COSMOL™ 43N

INCI Name: Polyglyceryl-2 Triisostearate

Appearance: Colorless to pale yellow liquid oil

Properties:
- The tri-ester of multiple branched isostearic acid and diglycerin
- High viscosity at 20°C: 35,210 mPa.s

Applications: Emulsions, Gels, Hot Pours

COSMOL™ 43V

INCI Name: Polyglyceryl-2 Triisostearate

Appearance: Colorless liquid

Properties:
- High polar fatty acid ester consisting of isostearic acid and diglycerin while also containing hydroxyl groups in the molecule
- Viscosity at 20°C: 448 mPa.s.
- Alternative to castor oil
- Superior to castor oil in oxidative stability, compatibility with oils in organic solvents, miscibility, pigment dispersing ability, and sweat prevention in solid cosmetics

Stability: No significant change in color or odor during heat testing (120°C for 24 hours)

Applications: Emulsions, Gels, Hot Pours

COSMOL™ 168ARV

INCI Name: Dipentaerythrityl Hexahydroxy Stearate/Hexastearate/Hexarosinate

Appearance: Pale yellow to yellow paste oil

Properties:
- Substitute for wool-derived lanolin
- Superior oxidative stability, miscibility, water retaining ability, luster, and emollient capabilities
- Good hair conditioning ability as seen in the unity of hairs and combing ability testing
- Double ability to retain water over lanolin

Stability: No significant change in color or odor during heat testing (120°C for 24 hours)

Applications: Emulsions, Gels, Hot Pours, Powders

COSMOL™ 182V

INCI Name: Sorbitan Sesquiisostearate

Appearance: Yellow or brown amber viscous liquid oil

Properties:
- Hydrophobic, Non-ionic emulsifier that contributes to product stability
- Good pigment dispersing ability compared to castor oil

Applications: Emulsions, Gels, Hot Pours

Effect on color during heat testing

COSMOL™ 43N vs. COSMOL™ 43V

Effect on color during heat testing

COSMOL™ 182V

Effect on color during heat testing

Additional amount of Ethylhexyl Palmitate (g)
**COSMOL™ 222**

**INCI Name:** Diisostearyl Malate  
**Appearance:** Colorless to pale yellow liquid  
**Properties:**  
- A high polar di-ester  
- Viscosity at 20°C: 5,500 mPa.s.  
- Substitute for castor oil  
- Superior to castor oil in oxidative stability and physical properties such as compatibility, water resistance, pigment dispersing ability, gloss and luster  
- Compatible with hydrocarbon oils and silicone oils  
- Helps control hardness of waxes and sweating in solid cosmetics  
**Stability:** No significant change in color or odor during heat testing (120°C for 24 hours)  
**Applications:** Emulsions, Gels, Hot Pours, Powders

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**COSMOL™ 525**

**INCI Name:** Neopentyl Glycol Diethylhexanoate  
**Appearance:** Pale yellow, viscous liquid  
**Properties:**  
- Di-ester of neopentyl glycol and branched medium chain acid  
- Dissolves silicone (≤ 3000mm2/s) due to the many branched-chains in the ester  
- Low viscosity at 20°C: 14 mPa.s  
**Stability:** Excellent heat stability due to hindered ester  
**Applications:** Emulsions, Gels, Hot Pours, Powders

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**SALACOS® 334**

**INCI Name:** Caprylic/ Capric/ Myristic/ Stearic Triglyceride  
**Appearance:** White to light yellow, petrolatum-like substance  
**Properties:**  
- Synthetic butter with superior emollience compared to shea butter  
- Melts gently at below body temperature  
- Provides soft texture  
- Excellent oxidative stability  
**Stability:** Colorless liquid before and after heating  
**Applications:** Emulsions, Gels, Hot Pours

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**SALACOS® 913**

**INCI Name:** Isotridecyl Isononanoate  
**Appearance:** Colorless to yellow liquid oil  
**Properties:**  
- Emollient ester  
- Exhibits non-oily, nearly-dry properties  
- Works to easily dissolve high viscosity silicones because of the presence of many branched methyl groups in its chemical structure  
**Applications:** Emulsions, Gels, Hot Pours

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**SALACOS® 3318**

**INCI Name:** Triisostearin  
**Appearance:** Light yellow liquid oil  
**Properties:**  
- Low polar, high viscosity ester  
- Enables enhanced adhesion and gloss in formulation  
- Offers good compatibility with silicones (table 1 & figure 1)  
**Applications:** Gels, Hot Pours

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**SALACOS® 99**

**INCI Name:** Isononyl Isononanoate  
**Appearance:** Colorless yellow liquid oil  
**Properties:**  
- Monoester of a branched medium length chain of an odd number alcohol with a branched medium length chain of an odd number chain acid  
- Dissolves high viscosity silicone (ability to dissolve silicone gum, viscosity > 1 million mm2/s)  
- Low viscosity at 20°C: 6 mPa.s  
**Applications:** Emulsions, Gels, Hot Pours, Pressed Powders

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Table 1. Shows the compatibility of SALACOS® 3318 with other materials

<table>
<thead>
<tr>
<th>Oil Sample</th>
<th>Result</th>
<th>Oil Sample</th>
<th>Result</th>
<th>Oil Sample</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINERAL OIL</td>
<td>S</td>
<td>COSMOL 41V</td>
<td>IS</td>
<td>DIMETHICONE/PEG-10 IS</td>
<td></td>
</tr>
<tr>
<td>HYDROGENATED POLYSOBUTENE</td>
<td>S</td>
<td>COSMOL 42V</td>
<td>IS</td>
<td>DIMETHICONE/PEG-10 IS</td>
<td></td>
</tr>
<tr>
<td>SQUALANE</td>
<td>S</td>
<td>COSMOL 43V</td>
<td>IS</td>
<td>DIMETHICONE/PEG-10 IS</td>
<td></td>
</tr>
<tr>
<td>JOJOBA OIL</td>
<td>S</td>
<td>COSMOL 44V</td>
<td>IS</td>
<td>POLYSORBATE 80</td>
<td></td>
</tr>
<tr>
<td>OLIVE OIL</td>
<td>S</td>
<td>CYCLOPENTADICHLORIDE</td>
<td>IS</td>
<td>BETA GLYCOCHLORIDE</td>
<td>IS</td>
</tr>
<tr>
<td>CASTOR OIL</td>
<td>S</td>
<td>DIMETHICONE (10 cs)</td>
<td>IS</td>
<td>ETHANOL</td>
<td></td>
</tr>
<tr>
<td>T.I.O</td>
<td>S</td>
<td>DIMETHICONE (50 cs)</td>
<td>IS</td>
<td>GLYCERIN</td>
<td></td>
</tr>
<tr>
<td>COSMOL 222</td>
<td>S</td>
<td>DIMETHICONE (50 cs)</td>
<td>IS</td>
<td>WATER</td>
<td></td>
</tr>
</tbody>
</table>

S = soluble, PS = partially soluble (cloudy), IS = insoluble
**SALACOS® 5418V**

**INCI Name:** Pentaeheirythryl Tetraisostearate

**Appearance:** Light yellow liquid oil

**Properties:**
- Gives rich feel to lip and skin care products
- Tetraester of Pentaerythritol and Isostearic Acid
- Low polarity
- Excellent heat stability

**Applications:** Emulsions, Gels, Hot Pours

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**SALACOS® P-8**

**INCI Name:** Ethylhexyl Palmitate

**Appearance:** Colorless to pale yellow liquid

**Properties:**
- Monoester of 2-ethylhexyl alcohol and palmitic acid
- Low viscosity at 20°C: 13 mPa.s

**Applications:** Emulsions, Gels, Hot Pours, Pressed Powders

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**SALACOS® WO-6**

**INCI Name:** Dipentaerythrityl Tri-Polyhydroxystearate

**Appearance:** Light yellow to yellow liquid

**Properties:**
- Water-retaining emollient polymer
- Stabilizing potential in W/O emulsions
- Good pigment dispersing ability
- Improves the manageability of hair such as making hair less frizzy and easier to comb

**Applications:** Emulsions, Gels, Hot Pours

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**SALACOS® HS-6C**

**INCI Name:** Polyhydroxystearic Acid

**Appearance:** Light yellow-brown liquid or petrolatum-like substance

**Properties:**
- Provides a moisturizing effect on the skin even after washing
- Gives excellent overall texture for washing
- Excellent pigment dispersing agent with low wet point and same fluidity point
- Provides smooth texture to formulations containing pigments (Figure 2)

**Applications:** Emulsions, Gels, Hot Pours

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**Figure 1.** Elastic and stable, fine foaming properties of SALACOS® HS-6C (left) versus a control (right)

**Figure 2.** Effect of dispersing pigments using SALACOS® HS-6C (left) versus control (right), in a W/O sunscreen milk

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**BEFORE**  

**AFTER**  

> SALACOS® WO-6

> Lanolin Oil

> Hydrogenated Polyisobutene

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**Figure 1.** The before state of a water droplet on an oil film and the state of the droplet after it is rinsed off with tap water show the waterproof film ability of SALACOS® WO-6. The delta of SALACOS® WO-6, lanolin oil, and hydrogenated polyisobutene are 4.3, 32.5, and 73.4 respectively.
**T.I.O.**

**INCI Name:** Triethylhexanoin

**Appearance:** Colorless to pale yellow liquid oil

**Properties:**
- Triester of glycerin and branched medium chain acid
- Low congealing point due to branched alkyl. (≤-30ºC)
- Viscosity lower than natural triglyceride (30mPa.s/20°C)
- Excellent oxidation and hydrolysis stability
- Superior to Caprylic/Capric Triglyceride in hydrolysis resistance, stability on skin and physical properties such as compatibility and cold stability

**Applications:** Emulsions, Hot Pours

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### KLP-160-BR

**Cashmere Lipstick**

#### Part 1
- Deionized Water - Water 15.15%
- Glycerin - CAAL: Glycerin 1.00%
- Sodium Chloride - CAAL: Sodium Chloride 0.50%

#### Part 2
- SALACOS® 5418V - Ikeda/Kobo Products: Pentaerythrityl Tetraisostearate 14.00%
- INBP50R68 - Kobo Products: Red 6 Lake (And) Isononyl Isononanoate (And) Isopropyl Myristate (And) Stearalkonium Hectorite (And) Isopropyl Titanium Trisostearate (And) Propylene Carbonate (And) Polyhydroxysearic Acid 10.40%
- INBP45R7C - Kobo Products: Red 7 Lake (And) Isononyl Isononanoate (And) Isopropyl Myristate (And) Stearalkonium Hectorite (And) Isopropyl Titanium Trisostearate (And) Propylene Carbonate (And) Polyhydroxysearic Acid 7.90%
- VEGETABLE WAX-SS1 (Non-GMO) - Ikeda/Kobo Products: Helianthus Annuus (Sunflower) Seed Wax (And) Phytosterols 6.00%
- Abil® EM 90 - Evonik: Cetyl PEG/PPG-10/1 Dimethicone 5.50%
- APRB70U - Kobo Products: Titanium Dioxide (And) Isononyl Isononanoate (And) Isopropyl Myristate (And) Stearalkonium Hectorite (And) Isopropyl Titanium Trisostearate (And) Propylene Carbonate (And) Polyhydroxysearic Acid 4.40%
- PM WAX 82 - Kobo Products: Polyethylene (And) Microcrystalline Wax 3.00%
- COSMOL™ 222 - Ikeda/Kobo Products: Diisostearyl Malate 3.00%
- NOMCORT® HK-G - Ikeda/Kobo Products: Glycerin Behenate/Eicosadiolote 3.00%
- CO40SS - Kobo Products: Sodium Saccharin (And) Ricinus Communis (Castor) Seed Oil (And) BHT 0.15%

#### Part 3
- KF-995 - Shin-Etsu: Cyclopentasiloxane 16.00%
- DAIMICBEAZ CM-1077 - Kobo Products: HDI/Trimethyl Hexyllactone Crosspolymer (And) Silica Silylate 8.00%
- Optiphen - Ashland: Caprylyl Glycol (And) Phenoxyethanol 1.00%

**Manufacturing Procedure**
1. Add Part 2 ingredients to the main vessel and heat under stirring to 80°C and complete dispersion of pigments.
2. Pre-mix Part 1 ingredients and heat to 75-80°C.
3. Add Part 1 to Part 2 slowly while mixing at 800 rpm.
5. Mix for 10 minutes at 800 rpm.
6. Mix at low speed to remove air and pour into components.

**Description**
This emulsified lipstick features INBP dispersions in Isononyl Isononanoate that can ease the manufacturing process and provide more vivid color. COSMOL™ 222 is a pigment dispersant that offers great stability against oxidation and SALACOS® 5418V is a high refractive index ester that can improve skin feel. VEGETABLE WAX-SS1 (Non-GMO) creates a high-luster lipstick and is used to structure the formulation in association with PM WAX 82, a combination of waxes, and with NOMCORT® HK-G, an oil phase gelant that can also improve formula stability. CO40SS is a sodium saccharin dispersion to give a slight sweet taste. DAIMICBEAZ CM-1077 is a polymer microsphere that improves feel and application.