

INTERNATIONAL STANDARD

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

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



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6.4.2.5 Before product application, the test area may be cleaned by using a dry cotton pad or equivalent.

6.4.2.6 The test sites shall be delineated by a method which does not interfere with the test or harm the subject e.g. skin marker and/or a template made from non-absorbent material.

6.4.3 Amount of product applied

6.4.3.1 The amount of test product and reference sunscreen formulation applied to the skin before spreading shall be $(2,00 \pm 0,05)$ mg/cm².

6.4.3.2 The balance used to weigh the products should be capable of weighing to the nearest 0,000 1 g, i.e. to the nearest 0,1 mg.

6.4.3.3 All products should be homogeneous and should be shaken if necessary, before weighing, to ensure uniform dispersion.

6.4.3.4 When handling the product during weighing or before application to the skin, take appropriate measures to prevent evaporative loss of the volatile components. It is important that the total quantity of weighed product is transferred to the product application site.

6.4.3.5 The amount of product to be applied is weighed in a syringe or in another device such as a watch glass. A method of weighing by loss is strongly recommended.

6.4.4 Mode of delivery

6.4.4.1 General

The use of a finger cot is optional but is recommended. When employed, a new finger cot shall be used for each new application of product and should not be pre-saturated with the test product. When a naked finger is used, the finger should be cleaned between product applications.

6.4.4.2 Liquid type products (e.g. lotions, liquids, milks, creams, sprays and sticks)

6.4.4.2.1 To aid uniform coverage, droplets (approximately 15 per 30 cm², 30 per 60 cm²) of the product should be deposited within the test site using a syringe/pipette, then spread over the whole test site using light pressure.

6.4.4.2.2 Spreading time should be in the range of (35 ± 15) s depending on the surface and ease of spreading of the product.

6.4.4.3 Powders

6.4.4.3.1 In the case of powder products, aliquots of powder should be transferred to the skin in a grid-like manner, using a spatula or finger.

6.4.4.3.2 The accumulated powder is tapped and then spread over the whole test site using a finger with or without a finger cot. Alternatively, the tip of a pre-loaded cosmetic applicator puff may be used instead of a finger. In this case, it is important to verify that $(2,00 \pm 0,05)$ mg/cm² of test powder product remains on the skin after spreading, by weighing the powder remaining on the tip of the applicator puff.

6.4.4.3.3 Purified water or another suitable solvent that has no UV protection properties may be applied on the skin before the powder application to help the sample adhere to the application site.

NOTE Powders present a unique form of cosmetic product. The modified method for these, described above, takes into account the need to present a reproducible application on the skin.