## HALLSTAR

## HALLBRITE® T-97

INCI Name: Titanium Dioxide, Dimethicone Product Code: 2358 CAS #: 13463-67-7, 63148-62-9 EINECS: 236-675-5, polymer exempt Brand: <u>HallBrite<sup>®</sup></u>

HallBrite<sup>®</sup> T-97 is a hydrophobic, microfine, non-nanoparticulate Titanium Dioxide designed for use in the formulation of globally acceptable sunscreens. It utilizes Titanium Dioxide of very small particle size that has been made extremely hydrophobic through surface-treatment with Dimethicone. This nanoparticle-free ingredient may be added at up to 3% in finished sunscreen formulations without objectionable whitening of the skin during "rub-in."

HallBrite<sup>®</sup> T-97 is easily added to the oil phase of a formulation. Addition when the oil phase is of low viscosity (e.g., when heated and before any rheological aids are added) maximizes dispersion and, consequently, efficacy. Introduction with a homogenizer, colloid mill or other high shear equipment is not always necessary, but helps ensure its thorough dispersion. Adequate dispersion is necessary to achieve minimum skin whitening during, and subsequent to, application of the finished sunscreen product.

HallBrite<sup>®</sup> T-97 typically contributes about 1.5 - 2.0 SPF units per percent utilized in sunscreen formulations, and also contributes appreciably to shorter wavelength UVA protection.

## Features & Benefits:

- Sunscreen Active
- UVA & UVB Absorber

Appearance	White to off-white powder
Odor	Characteristic
Titanium Dioxide (%, 800°C)	97.0 Minimum
Minimum Particle Size (nm)	100
Heavy metals (ppm)	To meet USP requirements (for Titanium Dioxide)- 10 ppm max Pb, 1 ppm max As, 1 ppm max Hg
Loss on Drying (%)	1.0 Maximum

Microbiology	500 cfu/g max (no pathogens detected)
Insoluble In	Water
Soluble In	Cosmetic Esters (dispersible) Isopropyl Myristate (dispersible)
Toxicology Profile	Inhalation: May cause dizziness Ingestion: May be harmful if swallowed. May irritate mouth, throat and stomach. Ocular / Eye Irritation: Contact not expected to cause irritation Skin Irritation: Contact not expected to cause irritation
Packaging	Box - 44lbs

## Applications:

- Beach Wear Sun Care
- Daily Wear Sun Care

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