

PATENTED UVB FILTERING SPF TECHNOLOGY

solar D[®]

s u n s c r e e n



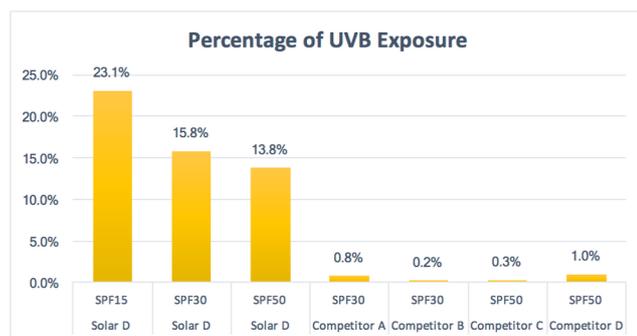
NEW
SPF
TECH!

THE BIGGEST DEVELOPMENT IN SPF TECHNOLOGY IN OVER 50 YEARS!

Solar D's **UVB FILTERING SPF TECHNOLOGY** is formulated to let through some of the UVB light that our bodies use to naturally produce Vitamin D whilst offering broad spectrum SPF protection. Free from Oxybenzone and Octinate.

TECHNOLOGY AVAILABLE TO LICENCE OR PRIVATE LABEL

Solar D's SPF Technology can be used in sunscreens, face creams, moisturizers, whitening creams, lip balm and many other cosmetic products.



All conventional broad-spectrum SPF products are designed to screen out as much of the ultraviolet radiation (UV-R) as possible to prevent sunburn, skin aging and DNA damage. Broad Spectrum SPF protection protects across both UVA & UVB light and this hasn't changed for over 50 years.

Solar D's revolutionary UVB Filtering SPF Technology was specifically designed and formulated to prevent sunburn or sun damage while allowing the passage of sufficient UVB light (specifically between 290 nm - 300 nm) that our bodies use to naturally produce vitamin D.

In 2016, a study was performed to test Solar D Sunscreens ability to let through some of the UVB light that our bodies use to make vitamin D against four other leading brands. The first study was performed using the protocols prescribed by the US Food and Drug Administration (FDA) to determine SPF values, and conducted by Bioscreen Testing Services, Inc. of Torrance, Calif., USA. The sunscreens that were tested were Solar D SPF 15, Solar D SPF 30, Solar D SPF 50, and 4 other leading brands of SPF 30 and SPF 50. All 7 sunscreens were smeared on clear silica plates, and both UVA and UVB light from a lamp was shone through the same and the percentages of light that passed through the plates was measured on the other side. The percentages of UVA light that passed through was consistent across all samples, however UVB light at a wavelength of between 290 nm - 300 nm (the range our body produces vitamin D) differs greatly and is shown in the bar-chart above. As is clearly outlined, there is a significant difference in the percentage of UVB light that is transmitted between all the sample sunscreens, with Solar D sunscreens across all SPF's showing a far greater transmittance of UVB light.

In another in-vitro study conducted in the laboratories of Dermatest of Sydney, Australia, they examined how this UVB exposure would impact our bodies ability to potentially produce vitamin D. Vitamin D intake is usually measured in International Units (IU's). One MED dose (time it takes for the skin to begin to turn red) of summer mid-day sunlight exposed directly on most of the body of a middle-aged person with healthy Caucasian skin will usually result in the production of between 10,000 and 20,000 IU of vitamin D. The daily recommendation by your GP's and world health authorities is around 600 IU's per day.

Based on both of these studies, we can calculate that exposing a middle-aged person with healthy Caucasian skin to One MED dose of summer mid-day sunlight, should result in the skin producing vitamin D using all of the sunscreens we sampled. However, the range of results differ significantly across the 7 sunscreens, showing that the Solar D formula's allows a larger percentage of the vitamin D forming UVB light through without risking or sacrificing the Sun Protection Factor (SPF).