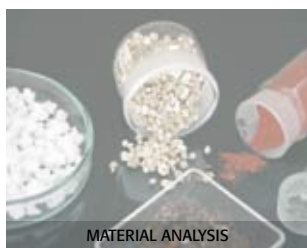


SPECORD® PLUS

Applications in Cosmetics



The UV/Vis spectrophotometer SPECORD® PLUS is especially suited for versatile applications in the field of cosmetics. By means of extensive range of accessories most diverse determinations of product development and quality assurance can be made easily.

In dental cosmetics the SPECORD® PLUS can for example be used for the analysis of dental materials. With the diffuse reflectance accessory with integrating sphere and the SPECORD® PLUS color software the translucency of materials for dental fillings or the white/yellow index of dental surfaces e.g. prostheses can be determined.

Different from such kind of analysis the SPECORD® PLUS can also be used for the determination of sun screen agents. In this field of application qualitative analysis of concrete UVA protectors like ethylhexyl methoxycinnamate (EM) or butyl methoxydibenzoylmethane (BM) can be performed. Using the integrating sphere the transmission of sunscreen agents can be analyzed and thus the UVA protection can be qualified concerning the conformity to the Australian standard.

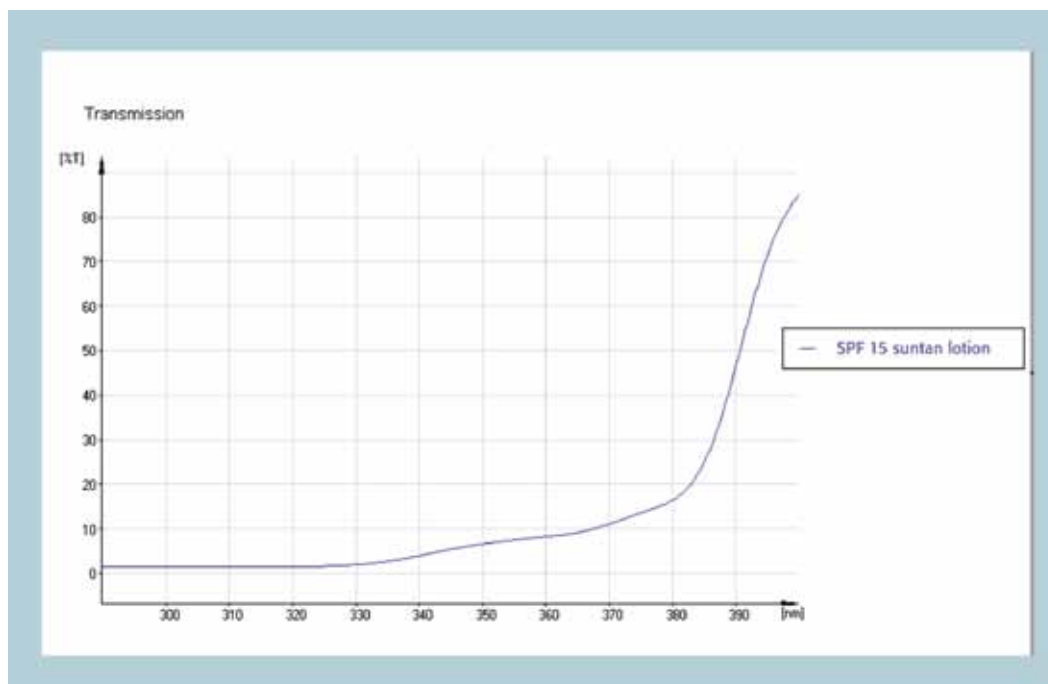
SPECORD® PLUS – Applications in Cosmetics

The UVA component was long regarded as being less harmful. There are, however, now indications that UVA radiation penetrates deeper into the skin than UVB radiation. Possible consequences are premature ageing of the skin and damage to the DNA.

A product is deemed to comply with the Australian standard if the transmission of UVA radiation in the range

from 320 to 360nm is reduced by at least 90 % by the sunscreen agent.

Characterization of the UVA protection with the aid of the SPECORD® PLUS and the integrating sphere as accessory can be applied quickly and easily to all sunscreen agents. The transmission spectrum of a sunscreen lotion is shown below as an example.



Transmission spectrum of a suntan lotion with SPF 15

Recommended instrumentation

Device option	SPECORD® 50 PLUS	822-0050P-2
	SPECORD® 210 PLUS	823-0210P-2
	SPECORD® 250 PLUS	822-0250P-2
Accessory option	Integrating sphere	820-60139-P
Software	WinASPECT® PLUS software includes methods for color analysis in standard software package	

Analytik Jena AG | Analytical Instrumentation

Konrad-Zuse-Str. 1 Tel. +49 (0) 36 41/77-70 info@analytik-jena.com
07745 Jena/Germany Fax +49 (0) 36 41/77-92 79 www.analytik-jena.com

en - 02/2013 - 888-21014-2 -
Förster & Bornies GmbH & Co.KG
© Analytik Jena AG

Subject to changes in design and scope of delivery as well as further technical development!

