Inquiries
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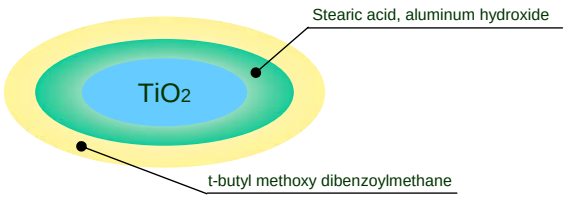
Hybrid micro titanium dioxide HXMT-100ZA

This product is made by surface processing t-butyl methoxy dibenzoylmethane with micro titanium dioxide and solves the issue of t-butyl methoxy dibenzoylmethane crystallization to exhibit an excellent UV-A shielding effect and SPF effect. In addition, the product maintains its UV shielding effect at a high-level due to the improved photo-durability of t-butyl methoxy dibenzoylmethane.

Features

- Solution of the issue of t-butyl methoxy dibenzoylmethane crystallization
- Excellent UV-A shielding effect and SPF effect
- Maintenance of UV shielding effect due to improved photo-durability

Conceptual diagram of hybrid powder



General characteristics

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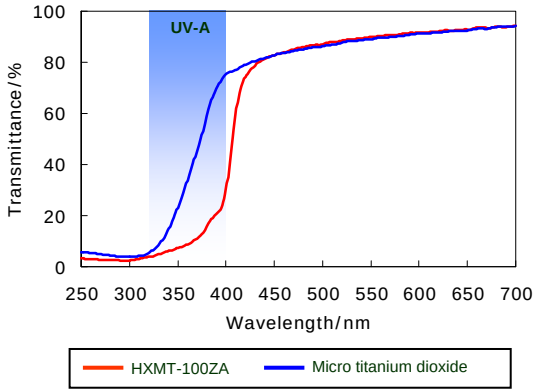
Appearance	Pale yellow powder
Titanium dioxide	60%
Titanium dioxide crystallization	Rutile
Average primary particle size of titanium dioxide	15 nm
Surface processing agents	Stearic acid Aluminum hydroxide t-butyl methoxy dibenzoylmethane
Residue on drying	3%
Loss on ignition	30%
Surface property	Lipophilic

UV-A shielding effect



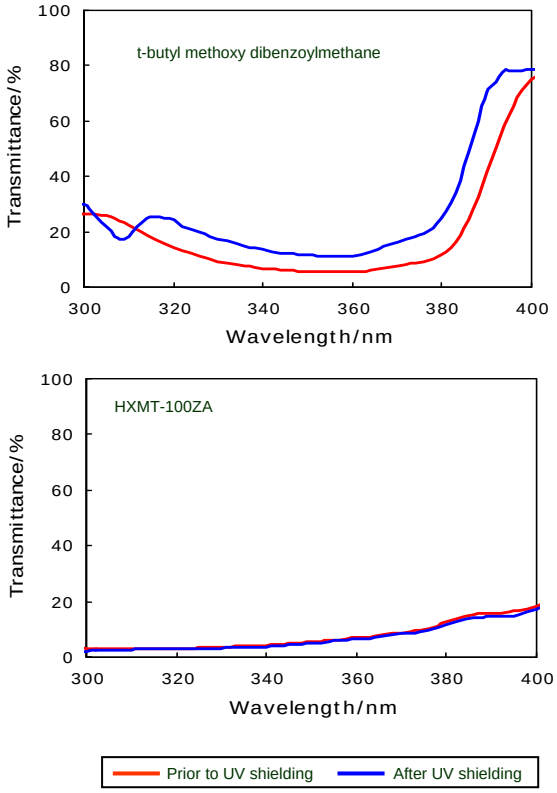
Form: W/S emulsion
Active ingredient: 10%
Film thickness: 12 μm
Basic material: Polypropylene
Measurement: Hitachi UV-3000 spectral photometer

SPF (*in vivo*)

	SPF	PFA
HXMT-100ZA	37	8
Micro titanium dioxide	28	5

Form: W/S emulsion
Active ingredient: 10%
Coating volume: 2 mg/cm^2
Measurement: In accordance with JCIA method

Durability against UV rays



Form: W/S emulsion
Active ingredient: 10%
Coating volume: 2 mg/cm^2
Basic material: Transpore tape
UV radiation level: 10 MED
Measurement: Hitachi UV-3000 spectral photometer