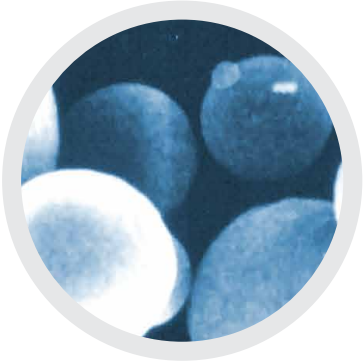
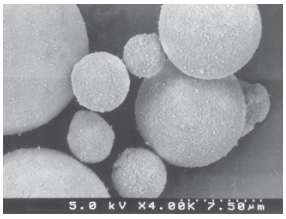
Microspheres

North America Program

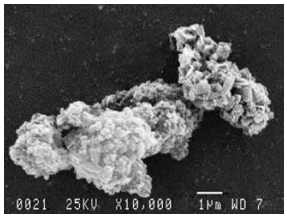


Microspheres are discrete spherical particles ranging in average particle size from 1 to 40 microns.
Because of their size and shape, Microspheres offer a **ball-bearing effect** which will impart finished products with an elegant silky texture, increased payoff, and enhanced slip.
This ball-bearing effect promotes better blendability on the skin and a more natural finish.
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. This phenomenon is known as "Soft Focus Effect" or "Optical Blurring."
Some Microspheres are porous and have a high oil absorption capacity: they can act as **carriers** to absorb and deliver materials, and can be used for **sebum control**.
A special use of Microspheres is in mascaras. The non-absorbent grades of silicas of different diameters have a **volumizing effect**, with minimum absorbency.
CELLULOBEADS are hydrophilic Microspheres made of cellulose which have a high capacity to absorb moisture. They are also available colored with inorganic colorants.

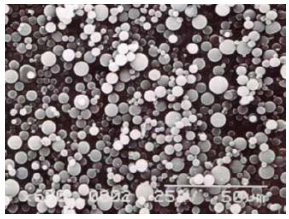
Since they can be used in all product forms (powders, anhydrous hot pours, emulsions, etc...), Microspheres, whether used individually or in combination, have become indispensable to formulation of state-of-the-art cosmetic products.

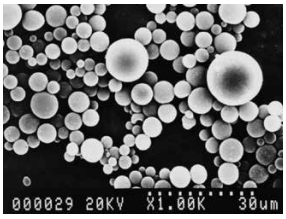


BPD-500



SILICA SHELLS


MSP-822



EA-209

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.

	Trade Name	INCI Name	Size (µm)	Oil Abs* (g/100g)	Refract Index	Bulk Density (g/in³)
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
	New SESQ-ML5		6	50	1.42	8.8
	New SESQ-White1	Polymethylsilsesquioxane (And) Polyphenylsilsesquioxane	8	34	1.49	7.1
	BPA-500X	Methyl Methacrylate Crosspolymer	7	58	1.49	6.7
	MSP-930		7	59	1.49	6.4
	MSP-825		8	57	1.49	6.7
	MSP-822	Polymethyl Methacrylate	9	48	1.49	5.3
	BPA-500		10	55	1.49	5.2
	SPHERICAL THERMOPLASTIC POWDER SE-3107A**	Ethylene/Methacrylate Copolymer	12	62	1.49	3.1
	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-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
	TR-2		20	141	1.53	3.5
	SP-500	Nylon-12	5	60	1.53	4.7
	SP-10		10	60	1.53	6.2
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	Calcium Silicate	10	434	1.63	1.1
	FLORITE R		29	650	1.63	1.2
Natural Polymer Microspheres	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
	CELLULOBEADS D-10(R-33P)	Cellulose (And) Iron Oxides (CI 77491)	10	48	-	9.9
	CELLULOBEADS D-10(Y-33P)	Cellulose (And) Iron Oxides (CI 77492)	10	42	-	10.3
	CELLULOBEADS D-10(UB-33)	Cellulose (And) Iron Oxides (CI 77499) (And) Silica	10	51	-	10.8
	CELLULOBEADS D-10(TI-33)	Cellulose (And) Titanium Dioxide (And) Aluminum Hydroxide	10	41	-	10.4
	New MAKIBEADS ECO D-1	Polylactic Acid (And) Polyglyceryl-5 Laurate	4	96	1.46	1.6
	New MAKIBEADS ECO D-5+++	Polylactic Acid	12	54	1.46	3.2
Spherical Elastomers	New MST-E8	Vinyl Dimethicone/Methicone Silsesquioxane Crosspolymer	8	77	-	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 subsitute for product specification sheets.

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

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