

RESEARCH REPORT
CONCERNING ABSORPTION ABILITY OF RADIATION BY THE
COSMETIC PRODUCT LABELLED AS:
THE PUREST SOLUTION BLEMISH DEFENSE

| | |
|------------|---|
| Product | THE PUREST SOLUTION BLEMISH DEFENSE |
| Customer | EVLY PHARMA KOZMETİK.SAN. VE TİC.LTD.ŞTİ. ŞERİFALİ MAH.BEYİT SOK. NO:41 D:1 ÜMRANIYE İSTANBUL |
| Report No. | BF/16/2022 |
| Date | 31.03.2022 |

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1. ORDER DETAILS

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|-----------------------|------------|
| Order acceptance date | 29.03.2022 |
| Study period | 30.03.2022 |
| Report No. | BF/16/2022 |
| Date | 31.03.2022 |

| | |
|--------------|-------------------------------------|
| Product name | THE PUREST SOLUTION BLEMISH DEFENSE |
|--------------|-------------------------------------|

2. PRODUCT CHARACTERISTICS

| | |
|-------------|--|
| Packaging | Plastic bottle, replacement packaging |
| Appearance | Homogeneous, white-yellowish emulsion |
| Composition | Aqua, Ethylhexyl Methoxycinnamate, Octoaylene, C 12-15 Alkyl Benzoate, Caprylic/Capric Triglyceride, Cyclopentasilxane, Titanium Dioxide, Diethylamino Hydroxybenzoyl Hexyl Benzoate, Glycerin, Arbutin, Cetearyl Alcohol, Zinc Oxide, Isononyl Isononanoate, Potassium Cetyl Phosphate, Glyceryl Stearate, PEG-100 Stearate, Dimethicone, Niacinamide, Sodium Hyaluronate Crosspolymer, Sodium Hyaluronate, Sodium Acetylated Hyaluronate, Hydrolyzed Sodium Hyaluronate, Pentylene Glycol, Scenedesmus Rubescens Extract, Sodium Acrylates Copolymer, Lecithin, Tocopheryl Acetate, Xanthan Gum, Parfum, Phenoxyethanol, Ethylhexylglycerin, Propylene Glycol, Chlorphenesin, Polyhydroxystearic Acid, Styrene/Acrylates Copolymer, Sucrose, Cellulose Gum, Mica, CI 77492, CI 77491, CI 77499 |

The customer is responsible for compliance with the declared composition of the sample sent for testing

3. METHODOLOGY

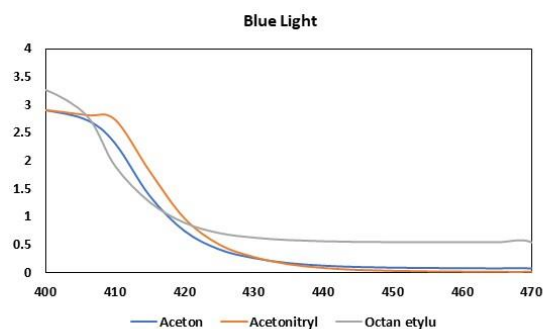
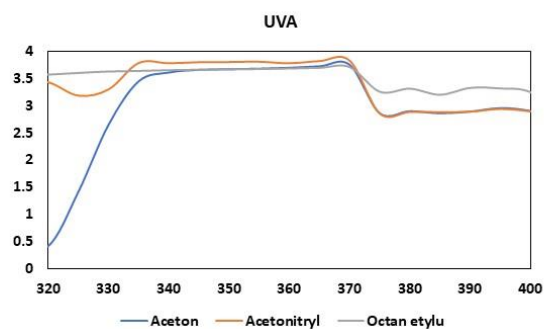
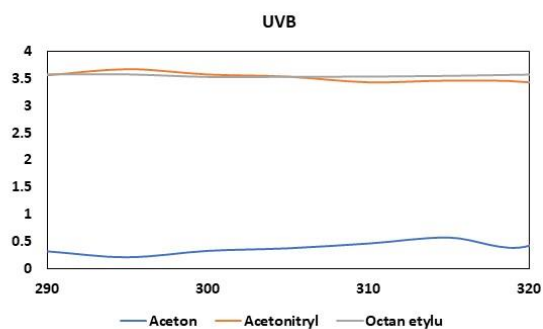
The ability to absorb radiation was determined by the spectrophotometric method. The cream sample was dissolved in three organic solvents: acetone, ethyl acetate and acetonitrile, and 10% solutions of the cosmetic sample were used for the tests (500 mg of the sample was dissolved in 4500 µl of the solvent and vortexed for 3 minutes, the samples were then centrifuged in a laboratory centrifuge). For each solvent, 3 independent solutions of the cosmetic sample were prepared, for which the absorbance was measured in the wavelength range 290-470 nm (290-320 nm - UVB radiation, 320-400 nm - UVA radiation, 400-470 nm blue light radiation) using quartz cuvettes and reading every 0.1 nm. The final result was the arithmetic mean of the measurements for 3 independently prepared solutions. The results are presented in graphical and tabular form. The tables show the absorbance measurements for the 5 nm wavelength.

4. AIM OF RESEARCH

The aim of the research was determining the ability to absorb radiation by the product **THE PUREST SOLUTION BLEMISH DEFENSE**

5. RESULTS

The absorption spectra of a cosmetic sample, expressed as the dependence of absorbance as a function of wavelength, are presented in the graphs, and the measurement results in the table.



| Wavelength [nm] | Absorbance | | | Radiation |
|-----------------|------------|-------------|-------------|------------|
| | Aceton | Acetonitryl | Octan etylu | |
| 290 | 0.317 | 3.57 | 3.589 | UVB |
| 295 | 0.207 | 3.682 | 3.587 | |
| 300 | 0.325 | 3.585 | 3.539 | |
| 305 | 0.371 | 3.544 | 3.542 | |
| 310 | 0.46 | 3.44 | 3.545 | |
| 315 | 0.569 | 3.471 | 3.559 | |
| 320 | 0.419 | 3.44 | 3.583 | |
| 325 | 1.42 | 3.193 | 3.613 | UVA |
| 330 | 2.651 | 3.31 | 3.64 | |
| 335 | 3.448 | 3.798 | 3.651 | |
| 340 | 3.608 | 3.791 | 3.665 | |
| 345 | 3.657 | 3.811 | 3.673 | |
| 350 | 3.669 | 3.815 | 3.678 | |
| 355 | 3.679 | 3.819 | 3.685 | |
| 360 | 3.696 | 3.792 | 3.695 | |
| 365 | 3.722 | 3.832 | 3.708 | |
| 370 | 3.75 | 3.839 | 3.722 | |
| 375 | 2.858 | 2.862 | 3.265 | |
| 380 | 2.896 | 2.893 | 3.323 | |
| 385 | 2.858 | 2.888 | 3.21 | |
| 390 | 2.889 | 2.897 | 3.338 | |
| 395 | 2.953 | 2.947 | 3.327 | |
| 400 | 2.9 | 2.903 | 3.257 | Blue Light |
| 406 | 2.722 | 2.811 | 2.787 | |
| 410 | 2.309 | 2.732 | 1.899 | |

| | | | |
|-----|-------|-------|-------|
| 415 | 1.367 | 1.806 | 1.252 |
| 420 | 0.741 | 0.966 | 0.885 |
| 425 | 0.411 | 0.498 | 0.701 |
| 430 | 0.255 | 0.275 | 0.62 |
| 435 | 0.166 | 0.145 | 0.576 |
| 440 | 0.119 | 0.079 | 0.554 |
| 445 | 0.095 | 0.043 | 0.543 |
| 450 | 0.083 | 0.027 | 0.539 |
| 455 | 0.077 | 0.018 | 0.537 |
| 460 | 0.074 | 0.013 | 0.536 |
| 465 | 0.071 | 0.011 | 0.536 |
| 470 | 0.07 | 0.01 | 0.537 |

6. RESULTS

Based on the conducted research, it was shown that **THE PUREST SOLUTION BLEMISH DEFENSE**:

- Demonstrates the ability to absorb radiation in the UVB range (290-320 nm)
- Demonstrates the ability to absorb radiation in the UVA range (320-400 nm)
- Demonstrates the ability to absorb radiation in the range of Blue Light (400-470 nm)

Signature of the person performing the test:

Dyrektor
Centrum Wdrożeniowo-Usługowego
Kolegium Medycznego
Wyższej Szkoły Informatyki
i Zarządzania z siedzibą w Rzeszowie

Tomasz Bujak

-
1. Sprawozdanie z badań bez zgody laboratorium nie może być powielane inaczej, jak tylko w całości. Inna forma kopiowania wymaga pisemnej zgody Wykonawcy.
 2. Raport z badań wykonano w 2 jednobrzmiących egzemplarzach (egz. 1 – Zleceniodawca, egz. 2 – dr Koziej).
 3. Wyniki odnoszą się wyłącznie do otrzymanej próbki wyrobu o składzie recepturalnym podanym przez Zleceniodawcę.