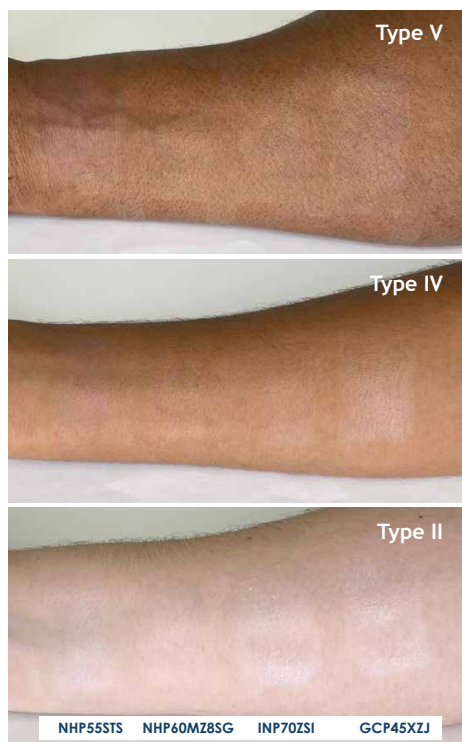


# High Transparency

## TiO<sub>2</sub> and ZnO Dispersions



Dispersions diluted to 20% Active, 2mg/cm<sup>2</sup> applied in the skin

Titanium Dioxide and Zinc Oxide are mineral UV filters, widely used for UVA and UVB protection, available in a broad range of primary particle sizes and with varying optical properties. However, when dispersed in a medium or vehicle, they form aggregates of primary particles; the degree of aggregation is a function of the primary particle size, surface treatment and manufacturing process. Larger aggregates affect the UV protection

of the formula and tend to scatter visible light more: when applied on the skin, the formula looks white or greyish, particularly on melanated skins.

Kobo uses its extensive experience in surface treatments and dispersions to control particle size. We offer formulators a selection of highly transparent TiO<sub>2</sub> and ZnO dispersions to create effective and cosmetically appealing sunscreen formulas.

Name	INCI Name	Active % (ZnO or TiO <sub>2</sub> )	Viscosity
UV Attenuation Nano TiO <sub>2</sub> Dispersions			
NHP55STS	Titanium Dioxide (And) C13-15 Alkane (And) Stearic Acid (And) Aluminum Hydroxide (And) Polyhydroxystearic Acid	44	Pourable
UV Attenuation Nano ZnO Dispersions			
GCP55ZSG	Zinc Oxide (And) Caprylic/Capric Triglyceride (And) Polyhydroxystearic Acid (And) Stearoyl Glutamic Acid	52	Pourable
NHP60MZ8SG	Zinc Oxide (And) C13-15 Alkane (And) Stearoyl Glutamic Acid (And) Polyhydroxystearic Acid	57	Pourable
HBTNP60ZSI	Zinc Oxide (And) Butyloctyl Salicylate (And) C12-15 Alkyl Benzoate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	58	Pourable
CAQP60ZSI	Zinc Oxide (And) Coconut Alkanes (And) Triethoxycaprylylsilane (And) Polyhydroxystearic Acid (And) Coco-Caprylate/Caprates	58	Pourable
UV Attenuation Non-Nano ZnO Dispersions			
INP70ZSI	Zinc Oxide (And) Isononyl Isononanoate (And) Polyhydroxystearic Acid (And) Triethoxycaprylylsilane	67	Pourable
GCP45XZJ	Caprylic/Capric Triglyceride (And) Zinc Oxide (And) Polyhydroxystearic Acid (And) Jojoba Esters	42	Pourable

Natural Origin Product

**KOBO**

USA

BRASIL

UK

FRANCE

ASIA PACIFIC



KSL-552-EU

# High Naturality Max Zinc Stick, Crystal Clear, Dry-Touch

**Part 1**

- **GCP55ZSG** - Kobo Products: *Zinc Oxide (And) Caprylic/Capric Triglyceride (And) Polyhydroxystearic Acid (And) Stearoyl Glutamic Acid* 48.00%
- **Dub Infinite** - Stearinerie Dubois: *Coco-Caprylate/Caprate* 22.00%
- **SunBoost ATB Natural** - Kobo Products: *Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol* 3.00%

**Part 2**

- **EXCEBEADS™ CS-725** - Tokuyama Corp./Kobo Products: *Silica* 8.00%
- **FLORITE PS-10** - Tomita/Kobo Products: *Calcium Silicate* 5.00%

**Part 3**

- **Sunflower Wax** - Koster Keunen: *Helianthus Annuus (Sunflower) Seed Wax* 5.50%
- **Dub PTB** - Stearinerie Dubois: *Pentaerythrityl Tetrabehenate* 3.50%
- **Kesterwax K82H** - Koster Keunen: *C20-40 Alkyl Stearate* 2.00%

**Part 4**

- **KOBOGUARD® NATURAL 3000P** - Kobo Products: *Glyceryl Hydrogenated Rosinate* 3.00%

**Manufacturing Procedure**

1. Mix Part 1 in a beaker.
2. Add Part 2 under stirring.
3. Add Part 3 and heat upto 85°C to melt the waxes.
4. Add Part 4 and keep at 85°C to melt.
5. Pour at 85°C and cool at RT

**Description**

This simple and easy to produce sunscreen stick glides onto the skin to deposit maximum amount of ZnO with no white cast.

This formula contains 24.96% (almost) the maximum allowed concentration of ZnO. The astonishing transparency of the formula is thanks to the use of the milled dispersion **GCP55ZSG**.

This is an NOI:1 dispersion with 48% active ZnO. Sunboost ATB Natural helps to boost the SPF. KOBOGUARD® NATURAL 3000P helps ensure an even deposition of the mineral filter on the skin. EXCEBEADS™ CS-725 helps to imparts a smooth feel to the formula. FLORITE PS-10 gives a matte look and prevents sweating of the stick. Both powders are instrumental in achieving the targeted dry touch effect.

**Active Ingredient(s):**

Zinc Oxide 24.96%