
415	1.454	2.090	2.241	
420	0.816	1.168	1.263	
425	0.470	0.620	0.654	
430	0.312	0.358	0.363	
435	0.225	0.209	0.197	
440	0.175	0.126	0.104	
445	0.148	0.081	0.056	
450	0.134	0.058	0.032	
455	0.126	0.046	0.020	
460	0.121	0.039	0.014	
465	0.118	0.034	0.011	
470	0.116	0.031	0.009	
475	0.114	0.029	0.008	
480	0.112	0.028	0.008	
485	0.111	0.028	0.007	
490	0.110	0.027	0.007	
495	0.109	0.026	0.007	
500	0.108	0.025	0.007	
505	0.108	0.025	0.007	
510	0.106	0.025	0.007	
515	0.106	0.024	0.007	
520	0.105	0.024	0.007	
525	0.104	0.024	0.007	
530	0.103	0.024	0.007	
535	0.103	0.024	0.006	
540	0.102	0.024	0.006	
545	0.102	0.024	0.007	
550	0.101	0.024	0.007	
555	0.100	0.023	0.006	
560	0.100	0.023	0.007	
565	0.099	0.023	0.006	
570	0.099	0.023	0.006	
575	0.098	0.023	0.006	
580	0.097	0.023	0.006	
585	0.097	0.022	0.006	

590	0.096	0.022	0.006	
595	0.096	0.022	0.006	
600	0.095	0.021	0.007	
605	0.094	0.021	0.007	
610	0.094	0.021	0.007	
615	0.093	0.021	0.007	
620	0.093	0.020	0.007	
625	0.092	0.020	0.006	
630	0.091	0.020	0.006	
635	0.091	0.020	0.006	
640	0.090	0.019	0.006	
645	0.090	0.019	0.006	
650	0.089	0.019	0.006	
655	0.088	0.019	0.006	
660	0.088	0.019	0.006	
665	0.087	0.019	0.006	
670	0.086	0.019	0.006	
675	0.086	0.018	0.005	
680	0.085	0.018	0.006	
685	0.085	0.018	0.006	
690	0.085	0.018	0.006	
695	0.085	0.019	0.006	
700	0.084	0.019	0.006	
705	0.083	0.019	0.006	
710	0.083	0.019	0.006	
715	0.082	0.019	0.006	
720	0.082	0.019	0.006	
725	0.082	0.019	0.006	
730	0.081	0.018	0.006	
735	0.081	0.018	0.006	
740	0.080	0.018	0.006	
745	0.080	0.018	0.006	
750	0.079	0.018	0.006	IR
755	0.078	0.018	0.007	
760	0.078	0.018	0.007	
765	0.077	0.017	0.007	
770	0.077	0.017	0.007	
775	0.076	0.017	0.007	
780	0.076	0.017	0.006	
785	0.075	0.016	0.006	
790	0.074	0.016	0.006	
795	0.074	0.016	0.006	
800	0.074	0.016	0.006	
805	0.073	0.016	0.006	
810	0.073	0.016	0.006	
815	0.072	0.016	0.006	
820	0.072	0.015	0.006	
825	0.072	0.016	0.006	
830	0.071	0.016	0.007	

835	0.071	0.016	0.007
840	0.070	0.016	0.007
845	0.069	0.016	0.007
850	0.069	0.016	0.007
855	0.068	0.016	0.007
860	0.068	0.015	0.007
865	0.067	0.015	0.007
870	0.067	0.015	0.007
875	0.066	0.015	0.006
880	0.066	0.014	0.006
885	0.065	0.014	0.006
890	0.064	0.013	0.005
895	0.064	0.012	0.004
900	0.063	0.013	0.006
905	0.062	0.013	0.007
910	0.063	0.013	0.007
915	0.063	0.013	0.008
920	0.064	0.014	0.008
925	0.064	0.016	0.010
930	0.065	0.017	0.011
935	0.065	0.018	0.013
940	0.065	0.019	0.013
945	0.065	0.019	0.014
950	0.067	0.021	0.017
955	0.068	0.024	0.023
960	0.069	0.026	0.026
965	0.069	0.027	0.026
970	0.068	0.027	0.024
975	0.067	0.027	0.024
980	0.065	0.026	0.022
985	0.064	0.024	0.019
990	0.062	0.022	0.016
995	0.060	0.020	0.014
1000	0.058	0.018	0.011
1005	0.057	0.016	0.009
1010	0.056	0.015	0.009
1015	0.055	0.014	0.009
1020	0.054	0.013	0.009
1025	0.054	0.013	0.008
1030	0.054	0.013	0.008
1035	0.053	0.012	0.008
1040	0.053	0.012	0.007
1045	0.052	0.012	0.007
1050	0.051	0.012	0.007
1055	0.052	0.012	0.007
1060	0.051	0.012	0.007
1065	0.052	0.012	0.008
1070	0.052	0.012	0.008
1075	0.051	0.013	0.008



1080	0.050	0.012	0.009	
1085	0.051	0.012	0.009	
1090	0.051	0.012	0.008	
1095	0.052	0.014	0.009	
1100	0.053	0.015	0.010	

SUMMARY

Based on the results, it can be concluded that the analyzed sample:

1. Shows the significant ability to absorb radiation in the UVA range (320-400 nm)
2. Shows partial absorption ability in the UVB range (290-320 nm)
3. Shows the ability to absorb radiation in the Blue Light range (380-500 nm)
4. Shows very low absorption ability in the near-infrared IR range (750- 1100 nm).

End of attachment

<p>Made on: 22-05-2024</p>	<p>Made by:</p>  <p>Accepted by:</p>  <p>mgr Anna Lichtarska p.o. Dyrektor Centrum Badań i Usług Biomedycznych Kolegium Medycznego Wyższej Szkoły Informatyki i Zarządzania z siedzibą w Rzeszowie Kielnarowa 386A, 36-020 Łyczyn</p>
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