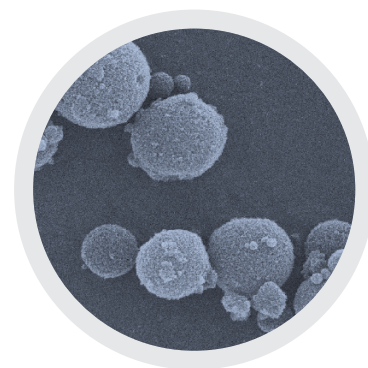


Microspheres

North America Program

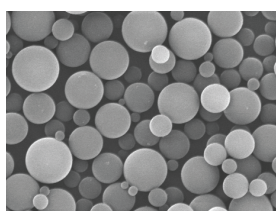


Microspheres are discrete spherical particles ranging from 1 to 50 microns in average particle size. Depending on their size and composition, Microspheres will impart finished products with elegant **silky textures**, **enhanced slip** or **ball bearing effect**; they will promote better blendability on the skin, a more natural finish and increased payoff. Microspheres are also able to scatter light to diminish the look of fine lines on the skin, while letting enough light through so the look of the skin is natural, an effect known as **“Soft Focus”** or **“Optical Blurring.”** Some Microspheres are porous and have a high **oil absorption capacity**: they can be used for sebum

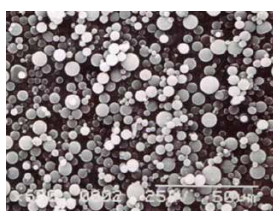
control or as carriers to absorb and deliver materials. A special use of Microspheres is in mascaras: non-absorbent grades of silicas of different diameters have a **volumizing effect**, with minimum absorbency.

Kobo offers a wide range of Microspheres, with different sizes, feel, absorption, and composition which allow formulators achieve the effects they need in their formulas.

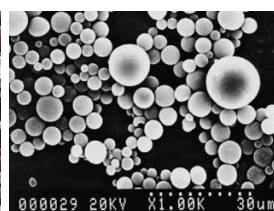
Kobo also offers Surface Treated Microspheres, Microsphere Complexes and Composite Microspheres, which can be used instead of, or in combination with, regular Microspheres to achieve unique effects (*download or request flyers*).



GWC-060G



MSP-822



EA-209



LSP-537



KLP-162

High Coverage, Semi-Matte Lipstick

Part 1

- **INBP45R7C** - Kobo Products: *Red 7 Lake (And) Isononyl Isononanoate (And) Isopropyl Myristate (And) Stearalkonium Hectorite (And) Isopropyl Titanium Triisostearate (And) Propylene Carbonate (And) Polyhydroxystearic Acid* 14.00%
- **COSMOL™ 222** - Ikeda Corporation: *Diisostearyl Malate* 13.20%
- **COSMOL™ 168ARV** - Ikeda Corporation: *Dipentaerythrityl Hexahydroxystearate/Hexastearate/Hexarosinate* 10.52%
- **COSMOL™ 43V** - Ikeda Corporation: *Polyglyceryl-2 Triisostearate* 10.00%
- **KOBOGUARD® 5400 CCT** - Kobo Products: *Hydrogenated Polycyclopentadiene (And) Caprylic/Capric Triglyceride* 10.00%
- **CPF-3300@10cSt** - Avantor/Kobo Products: *Phenyl Trimethicone* 7.98%
- **INBP70U** - Kobo Products: *Titanium Dioxide (And) Isononyl Isononanoate (And) Isopropyl Myristate (And) Stearalkonium Hectorite (And) Isopropyl Titanium Triisostearate (And) Propylene Carbonate (And) Polyhydroxystearic Acid* 7.00%
- **Ozokerite Wax White SP 1020P** - Strahl & Pitsch: *Ozokerite* 6.00%
- **PM WAX 82** - Toray/Kobo Products: *Polyethylene (And) Microcrystalline Wax* 4.90%

- **INBP55EY** - Kobo Products: *Iron Oxides (CI 77492) (And) Isononyl Isononanoate (And) Isopropyl Myristate (And) Stearalkonium Hectorite (And) Polyhydroxystearic Acid (And) Isopropyl Titanium Triisostearate (And) Propylene Carbonate* 4.40%
- **CARESS® BN30** - Bent Tree/Kobo Products: *Boron Nitride* 4.00%
- **SALACOS® 334** - Ikeda Corporation: *Caprylic/Capric/Myristic/Stearic Triglyceride* 2.00%

Part 2

- **MSS-500/3H** - Kobo Products: *Silica* 4.00%
- **SILICA SHELLS** - Kobo Products: *Silica* 2.00%

Manufacturing Procedure

1. Combine Part 1 and heat to 85 °C.
2. Slowly add Part 2 and mix until homogeneous.
3. Pour at 85 °C (ensure lipstick mold is not cold).

Description

This high coverage, semi-matte lipstick features a combination of Kobo's high oil absorption microspheres, **SILICA SHELLS** and **MSS-500/3H**, which offer a background matte effect with increased payoff and a smooth application. **CARESS® BN30** is a boron nitride that improves wear and gives a velvet finish. Kobo's **INBP Pigmentary Dispersions** ease the manufacturing process and give a more intense, uniformly developed color. **CPF-3300@10cSt** is a low viscosity phenyl trimethicone that improves feel and application. **PM WAX 82** contributes to the structure of the formula. **KOBOGUARD® 5400 CCT** is a film former that helps with long wear.

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	Trade Name	INCI Name	Size (µm)	Oil Abs* (g/100g)	Refract Index	Bulk Density (g/in ³)
Polymer Microspheres	MST-203	Polymethylsilsesquioxane	2	50	1.41	6.5
	MST-547		4.5	54	1.41	7.0
	DIASPHERE® KS-500		5	96	1.41	7.0
	DIASPHERE® KS-1000		10	50	1.41	5.0
	SEQ-ML5		6	50	1.42	8.8
	SEQ-White1	Polymethylsilsesquioxane (And) Polyphenylsilsesquioxane	8	34	1.49	7.1
	New GWC-060F	Polybutyl Methacrylate	6	55	1.48	5.0
	New LSP-537	Methyl Methacrylate Crosspolymer	5	71	1.49	3.8
	BPA-500X		7	58	1.49	6.7
	MSP-930		7	59	1.49	6.4
	MSP-825	Polymethyl Methacrylate	8	57	1.49	6.7
	MSP-822		9	48	1.49	5.3
	BPA-500		10	55	1.49	5.2
	Spherical POWDER SE-3107A**	Ethylene/Methacrylate Copolymer	12	62	1.49	3.1
	New GWC-150E	Polybutyl Acrylate (And) Silica	15	65	1.49	8.0
	New RUBCOULEUR KL501(2M)-CL	Lauryl Methacrylate/Glycol Dimethacrylate Crosspolymer (And) Acrylates/Ethylhexyl Acrylate/Dimethicone Methacrylate Copolymer	2	66	1.49	4.1
	New RUBCOULEUR KL501-CL		8	60	1.49	4.2
	EA-209**	Ethylene/Acrylic Acid Copolymer	10	60	1.51	2.6
	CL-2080**	Polyethylene	11	60	1.51	4.0
	BPD-800	HDI/Trimethylol Hexyllactone Crosspolymer (And) Silica	7	63	1.52	6.4
BPD-500W	11		60	1.52	8.2	
BPD-500	15		65	1.52	9.5	
BPD-500T	HDI/PPG/Polycaprolactone Crosspolymer (And) Silica	13.5	58	1.52	8.2	
TR-1	Nylon-6	13	112	1.53	4.0	
SP-500	Nylon-12	5	60	1.53	4.7	
SP-10		10	60	1.53	6.2	
New GWC-060G	Styrene/Acrylates Copolymer	6	55	1.54	4.1	
Mineral Microspheres	MSS-500/3	Silica	3	135	1.47	3.5
	MSS-500/3H		3	300	1.47	1.3
	MSS-500/3N		5.5	33	1.47	6.1
	MSS-500		12	133	1.47	5.8
	MSS-500W+		12	119	1.47	6.2
	MSS-500/H		12	300	1.47	3.1
	MSS-500/N		11.5	38	1.47	6.7
	MSS-500/20N		20	40	1.47	12.9
	SILICA SHELLS		3	490	1.47	0.8
	New FLORITE PS-10		10	434	1.63	1.1
FLORITE R	Calcium Silicate	29	650	1.63	1.2	
Natural Polymer Microspheres	New MAKIBEADS ECO D-5+++	Poly(lactic Acid)	12	54	1.46	3.2
	CELLULOBEADS D-5	Cellulose	10	70	1.49	9.7
	CELLULOBEADS D-10+		15	60	1.49	11.6
	CELLULOBEADS D-30		30	60	1.49	13.3
	CELLULOBEADS D-50		50	56	1.49	14.9
	CELLULOBEADS USF+		4	184	1.49	2.7
Spherical Elastomers	New ELIGHT SDS	Dimethicone/Vinyl Dimethicone Crosspolymer (And) Silica (And) Dimethicone	28	60	1.51	5.4
	New MST-E8	Vinyl Dimethicone/Methicone Silsesquioxane Crosspolymer	8	100	-	4.1

* Oil Abs: ASTM, D281-84

** EA-209 & CL-2080 are heat sensitive and will gel if heated above 70°C. SE-3107A have a softening point of 80°C and should be added under this temperature.

This chart was prepared to assist in formulating with Microspheres. The information contained herein is believed to be accurate at the time of printing, but should not be used as a substitute for product specification sheets.



COSMOS APPROVED

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



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Microspheres

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