

How to Choose a Sunscreen

CHECKLIST



Editor's Note

I created this resource to help you choose a safe, effective sunscreen that will protect you from sunburn as well as premature skin aging. Too many sunscreens on the market give inadequate protection—and may even harm your health! With this checklist, you'll be able to confidently read a sunscreen's label, calculate its true SPF, and identify beneficial and harmful ingredients.

Michelle

PS: This is a global guide, with options for all regions of the world!

How to Choose a Sunscreen

☑ Does it contain safe filters?

First, look at the sunscreen's active ingredients (on the back of the product or its packaging) to determine whether it contains any unsafe filters.

These are the common filters you'll see on labels:

Safe Filters	Unsafe Filters
Bemotrizinol (Tinosorb M)*	4-aminobenzoic acid (PABA)
Bisdisulizole disodium (Neo Heliopan AP)*	Amiloxate (Neo Helioplan E1000)*
Bisocetrizole (Tinosorb S)*	Avobenzene (Parsol 1789)
Diethylamino hydroxybenzoyl hexyl benzoate (Uvinul A Plus)*	Cinoxate
Ecamsule (Mexoryl SX)	Diethanolamine methoxycinnamate
Encapsulated octinoxate	Dioxybenzone
Ethylhexyl triazone or octyl triazone (Uvinul T 150)*†	Drometrizole trisiloxane (Mexoryl XL)*
Iscotrizinol (Uvasorb HEB)*	Ensulizole
Polysilicone-15 (Parsol SLX)	Enzacamene
Titanium dioxide	Homosalate
Zinc oxide	Menthyl anthranilate (Meradimate)
	Octinoxate
	Octisalate
	Octocrylene
	Oxybenzone
	Padimate O
	Sulisobenzene
	Triethanolamine salicylate or trolamine salicylate

*Not approved for mainstream use in Canada and/or USA. †Safe, but linked to photoallergy.

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Only use sunscreens that contain one or more safe filters. If you see any unsafe filters, avoid that sunscreen. Those ingredients may pass into the bloodstream, and are associated with hormone disruption and/or skin reactions.

☑ Does it contain both UVA and UVB filters?

It's important that your sunscreen gives you extensive protection from both UVA (the "aging" rays) and UVB (the "burning" rays). Most sunscreens are UVB-biased and inadequate against UVA, even if they claim to be "broad-spectrum."

Here's how the safe filters compare:

Filter	UVA Protection	UVB Protection
Bemotrizinol (Tinosorb M)	● Extensive protection	● Extensive protection
Bisdisulizole disodium (Neo Heliopan AP)	● Extensive protection	○ Minimal protection
Bisotrizole (Tinosorb S)	● Extensive protection	◐ Partial protection
Diethylamino hydroxybenzoyl hexyl benzoate (Uvinul A Plus)	● Extensive protection	○ Minimal protection
Ecamsule (Mexoryl SX)	● Extensive protection	◐ Limited protection
Encapsulated octinoxate	◐ Limited protection	● Extensive protection
Ethylhexyl triazone or octyl triazone (Uvinul T 150)	○ Minimal protection	● Extensive protection
Iscotrizinol (Uvasorb HEB)	◐ Limited protection	● Extensive protection
Polysilicone-15 (Parsol SLX)	○ Minimal protection	● Extensive protection
Titanium dioxide	◐ Partial protection	● Extensive protection
Zinc oxide	● Extensive protection	● Extensive protection

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Make sure your sunscreen contains at least one filter that gives extensive UVA protection, and at least one filter that gives extensive UVB protection. Tinosorb M and zinc oxide are the only filters that give extensive protection against both UVA and UVB.

☑ Is it a true SPF 30 or higher?

Next, check that the filters are present in high enough amounts to give you at least SPF 30 protection. Since anti-inflammatory and antioxidant ingredients can artificially inflate SPF numbers during testing, you'll need to look at the percentages of active ingredients in order to calculate the true level of protection.

Here's how many SPF units you get per one percent of each filter:

UVA Filters	Maximum SPF Units Per 1%
Bemotrizinol (Tinosorb M)	SPF 2.2
Bisdisulizole disodium (Neo Heliopan AP)	SPF 2.0
Bisotrizole (Tinosorb S)	SPF 3.1
Diethylamino hydroxybenzoyl hexyl benzoate (Uvinul A Plus)	SPF 1.6
Ecamsule (Mexoryl SX)	SPF 2.2
Zinc oxide	SPF 1.6
UVB Filters	Maximum SPF Units Per 1%
Encapsulated octinoxate	SPF 2.8
Ethylhexyl triazone or octyl triazone (Uvinul T 150)	SPF 3.4
Iscotrizinol (Uvasorb HEB)	SPF 3.5
Polysilicone-15 (Parsol SLX)	SPF 1.6
Titanium dioxide	SPF 2.6

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Your UVA filter should make up at least 50 percent of the total SPF number.

For example, a sunscreen with 10 percent zinc oxide would have a maximum true SPF of 16 (10 x 1.6). However, adding 7.5 percent of titanium dioxide (a UVB filter) would bump up the total SPF to 35.5 ((10 x 1.6) + (7.5 x 2.6)).

Does it contain stable oils?

Once you've determined whether the UV protection is sufficient, look at the inactive ingredients. They may be listed alphabetically or by order of concentration.

When they're listed by concentration, the first five ingredients will typically compose about 80 percent of the product. So be certain that you only see stable oils (or no oils at all) among them.

Stable oils have a saturated or monounsaturated fatty acid profile. Unstable oils are polyunsaturated. These are some of the most common oils found in sunscreens:

Stable Oils	Unstable Oils
Coconut oil	Safflower oil
Squalane oil	Grapeseed oil
Cocoa butter	Corn oil
Shea butter	Soybean oil
Joboba oil	Sesame oil
Castor oil	Sunflower oil
Olive oil	Canola oil
Marula oil	Rose hip oil

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Avoid sunscreens with one or more unstable oils in the first five ingredients—they can easily break down in UV light and cause cellular damage.

If the inactive ingredients are listed alphabetically, you won't know if the oils are in high concentrations (among the first five ingredients) or closer to the end of the ingredients list (where they're probably not worth worrying about). Contact the manufacturer to get more information, or just choose a different sunscreen.

Is it free of vitamin A and alpha-hydroxy acids?

Vitamin A and alpha-hydroxy acids (AHAs) increase sun sensitivity and the possibility of sunburn, so they should not be present in a sunscreen.

Here's how they may appear on labels:

Vitamin A	Alpha-Hydroxy Acids
Retinoic acid	Citric acid
Retinol	Glycolic acid
Retinyl acetate	Lactic acid
Retinyl linoleate	Malic acid
Retinyl palmitate	Mandelic acid
Vitamin A	Tartaric acid

Is it free of fragrance?

Ideally, sunscreens (not to mention other skincare products!) that contain fragrance should be avoided because of their potential to cause irritation and skin allergies.

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Here's how to spot fragrance on labels:

Names for Fragrance
Aroma
Essential oil blend
Fragrance
Parfum
Perfume

Is it silicone-free or low-silicone?

Although silicones have no bearing on sunscreen safety, they can contribute to acne and congestion by forming a film on the skin and trapping debris.

If you'd prefer to avoid them, check that you don't see silicones in the first five inactive ingredients (low-silicone). Or choose a sunscreen that is silicone-free.

To spot silicones on labels, look for words that end in -cone, -conol, -silane or -siloxane:

-Cone	-Conol	-Silane	-Siloxane
Amodimethicone	Dimethiconol	Bis-PEG-18 methyl ether dimethyl silane	Cyclopentasiloxane
Cyclomethicone		Triethoxycaprylylsilane	Polydimethylsiloxane
Dimethicone		Triethoxycaprylylsilane crosspolymer	Siloxane
Methicone			
Trimethicone			