



STEPS



3. PRODUCT APPLICATION



2. SOLAR SIMULATOR EXPOSURE



3. READING OF RESULTS

Eurofins Dermatest Pty Ltd
 20 - 22 King St
 Rockdale NSW Australia
 ph 61 2 9556 2601
info@dermatest.com.au
www.dermatest.com.au

JCIA ISO In vivo UVAPF Test

Overview

JCIA adopted the ISO 24442 test method in 2012 and became official from 1st Jan 2013. There are now 4 categories (previously 3).

UVAPF Protection Grade

2 to less than 4 PA+
 4 to less than 8 PA++
 8 to less than 16 PA+++
 16 or more PA++++

UVAPF is the Lowest ultraviolet A (UVA) dose that produces the first perceptible unambiguous persistent pigment darkening response with defined borders appearing over most of the field of UVA exposure, observed between 2 h and 24 h after the end of the UVA exposure. The UVA - Protection factor (UVAPF) is calculated as ...

$\frac{\text{MPPD (Seconds) - Protected Skin}}{\text{MPPD (Seconds) - Unprotected Skin}}$
 SPF must also be tested in accordance with JCIA SPF Measurement Standard (2011)

Test Subjects

A minimum of 10 subjects are inducted for the study. According to statistical variability, additional test subjects may be included in the study.

Test Material Application and UVA Exposure

2.0mg/cm² or 2 ul/cm². Fifteen minutes after application, a series of UVA light exposures were administered at 25% increments. The threshold PPD within each site is determined. The mid to lower untanned back, lateral to the midline, is used for the treatment and exposure areas.

Persistent pigmentation on each sub site is graded according to the following 4 point ordinal scale:
 0 = No discernible pigment darkening +/- = Barely perceptible pigment.

+ = unequivocal pigment darkening, distinct borders, lasting more than 2 hours.

++ = pronounced pigment darkening, lasting more than 2 hours.

Reporting:

The mean UVA Protection factor (UVAPF) of the sample, when 10 subjects tested is reported.

Labelling

This must be in compliance with requirements of the JCIA. A reference can be made to "values based on ISO 24442"

References

Japan Cosmetic Industry Association Measurement Standards for UVA Protection Efficacy (2012 revised edition).

ISO 24442 Cosmetics - Sun Protection test Methods -In vivo determination of sunscreen UVA protection.

Standard for the Fair Advertising Practices of Drugs, Quasi-drugs, Cosmetics and Medical Devices.

Dermatest DESOP - 027 Procedure for Conducting UVA Study - Persistent Pigment Darkening Method - JCIA Method