

Ask the Ingredient Expert



by
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Q: DOES A SELF-TANNER OFFER any sun protection?

A: Yes, even if the self-tanning product doesn't contain a sunscreen. Cosmetic chemists have known for years that a tan-from-a-tube offers mild to effective protection from UVA rays as long as the "tan" is present. Recent evidence from Boston University indicates that the darker the self-tan, the more protection is present. In fact, it may be one of the most effective forms of UVA protection on the market. Unfortunately, due to the way sunscreens are tested and proven effective in the United States, self-tanning products don't qualify as sunscreens.

This means it is illegal for you or a manufacturer to claim sun protection

for a self-tan product, unless the product contains a sunscreen recognized by the FDA and is manufactured according to that agency's sunscreen guidelines. Even then, you may only claim the temporary sun protection offered by the recognized sunscreen ingredient(s), not the long-term protection provided from the "tan" itself.

Q: Will adding aromatherapy oils to a sunscreen alter the SPF? What about when I customize make-up or moisturizer with sunscreen prior to selling it to my client?

A: Sunscreens are complex chemicals which react easily with a product's other ingredients, especially fragrances, essential oils, pigments, plant extracts, alcohols, silicones and emulsifiers. These reactions can magnify the sunscreen's protection, dilute it, or destroy the protection altogether. This is why the FDA requires that any sunscreen formula which is altered in any way, no matter how small, be tested to determine its SPF value prior to being marketed, even if the product was tested and proven effective before the alteration. Besides being tested for efficacy, sunscreens, which are drugs – not cosmetics – must be made by an FDA-registered drug manufacturing facility according to drug manufacturing standards determined by that agency.

If you are a retailer who alters a product with sunscreen prior to selling it to a customer, you may want to think twice before doing so. While the likelihood of getting caught by the FDA is very remote, adding sunscreen ingredients to any product, or adding ingredients to an existing sunscreen, is not only illegal, from a liability standpoint, it may also be dangerous for your business if the sunscreen doesn't perform as expected.

Q: Can my clients mix their sunscreen into their make-up or moisturizer and still have SPF protection?

columnist ingredients

A: Yes, but the amount of protection will probably vary. This is because sunscreens are difficult additives to mix into a product after it has been produced. Shaking the bottle of foundation or using a stick to mix in the sunscreen won't be enough to blend it evenly into the product. This will produce patches of protection mingled

with patches of exposure – not a good thing. Even if your client blends the product and sunscreen in her hand immediately prior to application, foundations and moisturizers contain fragrances, essential oils and pigments that can weaken the sunscreen, leaving skin exposed to UV.

Also, keep in mind that sunscreens

must be applied rather thickly over the skin in order to deliver the SPF on the bottle. Diluting sunscreens with other products will lower the SPF protection, although it is difficult to know by how much. And if your client wants to get all of her facial sun protection from her make-up, remind her that foundations must be applied just as thickly as a beach sunscreen to get the indicated SPF. Forget blending her make-up for a smooth, natural appearance – the more she blends, the more sunscreen she'll remove.

With all these challenges, it's best to apply sunscreen as a separate step. That way, your clients will be more likely to get the SPF protection that's on the label.

Q: Can hair care products provide SPF protection?

A: Not really. Sun Protection Factor (SPF) is defined as the amount of time it takes for skin to receive its Minimal Erythral Dose – perceived as the slight redness we think of as a mild sunburn. Since sun exposure for hair is not measured in terms of Minimal Erythral Dose (hair doesn't turn red when exposed to too much sun) SPF does not apply to hair.

This doesn't mean hair isn't damaged by sunlight. UVA rays fade hair color, aggravate damage from bleach and alter amino acid bonds formed by perms. So, if your clients are worried about protecting processed hair, you may want to suggest a leave-in conditioner with benzophenones, a group of UVA-protective sunscreens that are also effective on skin. ■

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