

Z-COTE® microfine zinc oxide

The clear choice for UVA protection



We don't make the sunscreen.
We make the sunscreen better.™

BASF

The
days
of the
white-
nosed
zinc
oxide
wearer
are
over.

FINALLY: EVERYTHING NEEDED IN A SUN PROTECTANT — CLEARLY.

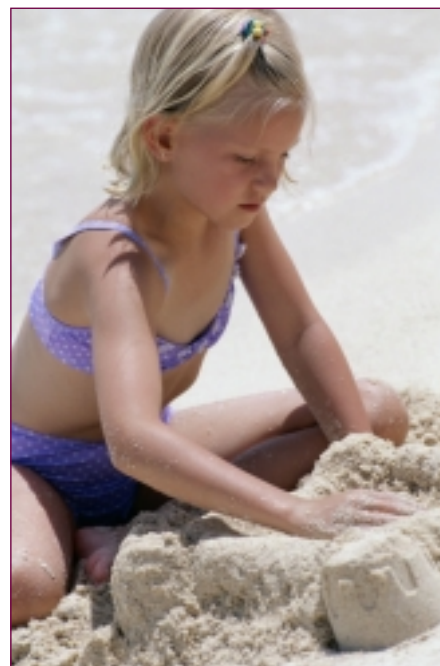


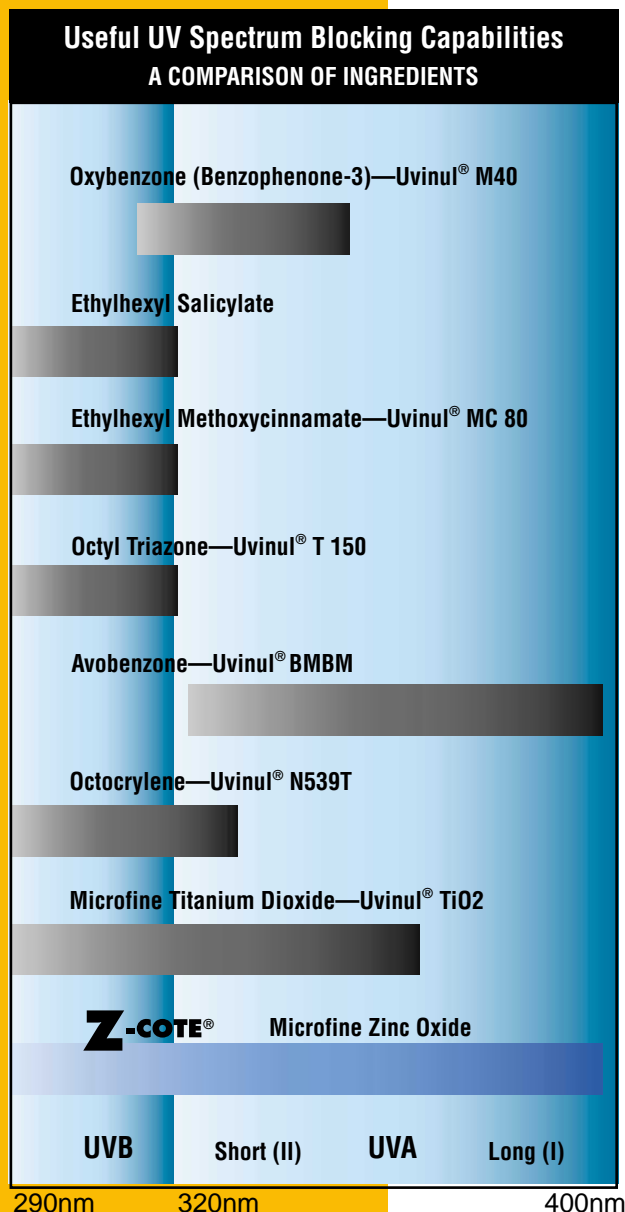
Introducing **Z-COTE® microfine zinc oxide. Combining cosmetic elegance with total UV protection**

Available in two forms, Z-COTE® and Z-COTE HP1® are highly effective in protecting against both UVA and UVB radiation. Yet their physical characteristics enable you to formulate products which are elegant and transparent on the skin.

An innovative form of microfine zinc oxide—with a particle size of less than 0.2 microns, Z-COTE® is invisible when applied to the skin. But don't let its transparent nature fool you. Even though it's light on the skin, it's a heavyweight when it comes to sun protection. It offers true broad-spectrum UVA and UVB protection.

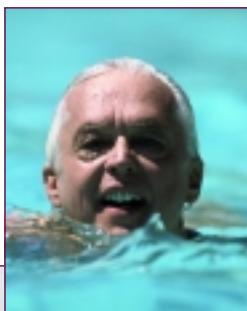
Transparent,
long-UVA/UVB
sunscreen



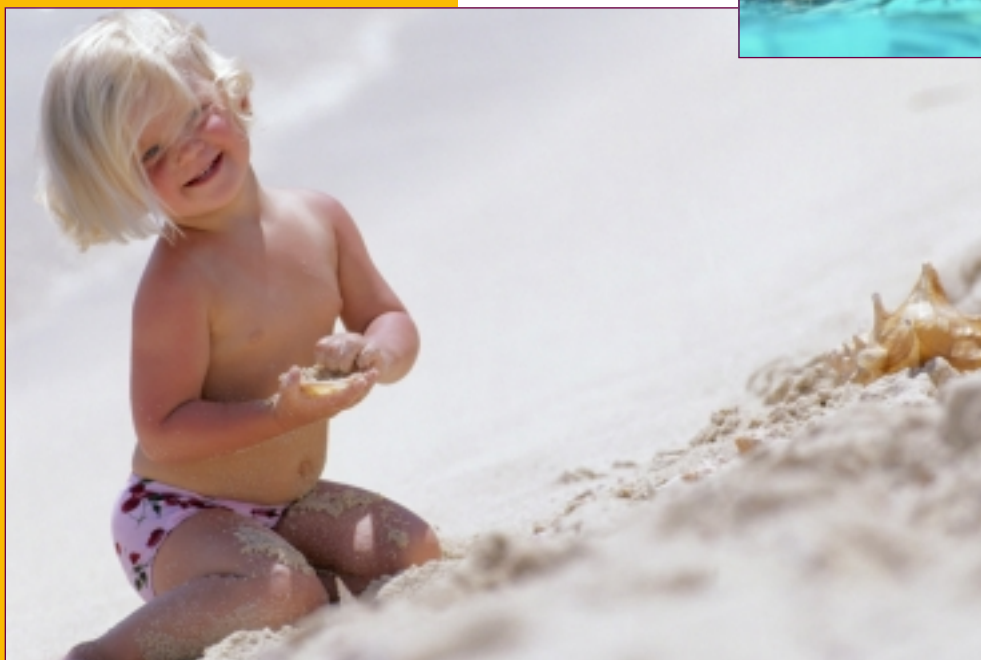


THE CLEAR CHOICE FOR BROAD SPECTRUM UV PROTECTION

Z-COTE® is the solution to experts' concerns that most sunscreens do not block long UVA radiation, also known as UVA I. UVA I has been linked to photoaging and may be the cause of the more aggressive skin cancers such as melanoma.



Because it blocks UVB as well as UVA rays, Z-COTE® can be used alone or—since it is synergistic with organics—in combination with other sunscreen agents. Z-COTE® requires no special solvents or photo stabilizers and is easy to incorporate into cosmetic formulas. The result? Simpler, gentler, more appealing formulations. It's a clear improvement in total sun protection.



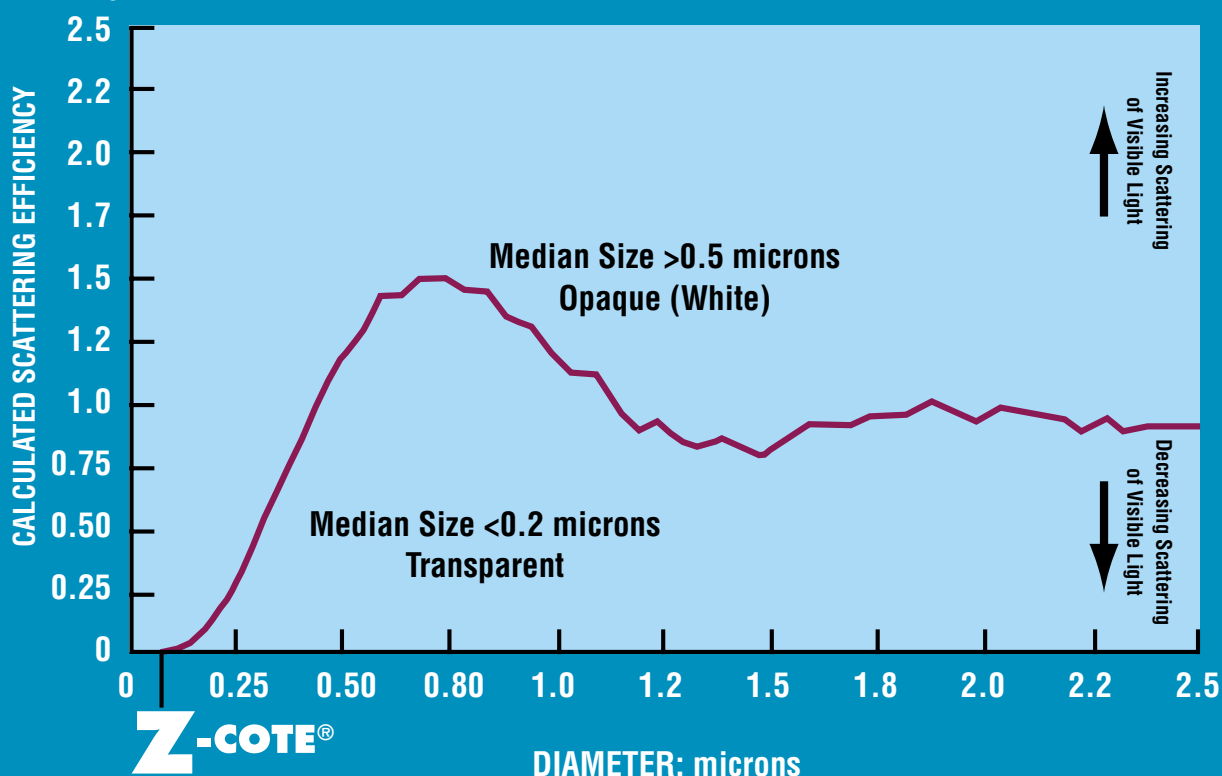
THE REMARKABLE QUALITIES OF Z-COTE® MICROFINE ZINC OXIDE:



- Long-ray UVA protection
- UVB protection
- Transparency
- Stability – doesn't degrade in the sun
- Hypoallergenic
- Non-staining
- Non-greasy
- Enables gentle formulations
- Easy to preserve – compatible with formaldehyde donors
- FDA Category I Sun Screen 2-25%
- FDA Category I Skin Protectant/ Diaper Rash Treatment
- Synergistic with organic sunscreens
- Two forms of Z-COTE® – coated and uncoated

LIGHT SCATTERING BY ZINC OXIDE

Historically, particulate sunscreens were of limited appeal because of their appearance. This is no longer the case. The graph below plots the calculated relationship between particle size and visible light scattering for zinc oxide. The whitest or most visible particle is the one that scatters light most efficiently. The particle size at which this happens differs for each material. Z-COTE® microfine zinc oxide has an average particle size of less than 0.2 microns and therefore scatters visible light poorly. Because of this Z-COTE® is inherently "transparent" when applied to the skin, while still being an excellent ultraviolet (UVA/UVB) block. This allows its incorporation into all topically applied products including sunscreens and other daily wear formulations with virtually no whitening effect.





INORGANIC **Z-COTE®** ZINC OXIDE IS GENTLE ENOUGH FOR DAILY WEAR

Z-COTE® Zinc Oxide is a physical, inorganic ingredient that is ideal for hypo-allergenic formulations, and does not cause allergic reactions. This is especially significant now that the importance of daily UV protection has become overwhelmingly obvious. Z-COTE® zinc oxide's gentleness is a unique advantage for use in daily-wear products.

Z-COTE® is the only sunscreen ingredient that is also recognized by the FDA as a Category I Skin Protectant/Diaper Rash Treatment, and is recommended for use on compromised or environmentally challenged skin. In fact, many brands containing Z-COTE® are formulated specifically for dermatology patients.

The safety and gentleness of Z-COTE® makes it a perfect protection ingredient for children's sunscreens and daily moisturizers, as well as for sensitive-skin formulations.



FINALLY—COMPLETE, SAFE, CLEAR SUN PROTECTION FOR KEY APPLICATIONS:

- Daily-wear products such as moisturizers and color cosmetics
- Children's sun protection products
- Beach and sport products



TWO FORMS TO MAKE FORMULATING EASIER...

Z-COTE® HP1 Zinc Oxide :

- Hydrophobic – coated with dimethicone
- Easier to disperse
- Compatible with all oil phases
- Reduces manufacturing time
- Easy to preserve

Z-COTE® Zinc Oxide :

- Hydrophilic – uncoated
- Coating flexibility

EITHER WAY...

Z-COTE® ZINC OXIDE IS PHOTOSTABLE

The outstanding photostability of Z-COTE® – which eliminates the need for photo stabilizers – provides continuous protection against the harmful UVA and UVB rays of the sun without degradation.

AND BEST OF ALL...

Z-COTE® zinc oxide users can be assured of long lasting protection.

BASF CAN MEET ALL YOUR SUN PROTECTION NEEDS

- Complete UV product portfolio
- Worldwide sales and technical service support
- Customer focused
- Vast formulation expertise

**We don't make the cosmetics.
We make the cosmetics better.™**



Products

BASF PRODUCTS FOR THE COSMETIC INDUSTRY

ACTIVE INGREDIENTS & VITAMINS

Bisabolol
D-Panthenol
D,L-Panthenol
Phytantriol
Retinol
Sodium Ascorbyl Phosphate
Vitamin A Palmitate
Vitamin E
Vitamin E Acetate

UV ABSORBERS

Uvinul® grades
Z-Cote® grades

POLYMERS

Luviflex™ grades
Luvimer® grades
Luviset® grades
Luviskol® grades
Ultrahold® grades

QUATERNARY COMPOUNDS

Luviquat® grades

SURFACTANTS

Avanel® grades
Cremophor® grades
Jordapon® grades
Pluracare® grades

SILICONES

Masil® grades

EMOLLIENTS

Lutrol™
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NEUTRALIZERS

Neutrol®

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ABOUT BASF

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