# **Fibers**

### Europe Program

Kobo offers a variety of natural and synthetic fibers in different lengths, thicknesses and shapes. They can be used to promote texturizing, soft focus, lengthening and volumizing effects in finished products.



### **Natural Fibers**

**CELL-U-LASH**<sup>™</sup> fibers are made of *cellulose*, a natural polymer, and vary in length from 20µm to 110µm; they are hydrophilic and disperse easily in the initial water phase of an emulsion.

These fibers are an excellent choice for finished products containing natural ingredients.

### Nylon Fibers

Synthetic Nylon fibers are commonly used in mascara and eyebrow products for lengthening and volumizing effects.

### **Colored Nylon Fibers**

Colored Nylon Fibers containing Black Iron Oxide are available. They are especially effective in promoting lengthening properties in Mascara and Eyebrow products while contributing to and enhancing the overall color effect of the product.

### Polypropylene Fibers

Synthetic fibers made from *Polypropylene* can be used for lengthening and volumizing effects in mascara and eyebrow products or to achieve a soft focus effect in powders, color and skin care emulsions, and lipsticks.











SEM Image: **HEART FIBER 15T** KNY-3D

N-6 ARCH 3.3T2 SPLASH FIBER II

	Trade Name	INCI Name	Length	Diameter	Shape	Color	Notes
	CELL-U-LASH™ 40	Cellulose	20-25µm	1-2µm	Conventional fiber strands	White	Natural; Hydrophilic; Volumizing; Soft Focus
	CELL-U-LASH™ 90		60-75µm				Natural; Hydrophilic;
	CELL-U-LASH™ 150		80-110µm			Lengthening	
	KNY-3D	Nylon-66 (And) Titanium Dioxide	1.2mm	3 Denier	Fiber of uniform length	White	Synthetic
$\mathbf{I}$	HEART FIBER 15T-1MM	Nylon-6 (And) Silica	1mm	13.5 Denier	Unique "heart" shape; Hollow	White	Synthetic
	HEART FIBER 15T-2MM		2mm				
	N-6 ARCH 3.3T1	- Nylon-6	0.8-1.1 mm	Fiber; 3.3 Triangular with Decitex round edge cross section	,	White	Synthetic; Volumizing, long lash and curl
	N-6 ARCH 3.3T2		1.6-2.2 mm				
	SPLASH FIBER II 7T-1MM	Nylon-6 (And) Iron Oxides (CI 77499) (And) Silica	1mm	6.3 Unique "flowe Denier shape	Unique "flower"	Black	Synthetic
	SPLASH FIBER II 7T-2MM		2mm		shape		
	PP FIBER 6D05	Polypropylene (And) Silica	0.5mm	5.6 Denier	Short Fibers	White	Synthetic
	PP FIBER 6D2		2mm				



	MICA S-ASG3 - Kobo Products: Mica (And) Stearoyl Glutamic Acid	15.65%
	ZNO-C-ASG3J - Kobo Products: Zinc Oxide (And) Stearoyl Glutamic Acid BBO-ASG3 - Kobo Products: Iron Oxides (Cl 77499)	15.65%
•	(And) Stearoyl Glutamic Acid MSS-500W - Kobo Products: Silica BRO-ASG3 - Kobo Products: Iron Oxides (Cl 77491)	9.04% 7.87%
	(And) Stearoyl Glutamic Acid BYO-ASG3 - Kobo Products: Iron Oxides (Cl 77492)	5.50%
	(And) Stearoyl Glutamic Acid	3.14%
Pa	ırt 2	
•	Protachem <sup>*</sup> CTG - Protameen: Caprylic/Capric Triglyceride Cetiol <sup>®</sup> CC - Cognis Corp.: Dicaprylyl Carbonate SunBoost ATB Natural - Kobo Products: Argania Spinosa Kernel Oil (And) Tocopheryl Acetate	18.37% 7.60%
	(And) Bisabololl  COSMOL** 43V - Ikeda: Polyglyceryl-2 Triisostearate  Plandool**-LG1 - Nippon/Kobo Products:	4.75% 3.63%
	Phytosteryl/Behenyl/Octyldodecyl Lauroyl Glutamate Carnauba Wax SP 63P - Strahl & Pitsch:	1.00%
	Copernicia Cerifera (Carnauba) Wax	0.40%

•	Polyaldo™ 10-1-0 K FG - Lonza: <i>Polyglyceryl-10 Oleate</i>	1.00%
•	Lexgard® Natural - Inolex Chemical Company:	
	Glyceryl Caprylate (And) Glyceryl Undecylenate	0.40%

### Part 4

• CELL-U-LASH<sup>™</sup> 40 - Kobo Products: Cellulose 1.00%

### Manufacturing Procedure

- 1. Blend Part 1.
- 2. Heat Part 2 to 80°C under propeller agitation.
- Slowly add Part 1 to Part 2 under prop mixer and start to gradually cool.
- 4. Slowly add Parts 3 and 4, respectively, to Parts 1 and 2 at 45°C.

### Description

This natural eyebrow filler features Kobo's ASG treated fillers and pigments which help to impart color, payoff and adhesion to brows. Kobo's silica microsphere, MSS-500W, provides payoff and glide during application. SunBoost ATB Natural is a proprietary ratio of anti-oxidant, anti-irritant and anti-inflammatory agents that nourishes brows. Kobo's cellulose fiber, CELL-U-LASH\* 40, fills in brows making them appear more even and covers sparse areas. Plandool\*-LG1 improves malleability of the wax complex which increases bulk transfer to the brow.

KMA-074A

Vegelight<sup>™</sup> 1214 LC - Grant Industries, Inc.:

Coconut Alkanes (And) Coco-Caprylate/Caprate

## All-In-One Conventional Mascara

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Part 3

	Paraffin Wax 4344 - Strahl & Pitsch: <i>Paraffin</i>	7.00%
•	Carnauba Wax SP 63P - Strahl & Pitsch:	
	Copernicia Cerifera (Carnauba) Wax	3.00%
•	Dermofat 4919 - Alzo Chemical: Stearic Acid	3.00%
•	Lipo® GMS-450 - Vantage: Glyceryl Stearate	3.00%
•	KOBOGUARD® HRPC - Kobo Products: Hydrogenated	
	Polycyclopentadiene (And) Polyethylene (And)	
	Copernicia Cerifera (Carnauba) Wax (And) Tocopherol	2.00%
•	Ganex® V-216 - Ashland: VP/Hexadecane Copolymer	1.50%
•	Apifil CG - Gattefosse: PEG-8 Beeswax	1.00%
•	Permethyl® 104A - Presperse: Polyisobutene	1.00%

### Part 2

•	Deionized Water - Water	15.00%
•	BLACK NF - Kobo Products: Iron Oxides (CI 77499)	10.00%
•	PVP K-30 - Ashland: Poly(Vinyl Pyrrolidone)	0.80%
	Lexgard® O - Inolex Chemical Company: Caprylyl Glycol	0.20%
	Prisorine™ 3515 - Croda: Isostearyl Alcohol	0.10%
	S-6W-6 - Shin Etsu: Simethicone	0.05%
Pa	art 3	
•	Deionized Water - Water	29.65%
•	Butylene Glycol - Ruger Chemical: Butylene Glycol	2.00%
•	KAÓLIN - Imerys: Kaolin	2.00%
	KoboMica S-25 - Kobo Products: Mica	1.50%
	MSS-500W - Kobo Products: Silica	1.00%
	AMP Ultra® PC 2000 - Angus Chemical Company:	1100/0

### Part 4

ГС	11 ( 4	
•	DAITOSOL 5000AD - Daito/Kobo Products:	
	Acrylates Copolymer (And) Water	14.009
•	HEART FIBER 15T-1MM - Nikko/Kobo Products: Nylon-6 (And) Silica	0.159
•	SPLASH FIBER II 7T-2MM - Nikko/Kobo Products:	
	Nylon-6 (And) Iron Oxides (CI 77499) (And) Silica	0.159

Natrosol® 250 HHR CS - Ashland: Hydroxyethylcellulose

Trisodium EDTA - Spectrum Chemical: Trisodium EDTA

Keltrol® CG - CP Kelco: Xathan Gum

### Part 5

5.00%

Euxyl® PE 9010 - Schulke & Mayr:
 Phenoxyethanol (And) Ethylhexylglycerin
 0.80%

### Manufacturing Procedure

### Oil Phase:

 Combine Part 1 in side beaker. Heat to 85-90°C with slow agitation with spatula.

### Grind Phase:

- Add water to beaker. Prop mix & heat to 60°C.
- Add PVP, followed by Isostearic Alcohol, Caprylyl Glycol, & Simethicone.
- 4. Sprinkle Black NF into the vortex. Mix until pigment is wet out.
- 5. Transfer to homogenizer for 30 minutes.

### Water Phase: (main beaker)

- . Record tare weight of main beaker & sweep.
- 7. Add water to the main beaker. Begin heating to 60°C with prop mixing.
- 8. Add Trisodium EDTA.
- 9. Pre-mix Butylene Glycol, Natrosol, & Xanthan Gum.
- 10. Add grind phase.
- 11. Heat to 85°C.
- Add AMP Ultra to batch. Then sprinkle in MSS-500W, Kaolin, & KoboMica S-25.
- 13. Add Oil phase into water phase, maintain mixing & temperature around  $85\,^{\circ}\text{C}$  for 15 mins.
- 14. Begin to air cool.
- 15. Change to sweep when the bulk becomes thicker.
- 16. Pre-mix film former with fibers and add to batch at 45°C.
- 17. Add Euxyl PE 9010.
- 18. Mix together for 5 minutes & QS missing weight with H20.
- 29. Cool & mix until bulk reaches 28°C.

### Description

0.50%

0.30%

0.20%

0.10%

This all-in-one conventional mascara features both HEART FIBER 15T-1MM and SPLASH FIBER II 7T-2MM. The combination of the heart and black star shape fibers gives the lashes both length and volume. KOBOGUARD® HRPC provides a water-resistant film and allows the mascara to be buildable upon application. DAITOSOL 5000AD also contributes to water-resistant properties. BLACK NF provides deep black color to the mascara. The combination of KoboMica S-25 and MSS-500W provides thickess and body while contributing to volume on the lashes.



2-Amonoisobutanol