KOBOFILLER™ NATURAL CCS-NJE4

The Next Generation of Fillers

KOBOFILLER™ NATURAL CCS-NJE4

INCI Name: *Calcium Carbonate (And) Mica (And) Jojoba Esters*

Particle Size: 19 µm

Oil Absorption (g/100g): 68

Bulk Density (g/in3): 3.66

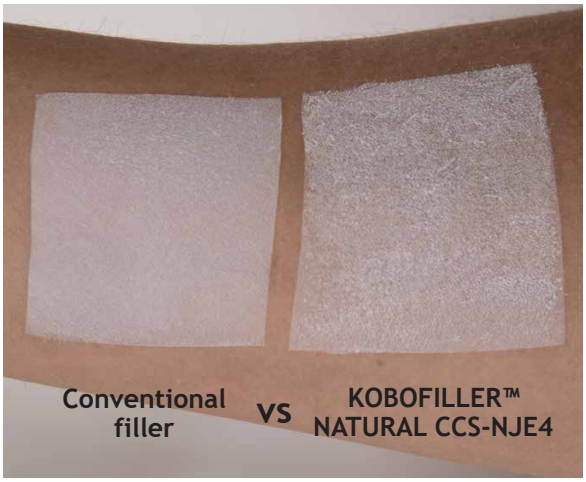
NOI (ISO 16128): 1.00

Unique Blend of Minerals	Surface treated calcium carbonate and sericite designed to deliver a soft, smooth feel while maintaining cost efficiency.
Enhanced Feel & Application	Provides a creamy yet silky, powdery feel with enhanced slip and spreadability
Enhanced Adhesion	Treated with jojoba esters using Kobo's patented* surface treatment to improve skin adhesion and overall wear performance
Soft Focus Effect	Superior light diffusion for a blurred finish
High Naturality	Natural origin surface treatment on mineral blend with high naturality index (ISO 16128): 1.00.

**Patent # US 8623386B2, WO 2009126859*
Natural ester, wax or oil treated pigment, process for production thereof, and cosmetic made therewith

Formulation Guidelines

- Typical Use Level: 5-50%
- Formulators can substitute this blend for conventional filler powders and can be processed using the same powder handling steps.



Performance

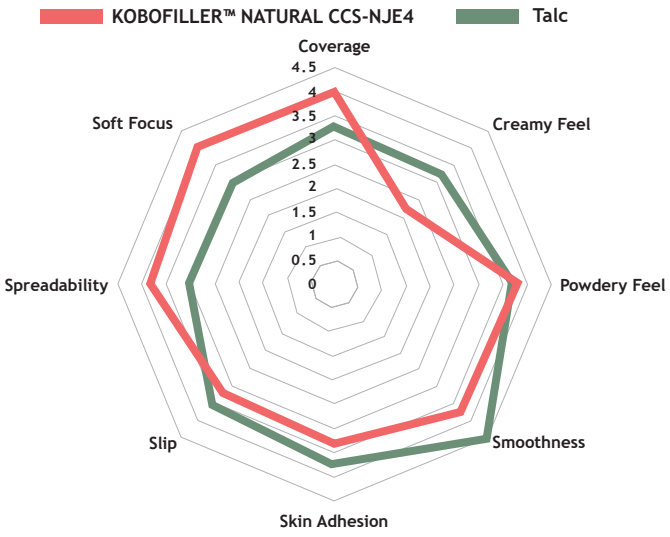
Objective: To evaluate and compare the performance of a cosmetic grade Talc powder and KOBOFILLER™ NATURAL CCS-NJE4 in various formats, using an internal sensory panel for performance assessment and colorimetric analysis for color measurement.

KOBOFILLER™ NATURAL CCS-NJE4 functions as a talc alternative.

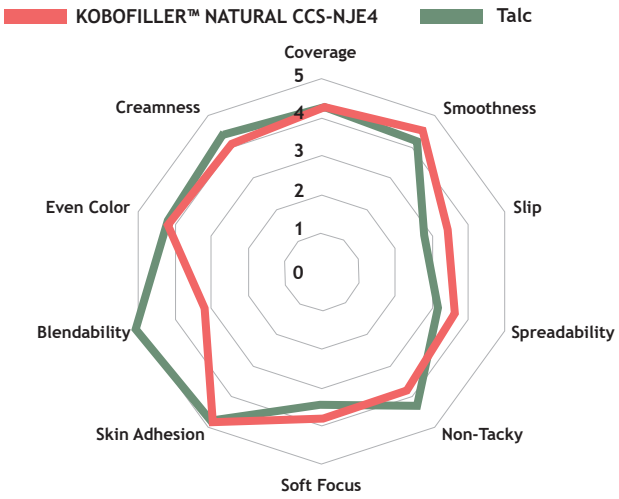
- **Delivers very similar sensorial and performance** attributes including **powdery feel, creaminess, smoothness, skin adhesion, slip, and spreadability, across a range of formulation types.**
- In a **pressed powder** with **40%** usage level, KOBOFILLER™ NATURAL CCS-NJE4 **performs comparably to Talc in powdery feel, smoothness, skin adhesion, and slip.** It also demonstrates enhanced performance over Talc in coverage, soft-focus effect, and spreadability.
- In an **emulsion** system with **10%** usage level, KOBOFILLER™ NATURAL CCS-NJE4 shows **comparable performance** to Talc **in even color payoff, coverage, smoothness, spreadability, non-tacky feel, and soft-focus effect**, while providing **slightly improved slip.**
- In a **hot-pour** system with **2%** usage level, KOBOFILLER™ NATURAL CCS-NJE4 is **comparable** to Talc **in smoothness, spreadability, non-tacky feel, and blendability.**

SPIDER CHART OF SENSORY PROPERTIES EVALUATED BY INTERNAL PANEL

Pressed Powder Evaluation



Emulsion Evaluation



KPP-153B

Natural, Talc-free Pressed Powder

Part 1

- **GMS-NOE4** - Kobo Products: Mica (And) *Hydrogenated Olive Oil Stearyl Esters* 44.68%
- **KOBOFILLER™ NATURAL CCS-NJE4** - Kobo Products: *Calcium Carbonate (And) Mica (And) Jojoba Esters* 40.00%
- **BTD-NOE2** - Kobo Products: *Titanium Dioxide (And) Hydrogenated Olive Oil Stearyl Esters* 7.00%
- **BRO-NOE4** - Kobo Products: *Iron Oxides (CI 77491) (And) Hydrogenated Olive Oil Stearyl Esters* 1.00%
- **BYO-NOE4** - Kobo Products: *Iron Oxides (CI 77492) (And) Hydrogenated Olive Oil Stearyl Esters* 0.86%
- **BBO-NOE4** - Kobo Products: *Iron Oxides (CI 77499) (And) Hydrogenated Olive Oil Stearyl Esters* 0.46%

Part 2

- OLIVE OIL (PURE) - Jeen International: *OLEA EUROPAEA (Olive Fruit) OIL (PURE)* 5.50%
- Lexgard Natural - Inolex: *Glyceryl Caprylate (And) Glyceryl Undecylenate* 0.50%

Manufacturing Procedure

1. Combine Part 1 and blend on high speed until pigments are uniform.
2. Add Part 2 to Part 1 and blend on high speed until oil is dispersed.
3. Press at 1000 psi.

Description

This light-as-air, natural pressed powder can be used on multiple complexions to even out skin tone. The use of Kobo's pigments and filler treated with Natural Olive Esters (NOE) provides a creamy feel and improves pressability. Powders can be pressed without additional dry binders when using NOE treated pigments. KOBOFILLER™ NATURAL CCS-NJE4 improves skin adhesion and contributes to the elegant texture.

KLF-386B

High Coverage, Talc-Free Mineral Only SPF Foundation

Part 1

- **HBP50T7** - Kobo Products: *Butyloctyl Salicylate (And) Titanium Dioxide (And) Alumina (And) Hydrogen Dimethicone (And) Polyhydroxystearic Acid* 18.00%
- **DIM2FH75MZCM** - Kobo Products: *Zinc Oxide (And) Dimethicone (And) Isononyl Isononanoate (And) Polyglyceryl-6 Polyricinoleate (And) PEG-10 Dimethicone (And) Hydrogen Dimethicone* 12.00%
- **KOBOFILLER™ NATURAL CCS-NJE4** - Kobo Products: *Calcium Carbonate (And) Mica (And) Jojoba Esters* 10.00%
- **WE70U** - Kobo Products: *Titanium Dioxide (And) Polyglyceryl-4 Isostearate (And) Cetyl PEG/PPG-10/1 Dimethicone (And) Hexyl Laurate (And) Isopropyl Titanium Triisostearate* 7.00%
- **KF-6038** - Shin Etsu: *Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone* 4.00%
- **KOBOGUARD® MQ60DM** - Kobo Products: *Trimethylsiloxysilicate (And) Dimethicone* 4.00%
- **SunBoost ATB** - Kobo Products: *Argania Spinosa Kernel Oil (And) Tocopheryl Acetate (And) Bisabolol* 4.00%
- **WE55Y** - Kobo Products: *Iron Oxides (CI 77492) (And) Polyglyceryl-4 Isostearate (And) Cetyl PEG/PPG-10/1 Dimethicone (And) Hexyl Laurate (And) Isopropyl Titanium Triisostearate* 3.20%
- KSG-320 - Shin-Etsu: *Isododecane (and) PEG-15/Lauryl Dimethicone Crosspolymer* 2.00%
- Garamite 7308 XR - Eckart/BYK: *Quaternium 90 Sepiolite & Quaternium 90 Montmorillonite* 0.80%
- **WE70R** - Kobo Products: *Iron Oxides (CI 77491) (And) Polyglyceryl-4 Isostearate (And) Cetyl PEG/PPG-10/1 Dimethicone (And) Hexyl Laurate (And) Isopropyl Titanium Triisostearate* 0.65%
- **WE70B** - Kobo Products: *Iron Oxides (CI 77499) (And) Polyglyceryl-4 Isostearate (And) Cetyl PEG/PPG-10/1 Dimethicone (And) Hexyl Laurate (And) Isopropyl Titanium Triisostearate* 0.35%

Part 2

- Deionized Water - *Water* 25.60%
- Butylene Glycol - Univar: *Butylene Glycol* 400%
- Mg Sulfate Hept - Fischer Scientific: *Magnesium Sulfate Heptahydrate* 1.50%
- Symdiol 68 - Symrise: *1,2-Hexanediol (And) Caprylyl Glycol* 0.60%
- Sensiva PA 20 - Schulke & Mayr: *Phenethyl Alcohol (And) Ethylhexyglycerin* 0.50%

Part 3

- **MSS-500W** - Kobo Products: *Silica* 1.00%
- **GWC-051H** - GuideWin/Kobo Products: *Vinyl Dimethicone/ Methicone Silsesquioxane Crosspolymer* 0.80%

Manufacturing Procedure

1. Prepare Part 1 by adding the ingredients in sequence, use a homogenizer with approximately 2000rpm
2. Prepare part 2
3. Make the emulsion by adding Part 2 to Part 1 (continuing to use homogenizer). Start at 2000 rpm, gradually increase to 5000 rpm
4. Add Part 3 and mix until homogeneous. Use 3000-4000 rpm
5. Pour into component

Description

This silky, non-sticky, high-coverage foundation is formulated to give high broad spectrum UV protection with only mineral filters. The formula contains HBP50T7, a light, pourable, ultra high efficiency dispersion of 15 nm PPS TiO2 and DIM2FH75MZCM, a highly concentrated but pourable dispersion of 100-300 nm PPS Zinc Oxide. DIM2H75MZCM is chosen for its silky skin feel and compatibility with the external phase of this w/si foundation. In this formula, it fulfills a double function as UV filter and opacifier. The level of pigmentary grade TiO_2 used can be reduced to less than half of what would normally be required, resulting in a cost efficient way of creating a high-coverage, mineral-only foundation. KOBOFILLER™ NATURAL CCS-NJE4 is a talc replacement which improves skin adhesion and contributes to the elegant creamy texture. The formula also contains KOBOGUARD® MQ60DM for improved wear and homogeneous deposition of sunscreens on the skin, SunBoost ATB for UV protection boosting and skin protection benefits, and WE dispersions of TiO_2 and Iron Oxides for ease of production and stability. Finally MSS-500W and GWC-051H are added for soft focus and mattifying effects.