

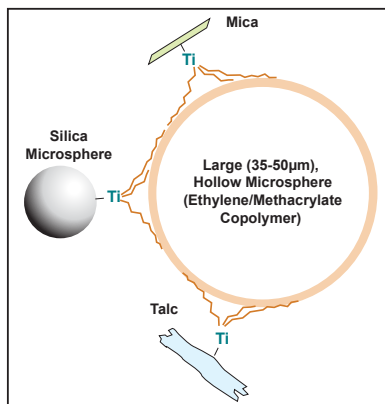
Surface Treated Microspheres & Complexes

USA Program

Microsphere Complexes: Kobo's patented technology covalently bonds Isopropyl Titanium Triisostearate to various substrates such as Platelets, Spheres and Pigments. The resulting complex offers the **best balance of properties possible**, including:

- lightweight, powdery afterfeel
- soft focus effect
- high oil absorption
- pearlescent effect

Patent #US 5356617
Pigment-material-microsphere complexes and their production



Trade Name	INCI Name	Size (µm)	Oil Abs (g/100g)	Bulk Density (g/in ³)
DSPCS-I2	Silica (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	23	280	1.0
DSPCS/20N-I2	Silica (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	45	550	0.7
DSPCS/3H-I2	Silica (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	30	375	0.7
DSPCS/3N-I2	Silica (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	45	470	0.6
DSPCS/H-I2	Silica (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	28	800	0.4
DSPCS/N-I2	Silica (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	43	350	0.8
SPCAT-I2	Talc (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	26	193	1.0
SPCM-I2	Mica (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	29	185	1.4
SPC/BLACK NF-I2	Iron Oxides (CI 77499) (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	25	224	0.9
SPC/MST-547-I2	Polymethylsilsesquioxane (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	23	255	0.4
SPC/KTZ BRONZE DOR-I2	Mica (And) Iron Oxides (CI 77491) (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	29	282	1.1
SPC/KTZ CLASSIC WHITE-I2	Mica (And) Titanium Dioxide (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	25	268	1.2
SPC/KTZ COPPER-I2	Mica (And) Iron Oxides (CI 77491) (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	31	214	1.2
SPC/KTZ FINE WHITE-I2	Mica (And) Titanium Dioxide (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	17	260	1.1
SPC/KTZ GOLD LAME-I2	Mica (And) Titanium Dioxide (And) Iron Oxides (CI 77491) (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	26	260	1.2
SPC/KTZ INTERVAL BLUE-I2	Mica (And) Titanium Dioxide (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	25	260	1.4
SPC/KTZ INTERVAL GOLD-I2	Mica (And) Titanium Dioxide (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	25	232	1.2
SPC/KTZ INTERVAL GREEN-I2	Mica (And) Titanium Dioxide (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	25	243	1.3
SPC/KTZ INTERVAL RED-I2	Mica (And) Titanium Dioxide (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	26	205	1.3
SPC/KTZ ROUSSILLON-I2	Mica (And) Iron Oxides (CI 77491) (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	28	230	1.2
SPC/KTZ SUNBURST GOLD-I2	Mica (And) Titanium Dioxide (And) Iron Oxides (CI 77491) (And) Ethylene/Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate	75	260	1.0

Technical Literature ref MCxTrUS-001 - July 17, 2017

KOBO
Kobo Products, Inc.
3474 So. Clinton Ave.
So. Plainfield, NJ 07080
USA
tel +1 (908) 757-0033
fax +1 (908) 757-0905

Kobo Products, SAS
135 Rue Buissonniere
Quartier Bouysset
31670 LABEGE
France
tel +33 (0)5-62-88-77-40
fax +33 (0)5-62-88-77-49

Kobo Brasil Ltda.
Rua Bamboré n.41
Ipiranga - São Paulo/SP
04278-060
Brasil
tel +55 (11) 5062-0634





www.koboproducts.com

Surface Treated Microspheres & Complexes

Surface Treated Microspheres: have been developed for easier use in formulations containing oil.

Treated Microspheres offer the following properties:

- enhanced skin feel
- soft focus
- all of the properties of the treatment that it contains
- better blendability on the skin
- better adhesion

Treatment	Trade Name	INCI Name	Size (µm)	Oil Abs (g/100g)	Bulk Density (g/in ³)
Lipophilic Treatment	BPA-515	Polymethyl Methacrylate (And) Isopropyl Titanium Triisostearate	9	50	3.8
	Nylon 10-12	Nylon-12 (And) Isopropyl Titanium Triisostearate	8	56	3.5
Natural Treatment	CELLULOBEADS D-10-PC2	Cellulose (And) Hydrogenated Lecithin	11	35	5.1
	CT-2 NYLON SP-500	Nylon-12 (And) Chitosan	5	65	3.0
Silicone Treatment	SILICA SHELLS-SH	Silica (And) Methoxy Amodimethicone/Silsesquioxane Copolymer	3	475	0.7
	MSS-500-NS5	Silica (And) Methoxy Amodimethicone/Silsesquioxane Copolymer	12	105	8.5
Fluorinated Treatment	 MSS-500N-FS	Silica (And) Perfluorooctyl Triethoxysilane	8	24	14.4
	 MST-547-FS	Polymethylsilsesquioxane (And) Perfluorooctyl Triethoxysilane	4	47	6.3
	 SP-10-FS	Nylon-12 (And) Perfluorooctyl Triethoxysilane	9	60	4.4
Hybrid Treatment	 SILIGHT DS-PDL3	Silica (And) Dimethicone (And) Cetearyl Alcohol (And) Stearic Acid (And) Ceramide NP (And) Phytosterols	6	100	4.7

This chart was prepared to assist in formulating with Microsphere Complexes. 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. **N.A.** = Not available at the time of printing

Fresh Glow Foundation

Formula KCP-037

Part 1

- **BTD-11S2** - Kobo Products: *Titanium Dioxide (And) Triethoxycaprylylsilane* 24.20%
- **TALC U-11S2** - Kobo Products: *Talc (And) Triethoxycaprylylsilane* 5.90%
- **BYO-11S2** - Kobo Products: *Iron Oxides (CI 77492) (And) Triethoxycaprylylsilane* 3.50%
- **GMS-11S2** - Kobo Products: *Mica (And) Triethoxycaprylylsilane* 3.50%
- **BRO-11S2** - Kobo Products: *Iron Oxides (CI 77491) (And) Triethoxycaprylylsilane* 1.75%
- **BBO-11S2** - Kobo Products: *Iron Oxides (CI 77499) (And) Triethoxycaprylylsilane* 0.75%
- Methyl Paraben NF - International Sourcing: *Methylparaben* 0.20%
- Propyl Paraben NF - International Sourcing: *Propylparaben* 0.20%

Part 2

- Lexol® EHP - Inolex Chemical Company: *Ethylhexyl Palmitate* 43.00%
- **PM WAX 82** - Toray/Kobo Products: *Polyethylene (And) Microcrystalline Wax* 3.00%
- **KOBOGUARD® 5400 SQ** - Kobo Products: *Hydrogenated Polycyclopentadiene (And) Squalane* 2.00%
- Lameform® TGI - BASF: *Polyglycerol-3 Diisostearate* 2.00%
- Petroleum G-1958 - Ruger Chemical: *Petrolatum* 2.00%
- SF1642 - Momentive: *C30-45 Alkyl Dimethicone* 2.00%
- Carnauba Wax SP 63P - Strahl & Pitsch: *Copernicia Cerifera (Carnauba) Wax* 1.00%

- Microcrystalline Wax SP-89 - Strahl & Pitsch: *Microcrystalline Wax* 1.00%
- Cetiol® SB 45 - BASF: *Shea Butter* 0.50%

Part 3

- **DSPCS/H-12** - Kobo Products: *Silica (And) Ethylene/ Methacrylate Copolymer (And) Isopropyl Titanium Triisostearate* 3.50%

Manufacturing Procedure

1. Blend Part 1 and pass through a micropulverizer until the color is fully dispersed.
2. Heat Part 2 with stirring to 80°C.
3. Add Part 1 to Part 2 and mix until homogenous.
4. Add Part 3.
5. Continue to mix until uniform while maintaining temperature.
6. Pour at 78°C-80°C.

Description

This Fresh Glow Foundation formula features Kobo's 11S Silane-Treated Pigments that disperse easily and adhere well to the skin. KOBOGUARD® 5400 SQ, resin composite, gives quick build up with a water-resistant film, and aids in long wear. DSPCS/H-12 gives a lightweight feel and helps the formula go immediately into a powder on the skin. PM WAX 82 helps with the structure.

KOBO

www.koboproducts.com