

Product Description

White Sapphire® is a high-purity cosmetic-grade aluminium oxide (Al_2O_3), commonly referred to as alumina, engineered for use as a functional mineral ingredient in cosmetic and personal care formulations.

The material is supplied as a free-flowing off-white powder composed of plate-like particles with a controlled hexagonal crystal structure. This engineered particle morphology contributes to a range of functional performance characteristics that are valuable in modern cosmetic formulations.

In topical systems, White Sapphire® acts primarily as a multifunctional performance mineral. The platelet structure promotes controlled light diffusion and optical blurring on the skin, while also contributing to improved skin feel, reduced tackiness and enhanced powder adhesion within finished formulations. These properties allow formulators to optimise sensory performance, product texture and the visual finish of cosmetic products.

White Sapphire® is also chemically inert and thermally stable, allowing it to integrate effectively into a wide range of formulation types, including both anhydrous and emulsion systems. The mineral is compatible with common cosmetic raw materials such as pigments, emollients, emulsifiers and UV filters.

When incorporated into mineral sunscreen systems containing zinc oxide, White Sapphire® may also contribute to improved aesthetic performance and has been observed to support potential SPF enhancement through improved optical scattering and film uniformity.

Depending on the specific grade used, White Sapphire® powders can be utilised to deliver targeted formulation benefits such as oil control, soft-focus optical effects, improved radiance or enhanced sensory feel.

As a result, the ingredient is commonly incorporated into formulations including:

- primers
- liquid and cream foundations
- pressed and loose powders
- BB and CC creams
- skincare products
- mineral sunscreen systems
- deodorant and personal care formulations

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White Sapphire® powders are manufactured under controlled quality systems to ensure consistent purity, particle structure and performance across cosmetic formulations.

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