

Blue Light Cut TiO₂

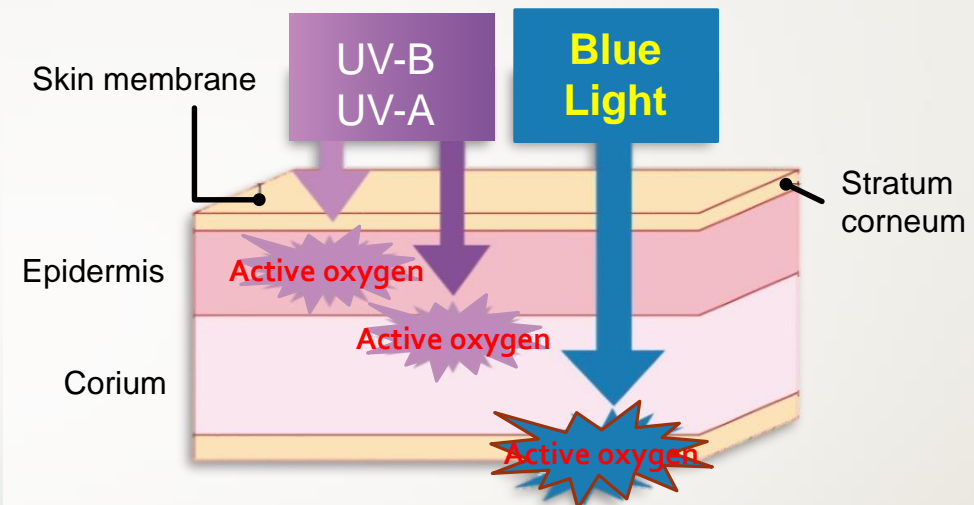
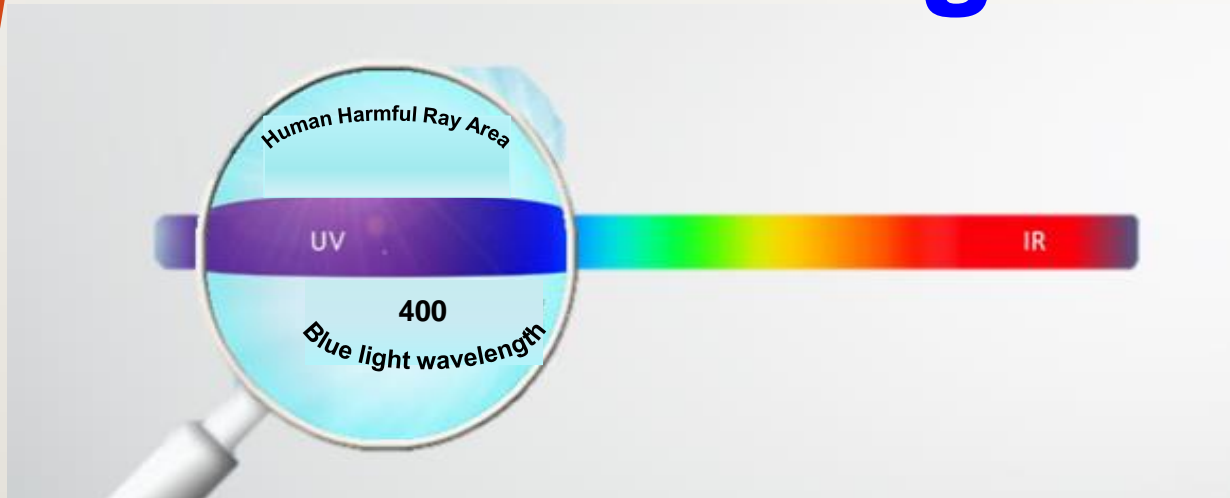
✓ **Blue Cut Titan 98**

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What is “Blue Light”?



- **Blue Light** is blue light of the wavelength of 380 ~ 500 nm which is the brightest among the visible light.
- It usually occurs in solar, electronic, and fluorescent lighting.
- This light, when exposed to the skin for a long time, damages the mitochondrial DNA of the epithelial cells and causes active oxygen (ROS), which is the cause of **Skin Aging** and **Pigmentation**.

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Blue Light Blocking Effect !!

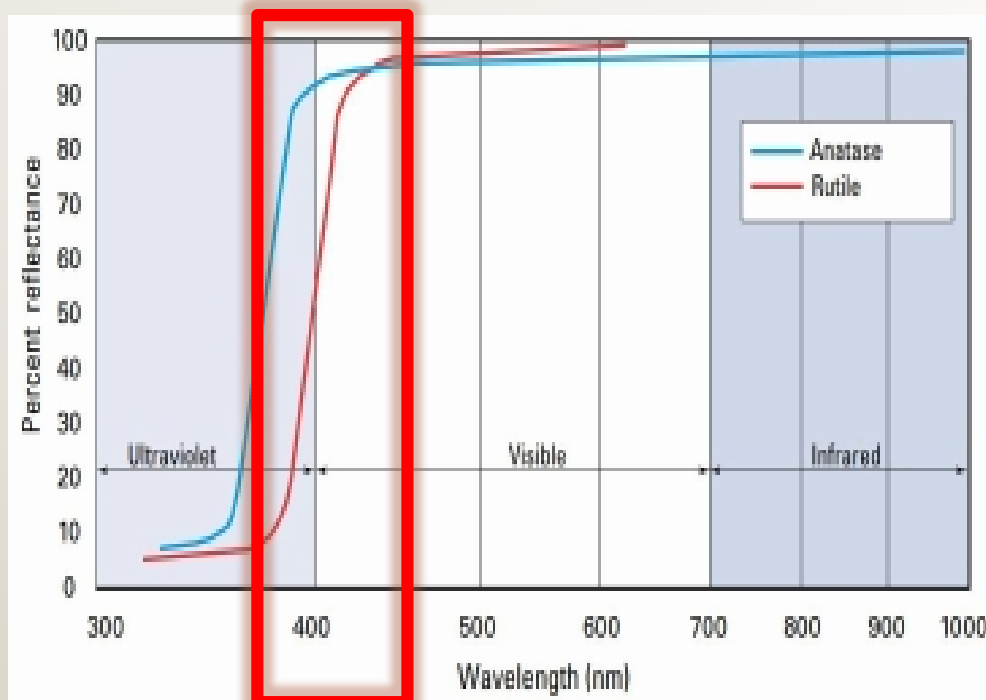


Figure 1. Reflectance of TiO₂ Pigment in Various Regions of the Spectrum.

➤ **Anatase >> Rutile**

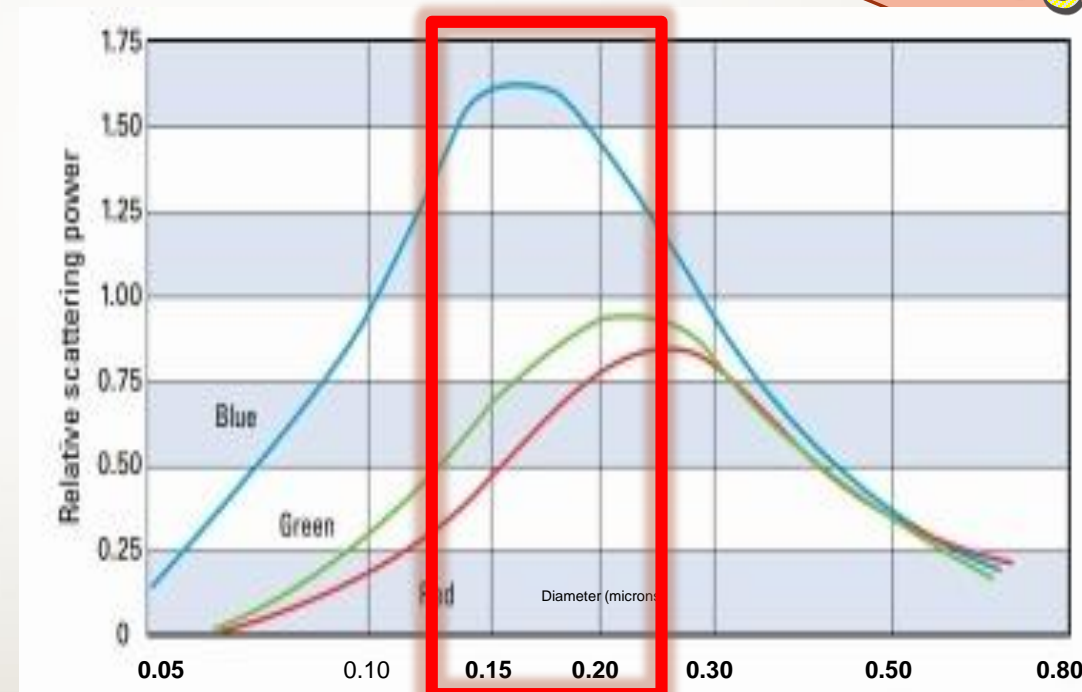


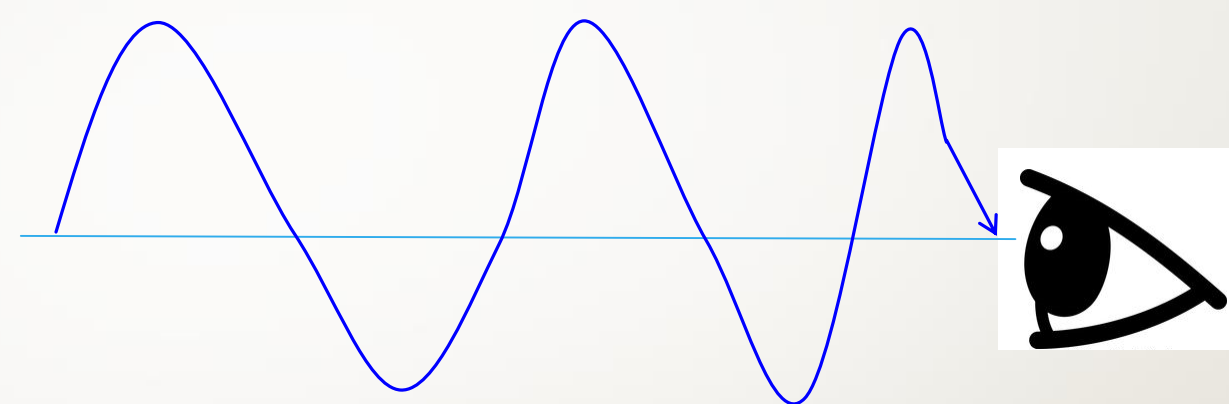
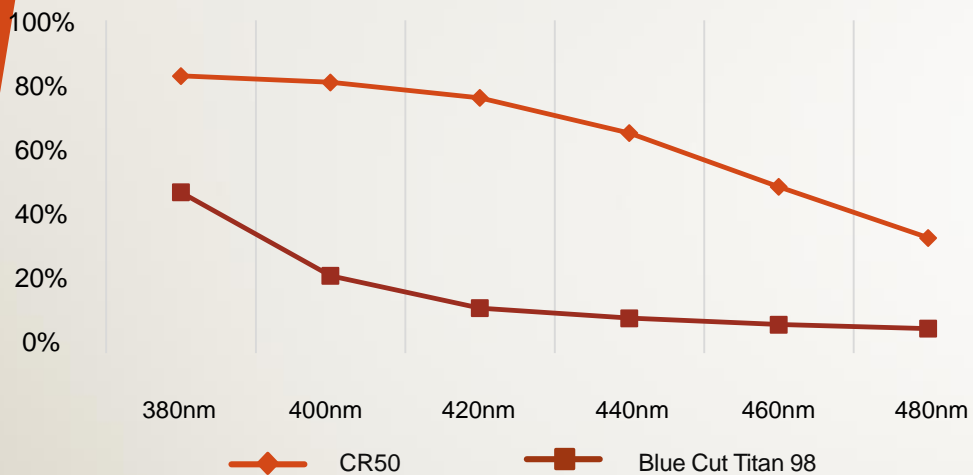
Figure 2. Relative Light Scattering Power versus Rutile Particle Size.

➤ **Particle Size: 190~250nm**

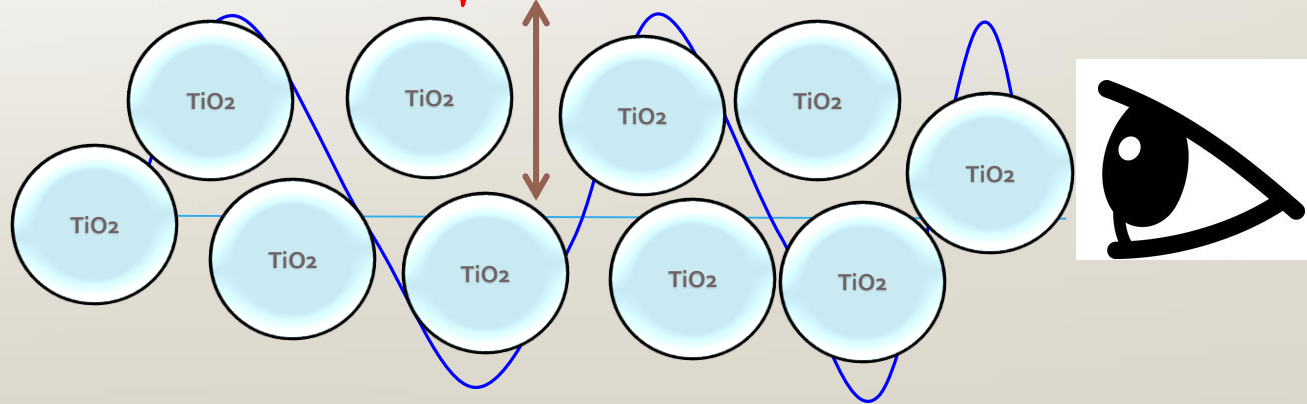
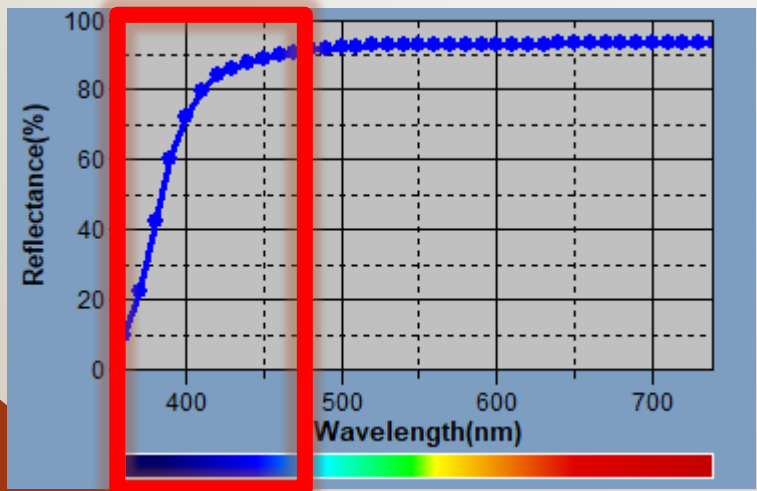
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Transmittance



1/2
Blue light Wavelength : 380~500 nm
Blue Cut Titan 98 : 190~250 nm



Blue Light Cut TiO₂

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+ **Make up Effect**

- TiO₂ makes the skin blue, pale and cakey make-up phenomenon, but **Blue Light Cut TiO₂** blocks the blue wavelength and gives a **Ruddy Complexion**.
- It is composed of the optimal particle size to form a **Natural cover** and **Make-up effect**.



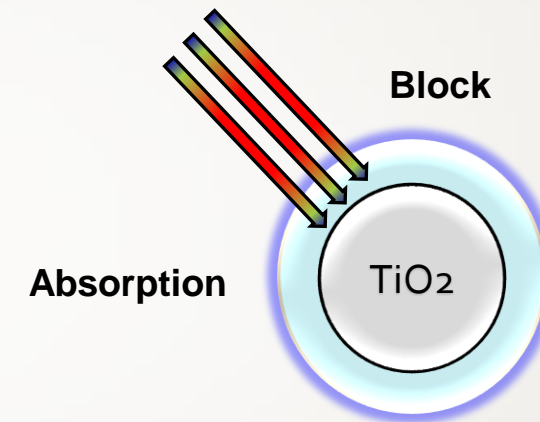
Natural coverage !

Blue Light Cut TiO₂

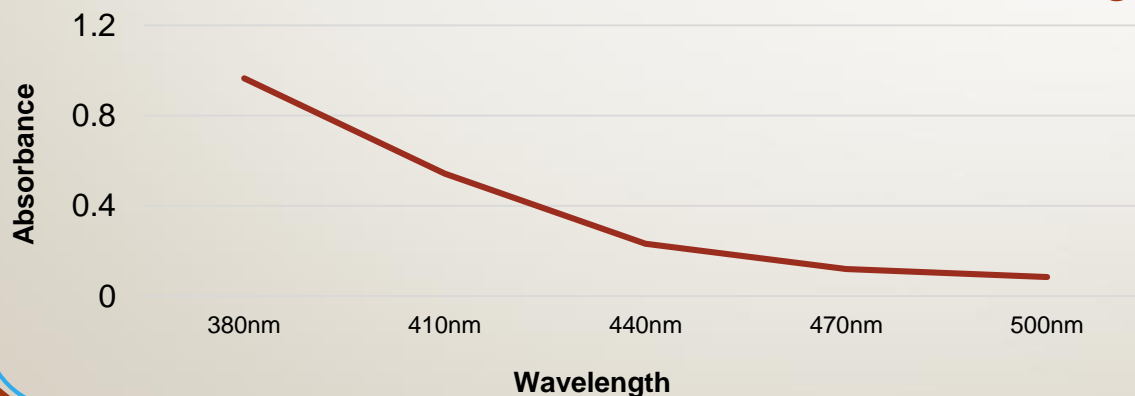
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Why use Safflower Oil?

- Safflower Oil to absorb blue light
+ Blue light-blocking TiO₂
→ **Double Blocking Effect!**
- Vitamin E, minerals, linolenic acid content.



Absorbance of **Safflower Oil** at 5 wavelength



COMPOSITION

Composition	CAS No.	Content (%)
Titanium Dioxide	13463-67-7	98
Carthamus Tinctorius (Safflower) Seed Oil	8001-23-8	2

PERFECT BLUE LIGHT CUT !!