

The sample products have been received by Entekno in May 2020, and the SPF analyses were carried out following COLIPA standards on PMMA plates (HelioScreen HD6). **All samples were measured 20 times to obtain a statistically accurate average result.**

UVA and UVB protection values of product can be seen in Table 1.

Table 1. UVA and SPF results of samples.

Sample Name	SPF	CoV%	UVA	UVB	UVA/UVB	Critical Wavelength	440nm %T	500nm %T	550 nm %T
SPF 50	51,02	21,80	43,90	52,33	0,84	376	51,34	60,19	65,01

The critical wavelengths and UVA/UVB ratios of the cream samples are well above 370 nm and 1/3 limits, respectively which are the minimum values for UVA protection set by the EU standards.

The recommended critical wavelength value for Sun care product should be at least 370 nm. **All samples are providing this value.**

According to the cosmetic standards, in order to claim that a sun care product also protects in UVA region and write “Broad Spectrum – Provides Fully Protection” expression, 1/3 of the sun protection factor stated on the label must belong to UVA protection factor. **It has been determined that the analyzed samples highly provide this value.**

Recommendation: If the homogenization time & rate is increased, more homogenous product & higher SPF values can be achieved.

