

Butyl Methoxydibenzoylmethane

Goodie

ALSO-CALLED-LIKE-THIS: Avobenzone

WHAT-IT-DOES: [sunscreen](#)

Official CosIng Information

Details

The famous Avobenzone. It is a special snowflake as it is **the only globally available chemical sunscreen agent that provides proper UVA protection** (in the US, [new generation sunscreen agents](#) are not approved because of impossible FDA regulations). It is the global gold standard of UVA protection and is the most used UVA sunscreen in the world.

It gives very good protection across the whole UVA range (310-400 nm that is both UVA1 and UVA2) with a peak protection at 360 nm. The problem with it, though, is that it is **not photostable** and degrades in the sunlight. [Wikipedia says](#) that avobenzone loses 36% of its UV-absorption capacity after just one hour of sunlight (yep, this is one of the reasons why sunscreens have to be reapplied after a few hours).

The cosmetic's industry is trying to solve the problem by combining avobenzone with other UV filters that enhance its stability (like octocrylene, [Tinosorb S](#) or [Ensulizole](#)) or by encapsulating it and while both solutions help, neither is perfect. Interestingly, the combination of avobenzone with mineral sunscreens (that is [titanium dioxide](#) and [zinc oxide](#)) is [not a good idea](#). In the US, it is flat out prohibited as avobenzone becomes unstable when combined with mineral sunscreens.

As for safety, avobenzone has a pretty good safety profile. It counts as non-irritating, and unlike some other chemical sunscreens, it shows no estrogenic effect. The maximum concentration of avobenzone permitted is 5% in the EU and 3% in the US.