# **Natural** Surface Treatments

#### Jojoba Esters Treatment (NJE)

Hydrogenated jojoba oil is a straight chain ester of 36 to 46 carbons in length. It does not have branching or points of unsaturation and contains terminal methyl groups at each end. As with jojoba oil there is no triglyceride component. Through hydrogenation of the colorless, flavorless jojoba oil, a functional and exceptionally pure, white solid is produced. Because of its high melting point the treatment is stable at high temperatures.

Kobo's patented surface treatment enables pigment particles to be rendered hydrophobic with this treatment. Jojoba Esters have similar properties to the human sebum, which help to balance the sebum on the skin. They can

contribute to moisturizing dry skin while easing sebum production in oily skin. Due to the natural origin of this treatment, it is ideal for use in formulas containing natural claims.

NJE treated pigments and powders offer a creamy feel and a good affinity to the skin. They are recommended for use in powders due to their good pressability, as well as emulsions and hot pours.

#### Patent #US 8623386 B2

Natural Ester, Wax or Oil Treated Pigment, Process for Production Thereof, and Cosmetic Made Therewith

	Trade Name	INCI Name	Product Type
	BBO-NJE2+	Iron Oxides (CI 77499) (And) Jojoba Esters	Black Iron Oxides
Nev	BEUB-NJE3+	Ultramarines (And) Jojoba Esters	Ultramarine Blue
	BRO-NJE2+	Iron Oxides (CI 77491) (And) Jojoba Esters	Red Iron Oxides
New	BYO-NJE3+	Iron Oxides (CI 77492) (And) Jojoba Esters	Yellow Iron Oxides
	BTD-NJE2+	Titanium Dioxide (And) Jojoba Esters	Pigmentary Titanium Dioxide
	RED 7CA K-NJE2	Red 7 Lake (And) Jojoba Esters	D&C Red No. 7 Calcium Lake
Nev	YELLOW 5AL-NJE8	Yellow 5 Lake (And) Jojoba Esters	FD&C Yellow No. 5 Aluminum Lake
	RBTD-671-NJE2+	Titanium Dioxide (And) Jojoba Esters	Pigmentary Titanium Dioxide
Ne	KoboMica 1000S-NJE5	Synthetic Fluorphlogopite (And) Jojoba Esters	Synthetic Mica
	KoboMica L-27-NJE2	Mica (And) Jojoba Esters	Mica
	GMS-NJE3	Mica (And) Jojoba Esters	Sericite
New	TALC N-NJE2	Talc (And) Jojoba Esters	Talc
	MT-500B-NJE5	Titanium Dioxide (And) Jojoba Esters	Attenuation Grade Titanium Dioxide
	A15-TiO <sub>2</sub> -S-NJE10	Titanium Dioxide (And) Hydrated Silica (And) Jojoba Esters	Non-Nano Titanium Dioxide
	TTO-NJE8+	Titanium Dioxide (And) Alumina (And) Jojoba Esters	Non-Nano Titanium Dioxide
	ZnO 750-NJE7	Zinc Oxide (And) Jojoba Esters	Attenuation Grade Zinc Oxide
	ZnO-C-NJE3+	Zinc Oxide (And) Jojoba Esters	Non-Nano Zinc Oxide



+ Raw material approved by Ecocert in accordance with the Cosmos and Ecocert Standards

### Natural Powder with NJE Treated Materials

7.00%

#### Formula KPP-020E

#### Part 1

- GMS-NJE3 Kobo Products: Mica (And) 45.18% Jojoba Esters
- Talc N-NJE2 Kobo Products: Talc (And) Jojoba 40.00% Esters
- RBTD-671-NJE2+ Kobo Products: Titanium Dioxide (And) Jojoba Esters • BYO-NJE3+ - Kobo Products:
- Iron Oxides (CI 77492) (And) Jojoba Esters
- BRO-NJE2+ Kobo Products: Iron Oxides (CI 77491) (And) Jojoba Esters
- Lexgard® Natural Inólex Chemical Company: 0.50% Glyceryl Caprylate (And) Glyceryl Undecylenate • BBO-NJE2+ - Kobo Products: 0.46%
- Iron Oxides (CI 77499) (And) Jojoba Esters

#### Part 2

• Jojoba Oil - Desert Whale Jojoba Co., Inc.: Simmondsia Chinensis (Jojoba) Seed Oil

#### Manufacturing Procedure

1. Blend Part 1 through pulverizer until color is fully developed.

- 1.00% 2. Add Part 2 and blend well.
- 3. Press at 300 psi. 0.86%

#### Description

This natural powder foundation features Kobo's Jojoba Ester-treated pigments and powders to give great feel, even application and good adherence on the skin, contributing to long wear.

#### 5.00%

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# Natural Surface Treatment

#### Hydrogenated Lecithin Treatment (PC)

Hydrogenated Lecithin is a popular natural treatment for cosmetics comprised of phospholipids.

It moisturizes the skin by promoting an increase in the skin's hydration, offers emollient properties, and provides a soothing effect, while functioning as an anti-oxidant.

Lecithin (PC) treated products. PC treated pigments and powders are hydrophobic. They offer a creamy texture, moisturizing feel and excellent affinity to the skin. They are ideal for use in powders and mineral makeup and can also be used in emulsions.

Kobo has developed a new series of Hydrogenated

Trade Name	INCI Name	Product Type
CELLULOBEADS D-10-PC2	Cellulose (And) Hydrogenated Lecithin	Cellulose Microsphere
GMS-PC2	Mica (And) Hydrogenated Lecithin	Sericite
MICA S-PC	Mica (And) Hydrogenated Lecithin	Mica

Not recommended for heating above 70°C during manufacturing

## Oil-Absorbing, Natural Pressed Powder with COVERSIL-100

#### Formula KPP-103A

#### Part 1

<ul> <li>IALC N-NJEZ - KOBO Products: Ialc (And) Jojoba Esters</li> <li>GMS-NJE3 - Kobo Products: Mica (And) Jojoba Esters</li> <li>RBTD-671-NJE2+ - Kobo Products: Titanium Dioxide</li> <li>(And) Jojoba Esters</li> </ul>	57.18% 20.00% 7.00%
MAGNESIUM MYRISTATE - Kobo Products:     Magnesium Myristate	2.50%
COVERSIL-100 - BoKwang/Kobo Products: Silica     BYO-NJE3+ - Kobo Products: Iron Oxides (Cl 77492)     (And).loioba Esters	2.50% 1.00%
BRO-NJE2+ - Kobo Products: Iron Oxides (CI 77491)     (And) Jaioba Estars	0.86%
(And) Jojoba Esters • Lexgard® Natural - Inolex Chemical Company: Gluceryl Caprulate (And) Gluceryl Underylenate	0.50%
• BBO-NJE2+ - Kobo Products: Iron Oxides (CI 77499) (And) Jojoba Esters	0.46%
Part 2	
Xiameter® PMX-200 Silicone Fluid 20CS - Dow Corning:     Dimethicone	2.50%
LEXOL® PG-865 - Inolex Chemical Company: Propulate / Dicaprulate / Dicaprate	2.50%
Xiameter® PMX-200 Silicone Fluid 350CS - Dow Corning:     Dimethicone	2.00%
SS4267 - Momentive: Dimethicone     (And) Trimethylsiloxysilicate	1.00%



+ Raw material approved by Ecocert in accordance with the

#### APPROVED

Cosmos and Ecocert Standards

#### Manufacturing Procedure

Blend Part 1 through pulverizer until color is fully developed.
 Add Part 2 and blend well.

3. Press at 500 psi.

#### Description

This natural powder foundation features COVERSIL-100, which helps to absorb oil and also gives the powder a very creamy and smooth feel on skin. COVERSIL-100 is used as a functional filler to help with the flowability of a pressed powder. Kobo's patented Natural Jojoba Ester-treated pigments and powders (NJE) gives great feel, even application, and good adherence on the skin, contributing to long wear. MAGNESIUM MYRISTATE is a dry binder to help with formula compressibility.

