

ZinClear XP™

Transparent Broad Spectrum Protection



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Consumers are increasingly aware of the health risks and skin aging affects associated with sun exposure. At the same time, there is a growing concern over the safety of chemicals in sunscreens and cosmetics. Providing quality products that meets both consumers' expectations and evolving regulations requirements at a low cost is a challenge for brand owners and manufacturers.

ZinClear XP™ zinc oxide powder is Antaria's latest innovation to answer this challenge in a wide variety of personal care products including sunscreens and everyday moisturizers and anti-aging creams.

ZinClear XP™ is designed to:

- ✓ **Meet the UVAPF>1/3 SPF requirement**
- ✓ **To exceed the 370nm critical wavelength**

While providing:

- ✓ **Light and pleasant skin feel**
- ✓ **Exceptional transparency**

Concerns over safety of chemicals in sunscreens

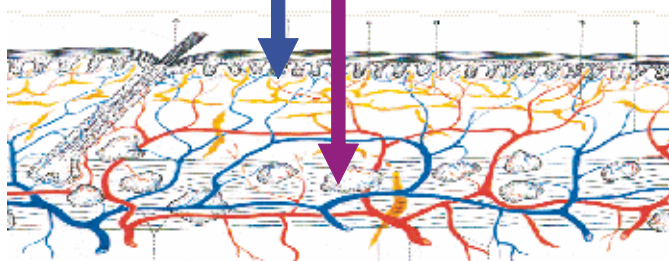
Increasing usage of UV absorbers in everyday products has led to concern about prolonged chemical exposure causing skin sensitisation. Zinc oxide has a long history in skincare products such as calamine lotion and diaper rash creams, for use on even the most sensitive of skin. Zinc oxide sunscreens are widely recommended by dermatologists for patients with skin disorders, or those suffering sensitisation or irritation from chemical based sunscreens.

It takes more than high SPF to protect skin from the sun

UV light consists of both UVA and UVB rays, with both contributing to skin damage caused by sun exposure.

UVB – Higher energy rays causing erythema, (sunburn) and increasing risk of skin cancers.

UVA- Lower energy but deeper penetrating. Pigment darkening, skin ageing, longer term damage, risk of skin cancer



The importance of UVA protection

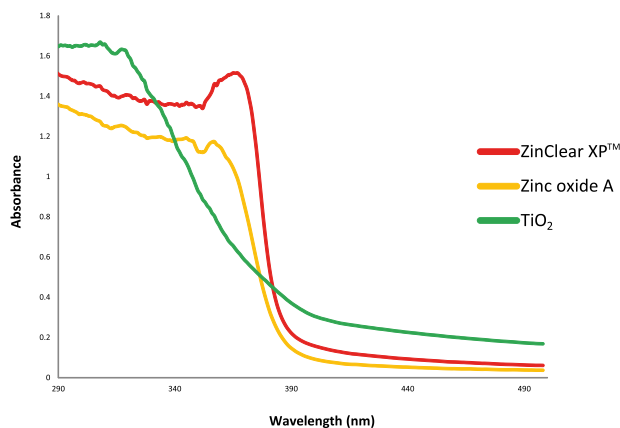
The longer term effects of UVA on the skin are now well recognized. UVA has been shown to be a major contributor to skin ageing and is believed to contribute to heightened risk of skin cancers. Many mass-market sun care products reliant on chemical UV absorbers or titanium dioxide (TiO₂) have been found to provide inadequate UVA protection. Regulatory bodies worldwide are now implementing new regulations that prevent misleading claims and require sunscreens to offer improved protection from both UVA and UVB.

Enhanced UVA protection

Zinc Oxide's absorbance profile intrinsically spans both UVA and UVB. ZinClear XP™ has been specifically designed to enhance the UVA protection performance of the zinc oxide.

This enables ZinClear XP™ to be used on its own or in combination with other filters to:

- ✓ **Meet the UVAPF>1/3 SPF requirement**
- ✓ **To exceed the 370nm critical wavelength**

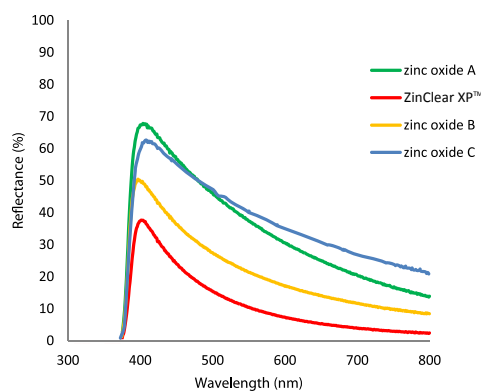


UV/visible spectrum, ZinClear XP™ VS TiO₂ and conventional zinc oxide.

Superior Aesthetics

ZinClear XP™ provides maximum formulation flexibility for optimal product aesthetics:

- ✓ **Light and pleasant skin feel** is possible due to the powdered form eliminating the challenges of formulating with the large amounts of oils contained in dispersion products.
- ✓ **Exceptional transparency** is possible even at maximum use levels thanks to the market leading performance of ZinClear XP™



Reflectance of 30wt% ZnO films

Versatility of the formulations

ZinClear XP™ can be used in multiple formats, W/O or O/W emulsions, sticks, and sun oils. Its all-round performance makes it ideal for use in low SPF protection daily wear products and very high protection beach wear. ZinClear XP™ may be used alone as the only active or will complement TiO₂ or organic chemical filters by providing UVA performance along with additional SPF.

- ✓ For **sun care products**, appealing formulations that meet the toughest regulatory requirements are possible
- ✓ For **everyday cosmetics**, a transparent protection without compromising skin feel

Replacing chemical filters

The cost effectiveness of ZinClear XP™ will enable replacement of chemical filters in sun care formulations by achieving comparable aesthetics while:

- ✓ Providing **100% mineral and natural protection** when used as the only filter or in combination with TiO₂
- ✓ Providing a **photostable** formula without the stabilisers required when using chemical filters
- ✓ **Simplifying the formulation** as ZinClear XP™ can be used as a single broad spectrum filter
- ✓ Providing protection suitable for **sensitive skins**; zinc oxide sunscreens are widely recommended by dermatologists for patients with skin disorders, or those suffering sensitisation or irritation from chemical based sunscreens.

Sales Support

ZinClear XP™ is available worldwide through our network of distribution partners, with stock held in each region. Contact Antaria Limited sales@antaria.com to find your nearest ZinClear XP™ distributor as well as documentation, quotes, samples, formulation advice and demonstration formulations.

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Suitable for a wide variety of uses:

- ✓ Mass market sun care in combination with other UV absorbers
- ✓ Low irritant or sensitive skin sunscreens
- ✓ Everyday wear cosmetics and foundation
- ✓ Everyday moisturisers providing SPF
- ✓ 'All natural' and 'mineral only' sunscreens
- ✓ Baby and childrens' sun care products
- ✓ Lip balms

Did you know?

In September 2012, the EU Scientific Committee on Consumer Safety (SCCS) recommended that zinc oxide be approved as a UV filter in Europe at up to 25%. This positive opinion was based on a complete safety review of zinc oxide and as a consequence the EU Working Group on Cosmetics has proposed an update to Annex VI of the EU Cosmetic Regulation to include both nano and non-nano zinc oxide as approved UV filters.

Now is the perfect timing to develop broad spectrum sun care and cosmetics with SPF protection that will soon be approved worldwide!

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