

# Guide to Sunscreen Filters

## 1. What is the difference between sunscreens?

### Chemical = Organic

- Organic filters undergo a chemical reaction that breaks double bonds, converting photons of energy from the sun into heat.
- Examples: **avobenzone**, **oxybenzone**, **homosalate**, and **octisalate**
- These filters can be absorbed into the body.

### Physical = Mineral = Inorganic

- Inorganic filters reflect solar radiation away from the skin and often leave a white cast.
- Examples: **zinc oxide** and **titanium dioxide**
- These sunscreens are **broad spectrum** and protect against **UVA** and **UVB**.
- **Tinted** sunscreens contain **iron oxide**, a brownish mineral that reduces the appearance of a white cast and adds protection against **visible light**. This is great for melasma patients.

## 2. Why are sunscreens outside of the US better?

- Filters approved outside of the US are **CHEMICAL** and predominantly protect against **UVA**.
- Examples: **Tinosorb S**, **Tinosorb M**, **Uvinul T150**, **Mexoryl 400**, **Mexoryl SX**, and **Mexoryl XL**
- These filters often feel better to the touch and blend into the skin without leaving a white cast.

## 3. What if I have acne or sensitive skin?

### Physical >>> Chemical

- You may want to think about using a physical sunscreen (i.e. US sunscreen) since these are less likely to be irritating/reactive to the skin and non-comedogenic (pore-clogging)
- Just because we don't have all the filters in the US doesn't mean that you should go unprotected.
- Find the best sunscreen that works for you!

## 3. Which sunscreens should I purchase while abroad?



**France:** La Roche Posay Anthelios UVMune 400

Active ingredients:  
*avobenzone, octisalate, Mexoryl SX, Mexoryl XL, Tinosorb S, Uvinul T150, Uvinul A Plus, MCE*



**Spain:** Isdin Fotoprotector FusionWater Magic

Active ingredients:  
*avobenzone, octisalate, Tinosorb S, Uvinul T150, Ensulizole*



**Japan:** Anessa Perfect UV Skincare Milk

Active ingredients:  
*octisalate, homosalate, octocrylene, Tinosorb S, Uvinul T150, Uvinul A Plus, titanium dioxide, zinc oxide, polysilicone-15*



**Korea:** Aestura Derma UV365 Barrier Hydro Mineral Sunscreen

Active ingredients:  
*octisalate, homosalate, Tinosorb S, Uvinul A Plus, titanium dioxide, polysilicone-15*