

**Number and Title of the Indian Standard:** PCD 19 (14968)F ‘Cosmetics — Sun protection test methods — *In vivo* determination of sun protection factor (SPF)’

**Scope:** This standard specifies a method for the *in vivo* determination of the sun protection factor (SPF) of sunscreen products. It is applicable to products that contain any component able to absorb, reflect or scatter ultraviolet (UV) rays and which are intended to be placed in contact with human skin.

This standard provides a basis for the evaluation of sunscreen products for the protection of human skin against erythema induced by solar ultraviolet rays.

**b) Salient features of content:**

The level of sun protection provided by sunscreen products has traditionally been estimated using the sun protection factor or SPF test, which uses the erythema response of the skin to ultraviolet (UV) radiation. The SPF is a ratio calculated from the energies required to induce a minimum erythema response with and without sunscreen product applied to the skin of human test subjects. It uses ultraviolet radiation usually from an artificial source.

**c) Types/grades/classes, if any covered in the standard:**

No

**d) Disclaimer (to be automatically provided by the program/software)**