

LIPID SHIELD SPF 30

The Science Behind Advanced Sun Protection

WHAT DOES NON-NANO MEAN?

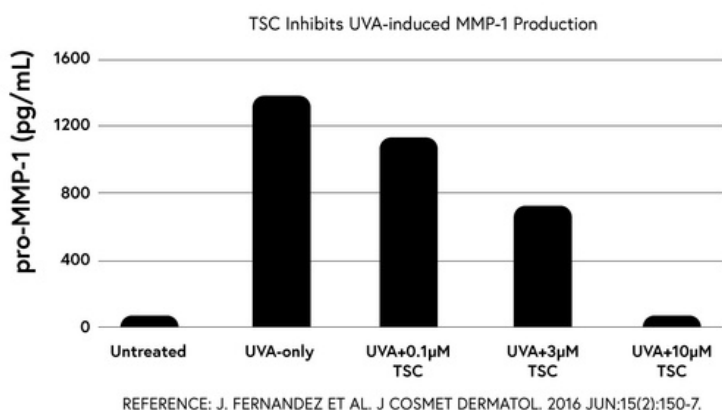
Non-nano zinc oxide refers to particles that are larger than 100 nanometers. This size threshold is important because it means the particles are too large to penetrate the skin, reducing concerns associated with the potential absorption of nanoparticles.

WHY IS NON-NANO ZINC OXIDE BETTER FOR SKIN?

Non-nano zinc oxide remains on the skin's surface, where it functions as a physical barrier that reflects and scatters ultraviolet (UV) radiation. Its inability to penetrate pores makes it less likely to contribute to comedone formation or trigger low-grade inflammation, supporting overall skin health.

HOW DOES TSC TECHNOLOGY REPAIR UV DAMAGE TO THE SKIN?

- **Prevents collagen breakdown** by blocking UV-induced MMP-1 enzyme production that destroys the skin's structural foundation and leads to wrinkle formation
- **Neutralizes free radicals** with direct antioxidant activity similar to vitamin E, protecting skin cells from oxidative stress and reducing intracellular damage by 37%
- **Accelerates skin repair** by increasing cell migration and wound healing by 49%, helping damaged skin cells move into affected areas more efficiently for faster recovery
- **Reduces inflammation** through proven anti-inflammatory mechanisms that calm UV-irritated skin and minimize redness and damage from sun exposure



What this graph shows: When skin cells are hit with UVA rays, they produce a harmful enzyme (MMP-1) that breaks down collagen and causes wrinkles.

The results:

No UV exposure: Low MMP-1 levels (baseline)

UV exposure alone: MMP-1 levels spike dramatically

UV + TSC: MMP-1 levels stay low, even with UV exposure

What this means: TSC stops the skin damage process before it starts. Instead of just blocking UV rays, TSC prevents your skin cells from producing MMP-1, the "collagen-eating" enzyme that causes aging.

We often underestimate the risk we take on with UV exposure. Having a sunscreen to not only block UV damage, but also fight any exposure we may receive is the natural evolution of this type of formulation.

