Technical
Specification

ADP® Cosmetics

enhanceU-S

Product: EnhanceU
Type: S
Family: ADP Cosmetics

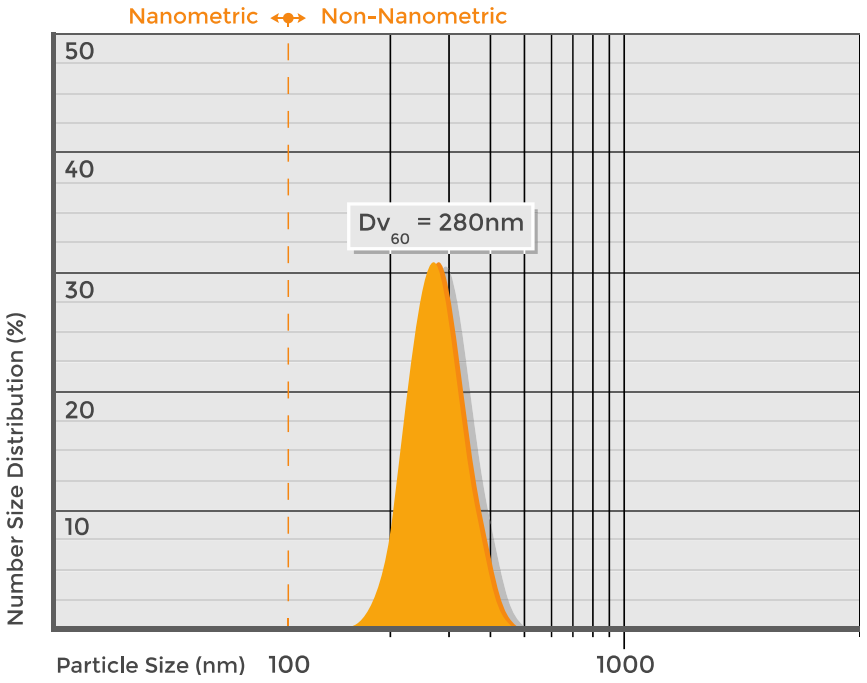
Producer:
Advanced Dispersed Particles S.L.
C/ Oro 45 nave 14 P.I. Sur
28770 Colmenar Viejo. Madrid (Spain)

ENHANCEU-S, A NON-NANOMETRIC INORGANIC SUNSCREEN

ADParticles has developed EnhanceU-S, an inorganic composite with properties suitable for use as UV filter in cosmetic. The particle-size distribution of EnhanceU-S is not in the nanometer range (1-100nm) and it provides a high level of UVA and UVB protection.

EnhanceU-S consists of a composite of ZnO, TiO_2 and SiO_2, developed by ADParticles' patented technology, providing broad band UV protection and offering safety and efficacy to the final formula.

The particle size distribution was determined by Nanoparticle Tracking Analysis (NTA) a characterization technique that utilizes the properties of both light scattering and Brownian motion in order to obtain the particle number size distribution of samples.



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COMPOSITION

INCI:

- Zinc Oxide
- Titanium Dioxide
- Silica

ZnO content	68-72 %
TiO_2 content	22-25 %
SiO_2 content	4-6 %
As (ppm)	≤ 3
Sb (ppm)	≤ 20
Pb (ppm)	≤ 10
Hg (ppm)	≤ 1

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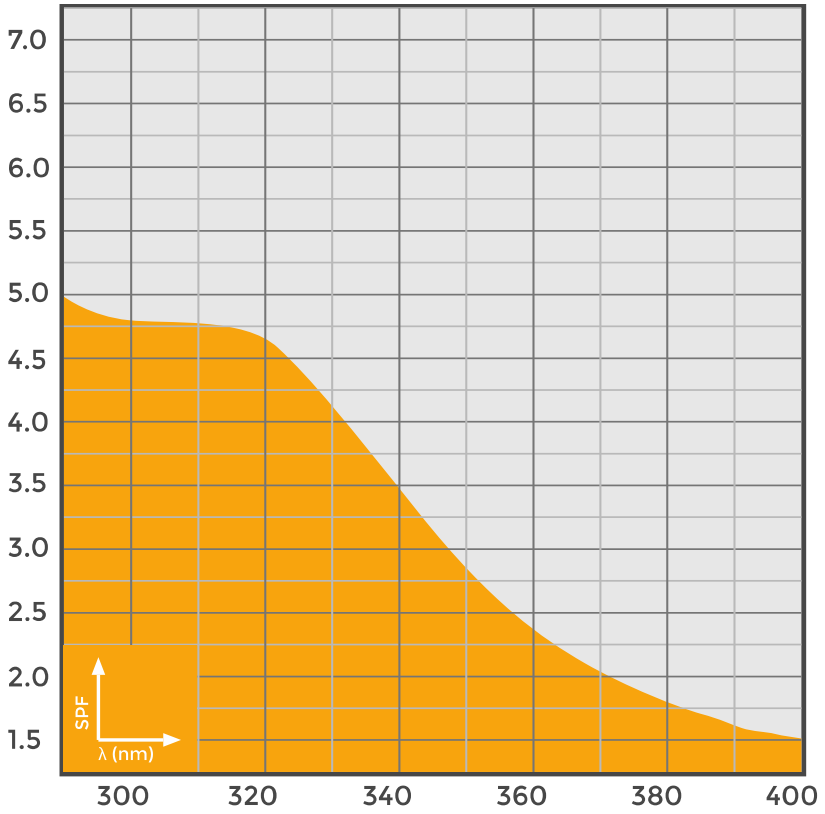
UV ABSORPTION SPECTRUM. PHOTOSTABILITY

- **SPF:** 4,3
- **UVA PF:** 3,0
- **UVA/UVB Ratio:** 0,7
- **UVAI/UV Ratio:** 0,8
- **Critical wavelength:** 384 nm

The analysis was performed with a spectrophotometer equipped with a **WC Xenon lamp of 125W** operating at **75W (SPF-290S Analyzer System).**

The filter concentration in the final formula was **2% (w/w)**

Photostability test was performed to evaluate the **SPF** both before and after irradiation of the sample with UV light, after **11 irradiation sessions of 1 minute.** The photostability value is higher than **80%,** therefore **EnhanceU-S is considered to be photostable** (Garolietal. J. Dermatol. Sci. 52 (3), 193-204).



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