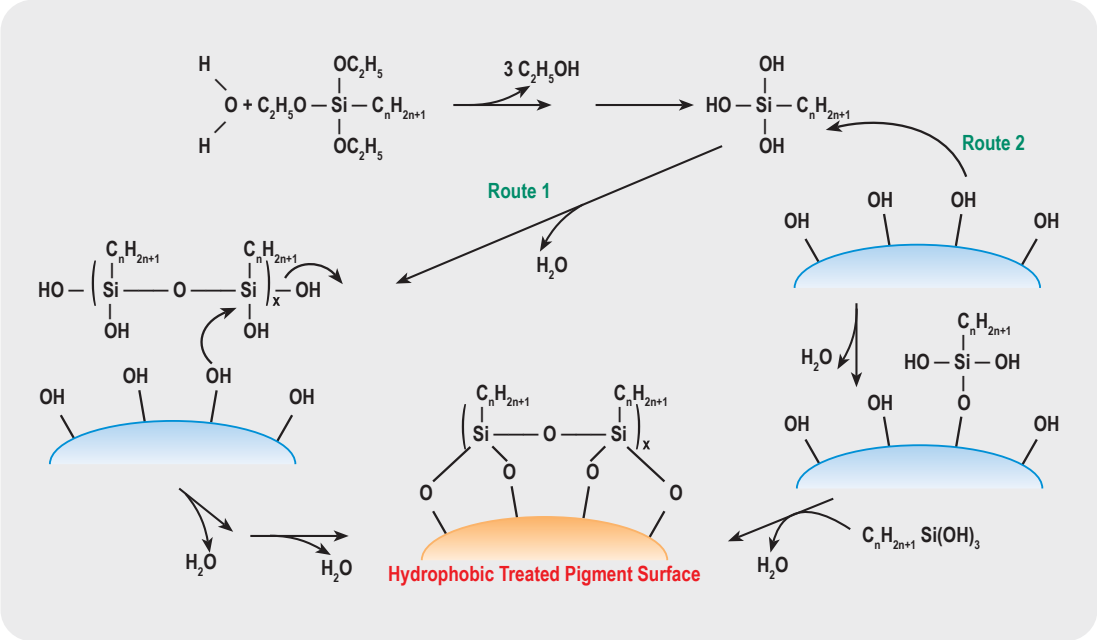
Triethoxy Caprylylsilane

Treatment-11S

***Triethoxycaprylylsilane** is a very reactive surface-treating agent, because the hydrolysis of Si-O bond takes place readily in presence of moisture to form silanol.*

The caprylylsilyl group is then chemically bonded to the pigment via a condensation reaction between the silanol group formed above and the hydroxyl groups of the pigment surface. This reaction is thus especially suitable for treament of metal oxides. At the completion of the reaction, all ethoxy groups are substituted and caprylylsilyl groups are crosslinked to the pigments to form a very stable coating, even at low pH.



Silicone treated pigments disperse well in cyclomethicones. They have a very low surface tension and excellent hydrophobicity, but they sometimes have poor wettability in common organic vehicles. While they offer maximum water repellency, triethoxycaprylylsilane treated pigments, because of the lipophilic caprylyl groups, are easy to disperse in esters, mineral oils and silicone fluids : higher pigment loading can be achieved as compared to methicone treated pigments. The treatment is also physicochemically stable, even at pH 3, has no residual methanol, and, due to the absence of Si-H bonds, has zero hydrogen potential.

Trade Name	INCI Name	Product type
MT-600B-11S5	*Titanium Dioxide (And) Triethoxycaprylylsilane*	Attenuation Grade Titanium Dioxide
A120-ZNO-11S3	*Zinc Oxide (And) Triethoxycaprylylsilane*	Attenuation Grade Zinc Oxide
MZO-35-11S5		
ZNO FSF-11S4		
ZNO-USP1-11S3		
New ZNO XZ-11S3L		
New A1K-TiO2-11S2	*Titanium Dioxide (And) Aluminum Hydroxide (And) Triethoxycaprylylsilane*	IR Blocker
New TiO2-IR300-11S2	*Titanium Dioxide (And) Triethoxycaprylylsilane*	
BTD-11S2		Pigmentary Titanium Dioxide
RBTD-671-11S2		
BBO-11S2	*Iron Oxides (CI 77499) (And) Triethoxycaprylylsilane*	Black Iron Oxide
BLACK NF-11S2	*Iron Oxides (CI 77499) (And) Triethoxycaprylylsilane*	
BRO-11S2	*Iron Oxides (CI 77491) (And) Triethoxycaprylylsilane*	Red Iron Oxide
BYO-11S2	*Iron Oxides (CI 77492) (And) Triethoxycaprylylsilane*	Yellow Iron Oxide
BEUB-11S2	*Ultramarines (And) Triethoxycaprylylsilane*	Ultramarine Blue
BUV CG-11S2		Ultramarine Violet
BFF-11S2	*Ferric Ammonium Ferrocyanide (And) Triethoxycaprylylsilane*	Blue Ferric Amm. Ferrocyanide
BGCO-11S3	*Chromium Oxide Greens (And) Triethoxycaprylylsilane*	Green Chromium Oxide
BHG TM-11S2	*Chromium Hydroxide Greens (And) Triethoxycaprylylsilane*	Green Chromium Hydroxide
RED 6BA C-11S5	*Red 6 Lake (And) Triethoxycaprylylsilane*	D&C Red No. 6 Barium Lake
RED 6SS-11S2	*Red 6 (And) Triethoxycaprylylsilane*	D&C Red No. 6
RED 7CA C-11S5	*Red 7 Lake (And) Triethoxycaprylylsilane*	D&C Red No. 7 Calcium Lake
RED 27AL-11S3	*Red 27 Lake (And) Triethoxycaprylylsilane*	D&C Red No. 27 Aluminum Lake
RED 28AL C-11S3	*Red 28 Lake (CI 45410) (And) Triethoxycaprylylsilane*	D&C Red No. 28 Aluminum Lake
RED 33AL-11S2	*Red 33 Lake (And) Triethoxycaprylylsilane*	D&C Red No. 33 Aluminum Lake
YELLOW 5AL-11S2	*Yellow 5 Lake (And) Triethoxycaprylylsilane*	FD&C Yellow No. 5 Aluminum Lake
YELLOW 6AL-11S2	*Yellow 6 Lake (And) Triethoxycaprylylsilane*	FD&C Yellow No. 6 Aluminum Lake
BLUE 1AL-11S4	*Blue 1 Lake (And) Triethoxycaprylylsilane*	FD&C Blue No. 1 Aluminum Lake
New KoboMica 1000S-11S2	*Synthetic Fluorphlogopite (And) Triethoxycaprylylsilane*	Synthetic Fluorphlogopite
GMS-11S2	*Mica (And) Triethoxycaprylylsilane*	Sericite
MICA S-11S4		Mica
TALC U-11S2	*Talc (And) Triethoxycaprylylsilane*	Talc
ASO-11S2	*Aluminum Starch Octenylsuccinate (And) Triethoxycaprylylsilane*	Aluminum Starch Octenylsuccinate

KBL-021A

Fresh Glow Cream Blush

Part 1

- **ASO-11S2** - Kobo Products: *Aluminum Starch Octenylsuccinate (And) Triethoxycaprylylsilane* 10.00%
- **GMS-11S2** - Kobo Products: *Mica (And) Triethoxycaprylylsilane* 6.05%
- **BTD-11S2** - Kobo Products: *Titanium Dioxide (And) Triethoxycaprylylsilane* 4.00%
- **BRO-11S2** - Kobo Products: *Iron Oxides (CI 77491) (And) Triethoxycaprylylsilane* 2.00%
- **RED 27AL-11S3** - Kobo Products: *Red 27 Lake (And) Triethoxycaprylylsilane* 0.75%
- Methyl Paraben NF - International Sourcing: *Methylparaben* 0.10%
- Propyl Paraben NF - International Sourcing: *Propylparaben* 0.10%

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 - IBASF: *Polyglycerol-3 Diisostearate* 2.00%
- Petrolatum G1958 - Sonneborn Inc: *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%
- **KTZ® CLASSIC WHITE-11S2** - Kobo Products: *Mica (And) Titanium Dioxide (And) Triethoxycaprylylsilane* 8.50%
- **KTZ® FOLIAGE FLUTTER** - Kobo Products: *Titanium Dioxide (And) Mica (And) Iron Oxides (CI 77491) (And) Triethoxycaprylylsilane* 8.50%

Part 3

- **DSPCS/H-I2** - Kobo Products: *Silica (And) Ethylene/Methacrylate (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 T-blade stirring to 80°C.
3. Add Part 1 to Part 2 and mix until homogeneous using a propeller blade.
4. Add Part 3.
5. Continue to mix until uniform while maintaining temperature.
6. Pour at 78°C-80°C

Description

Fresh Glow Cream Blush features Kobo's 11S Silane-Treated Pigments that disperse easily and adhere well onto the skin. KOBOGUARD® 5400 SQ, resin composite, gives a water-resistant film and aids in long wear. KTZ® CLASSIC WHITE-11S2 and KTZ® FOLIAGE FLUTTER-11S2 offer a unique pearlescent effect. DSPCS/H-12 gives a lightweight feel and helps the formula transform into a powder on the skin. PM WAX 82 helps with the structure of this blush.