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**AMENDMENT 1**
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# Cosmetics — Sun protection test methods — In vivo determination of the sun protection factor (SPF)

## AMENDMENT 1

*Cosmétiques — Méthodes d'essai de protection solaire — Détermination in vivo du facteur de protection solaire (FPS)*

*AMENDEMENT 1*



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This document was prepared by Technical Committee ISO/TC 217, *Cosmetics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 392, *Cosmetics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).



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# Cosmetics — Sun protection test methods — In vivo determination of the sun protection factor (SPF)

## AMENDMENT 1

*6.4.5.2*

Edit the second sentence to read as follows:

The average uniformity of all beams for the multiple output device shall be ≥ 90 %, with no individual port having uniformity of < 85 %.

*8.2.2, first bullet*

Edit the first bullet to read as follows:

— SPF Claim ≤ 24: any reference standard listed in Annex C may be used for each subject



*10.3*

Replace the current text with the following:



The statistical criterion for the test product SPF measurements is that the 95 % confidence interval (CI) on the mean SPF measured shall comply with the ± 17 % CI criteria of the measured mean SPF. This *only* applies to test products.

Consequently, the actual number of subjects tested shall be *determined* as the number (minimum ten) required to produce a mean test product SPF with a 95 % confidence interval (CI) which falls within a range of ± 17 % of the measured mean SPF for the tested product.

For the reference sunscreens used on test panelists, the average value for each of the reference sunscreens shall fall within their respective acceptance ranges specified in Annex C. No further statistical requirement is needed for the reference sunscreen.

A minimum of ten valid results is only sufficient if the statistical criterion of the test sunscreen is fulfilled and the means of the reference sunscreens fall within their respective acceptance ranges. If not, the number of subjects shall be increased until these criteria are met, up to a maximum of twenty valid results.

The full statistical procedure for this calculation is described in Annex D.

*C.5.3.3*

Change “16 000” to “17 000” $mPas^{-1}$ to read:

**C.5.3.3** Viscosity: *17 000* $mPas^{-1}$ to 19 000 $mPas^{-1}$ using Brookfield DVIII Ultra, Spindle RV-5 at 10 r/min.