

Prediction of sun protection factor and UVA Parameters

Region: Europe

30/10/2006 11:53:18 C.E.T.

Composition:

INCI Name

Octocrylene
 Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine (Tinosorb S)
 Butyl Methoxydibenzoylmethane
 Methylene Bis-Benzotriazolyl Tetramethylbutylphenol (Tinosorb, M active)
 Ethylhexyl Triazone

USAN Name

Octocrylene
 Bemotrizinol
 Avobenzone
 Bisotrizole
 -

Abbrev.

OCR	7 %
BEMT	2 %
BMBM	3 %
MBBT	4 %
EHT	2 %
Total	18 %

Sun Protection Factor Results

Calculated SPF 41.6

Rating(1)

40

(1) Rating according to international standard

UVA Results

UVA-PF(PPD) 24.5

Australian Standard

Critical Wavelength 380

UVA/UVB-Ratio 0.76

Rating

JCIA PA+++

Pass

Star Rating ***

(2) UVA Balance calculated according to the description in DIN 67502

Filter Efficiency

SPF/Total % UV Filter

2.31

UVA-Balance(2)

Based on simulated SPF

UVA-PF(DIN) 23.6

UVA-Balance 56

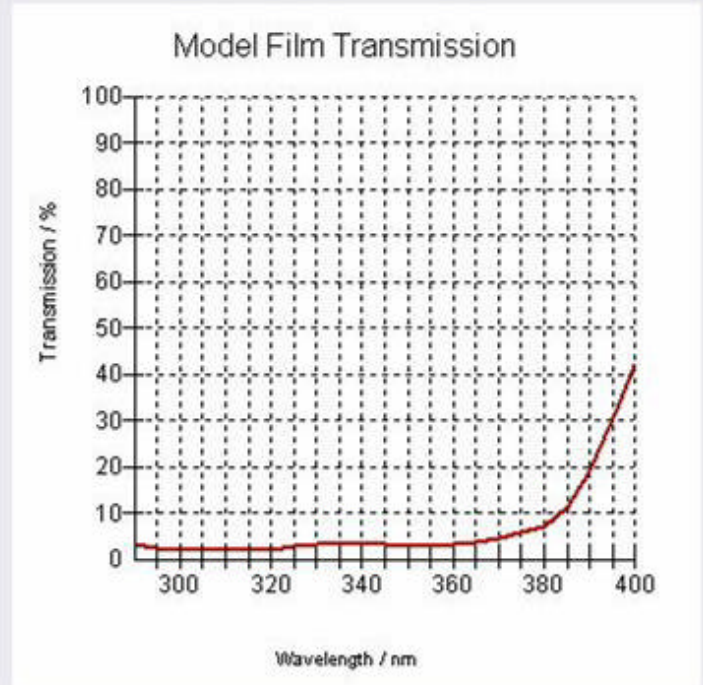
Based on labelled SPF

labelled SPF (in vivo)

Extinction and transmission graphs

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Reference

1. Herzog B, Prediction of Sun Protection Factors and UVA Parameters by Calculation of UV Transmissions Through Sunscreen Films of Inhomogenous Surface Structure, Chapter 44 in: Sunscreens: Regulations and Commercial Development (3rd edition), Edited by N. Shaath. Cosmetic Science and Technology Series, Vol 26; Taylor & Francis Group, Boca Raton, FL, 2005, p. 881-900