

No difference between SALACOS® 43V(MB) and SALACOS® 43V in the followings

|                                      | SALACOS® 43V(MB)                                                                                                                                         | SALACOS® 43V                                                                                                                                             |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SPECIFICATION</b>                 |                                                                                                                                                          |                                                                                                                                                          |
| Appearance                           | Light yellow or yellow liquid, a faint characteristic odor                                                                                               | Light yellow or yellow liquid, a faint characteristic odor                                                                                               |
| Identification                       | Absorbance at 3470cm <sup>-1</sup> , 2920cm <sup>-1</sup> or 2930cm <sup>-1</sup> , 1745cm <sup>-1</sup> , 1465cm <sup>-1</sup> and 1165cm <sup>-1</sup> | Absorbance at 3470cm <sup>-1</sup> , 2920cm <sup>-1</sup> or 2930cm <sup>-1</sup> , 1745cm <sup>-1</sup> , 1465cm <sup>-1</sup> and 1165cm <sup>-1</sup> |
| Specific Gravity (25°C/25°C)         | 0.926~0.936                                                                                                                                              | 0.926~0.936                                                                                                                                              |
| Refractive Index (25°C)              | 1.460~1.470                                                                                                                                              | 1.460~1.470                                                                                                                                              |
| Viscosity (mPa·s, 25°C)              | 250~450                                                                                                                                                  | 250~450                                                                                                                                                  |
| Acid Value (mgKOH/g)                 | ≤1.5                                                                                                                                                     | ≤1.5                                                                                                                                                     |
| Saponification Value (mgKOH/g)       | 170~185                                                                                                                                                  | 170~185                                                                                                                                                  |
| Hydroxyl Value (mgKOH/g)             | 35~55                                                                                                                                                    | 35~55                                                                                                                                                    |
| Iodine Value (gI <sub>2</sub> /100g) | ≤5                                                                                                                                                       | ≤5                                                                                                                                                       |
| Heavy Metals (ppm)                   | ≤10                                                                                                                                                      | ≤10                                                                                                                                                      |
| Arsenic (ppm)                        | ≤2                                                                                                                                                       | ≤2                                                                                                                                                       |
| Loss on Drying (%)                   | ≤1.0                                                                                                                                                     | ≤1.0                                                                                                                                                     |
| Residue on Ignition (%)              | ≤0.1                                                                                                                                                     | ≤0.1                                                                                                                                                     |
| Color(Gardner)                       | ≤3                                                                                                                                                       | ≤3                                                                                                                                                       |
| <b>OTHERS</b>                        |                                                                                                                                                          |                                                                                                                                                          |
| Origin and Countries                 | Isostearic Acid                                                                                                                                          | Vegetable (Rapeseed, Sunflower, Olive, etc.) Europe, etc.                                                                                                |
|                                      | Diglycerin                                                                                                                                               | Vegetable (Coconut, Palm=Mass Balance) Indonesia, Philippines, Malaysia                                                                                  |
| CAS No.                              | 73296-86-3, 120486-24-0                                                                                                                                  | 73296-86-3, 120486-24-0                                                                                                                                  |
| EC No.                               | 277-361-8                                                                                                                                                | 277-361-8                                                                                                                                                |
| REACH registration No.               | 01-2120267195-52-xxxx                                                                                                                                    | 01-2120267195-52-xxxx                                                                                                                                    |
| Made in                              | Japan                                                                                                                                                    | Japan                                                                                                                                                    |



LOW POLAR ESTER  
HIGH POLAR ESTER  
PASTE ESTER  
EMULSIFYING AGENT  
GELLING AGENT  
LECITHIN  
TOCOPHEROL  
VEGETABLE OIL

**NISSHIN Oillio**

**The Nisshin Oillio Group, Ltd.**

Fine Chemicals Dept.  
1, Shinmori-cho, Isogo-ku, Yokohama  
235-8558 Japan

TEL : +81-45-757-5442 FAX: +81-45-757-5444  
E-mail : salacos@nisshin-oillio.com  
[http://www.nisshin-oillio.com/company/fc/products\\_en/index.html](http://www.nisshin-oillio.com/company/fc/products_en/index.html)



**NISSHIN Oillio**

COSMETICS RAW MATERIALS  
from **RSPO Mass Balanced** palm oil



**SALACOS® 43V (MB)**

12th Jul. 2018

※All information concerning this product and/or all suggestions for uses in this leaflet are given in good faith. The Nisshin Oillio Group, Ltd., however, cannot assume any liability expressed or implied in the presentation of this data. Nothing contained herein shall be construed as granting or extending any license under any patent.



## SALACOS® 43V (MB)

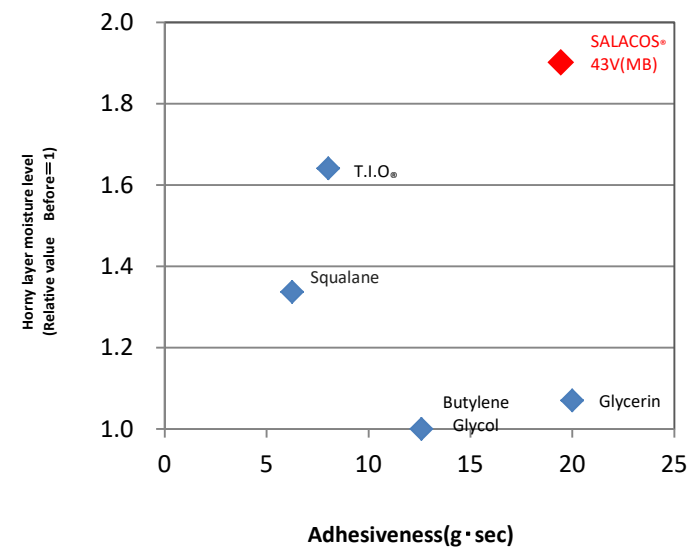
### Compatibility

| Oil sample :<br>Ingredient = 1:1                      | SALACOS®<br>43V(MB)<br><Viscosity(20°C) ,<br>448mPa·s> | SALACOS®<br>222<br><Viscosity(20°C) ,<br>5500mPa·s> | Castor Oil<br><Viscosity(25°C) ,<br>680mPa·s> |
|-------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------|
| Mineral Oil                                           | Soluble                                                | Soluble                                             | Insoluble                                     |
| Triethylhexanoin                                      | Soluble                                                | Soluble                                             | Soluble                                       |
| Diisostearyl Malate                                   | Soluble                                                | Soluble                                             | Soluble                                       |
| Polyglyceryl-2<br>Triisostearate                      | Soluble                                                | Soluble                                             | Soluble                                       |
| Castor Oil                                            | Soluble                                                | Soluble                                             | Soluble                                       |
| Dephenylsiloxy<br>Phenyl Trimethicone                 | Soluble                                                | Soluble                                             | -                                             |
| Cyclomethicone                                        | Soluble                                                | Soluble                                             | Insoluble                                     |
| Dimethicone (10cs)                                    | Insoluble                                              | Soluble                                             | Insoluble                                     |
| Dimethicone (30cs)                                    | Insoluble                                              | Dispersed                                           | Insoluble                                     |
| Dimethicone (50cs)                                    | Insoluble                                              | Dispersed                                           | Insoluble                                     |
| Dimethicone/Peg-<br>10/15Crosspolymer,<br>Dimethicone | Insoluble                                              | Soluble                                             | -                                             |
| Sorbitan Sesquioate                                   | Dispersed                                              | Dispersed                                           | Soluble                                       |
| Ethanol                                               | Soluble                                                | Soluble                                             | Soluble                                       |



### Continuous Moisturizing Level and adhesiveness

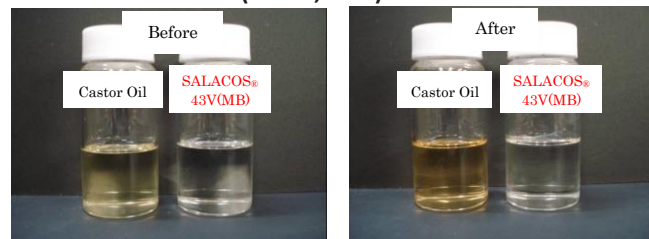
SALACOS®43V(MB) is superior in continuous moisturizing level even if after removal and moderate adhesiveness.



### Heating Test

SALACOS® 43V(MB) is superior in heating stability without big change of color and odor.

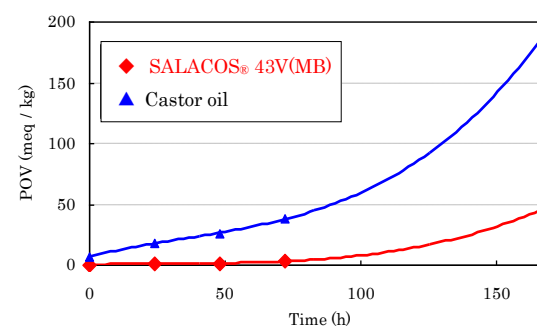
#### The Change of Color by Heat (120°C, 24 h)



### Oxidative Stability

SALACOS® 43V(MB) is superior in oxidative stability with a little increase of the POV (Peroxide Value).

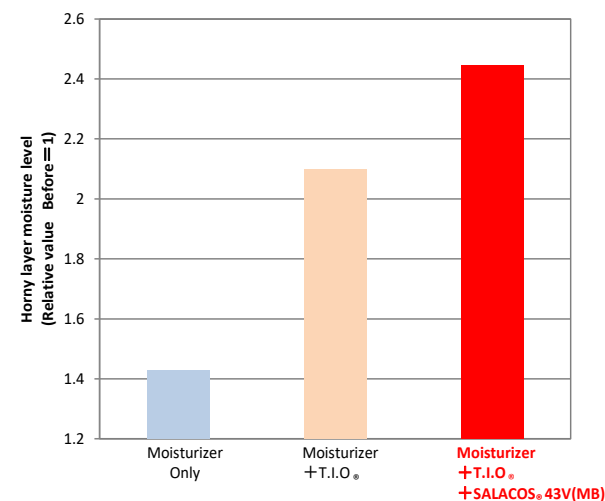
#### Temporal Change of POV (98 °C, Air Flow of 8 L/h)



### Continuous Moisturizing Level in emulsion

SALACOS®43V(MB) in emulsion improves “Continuous moisturizing level”.

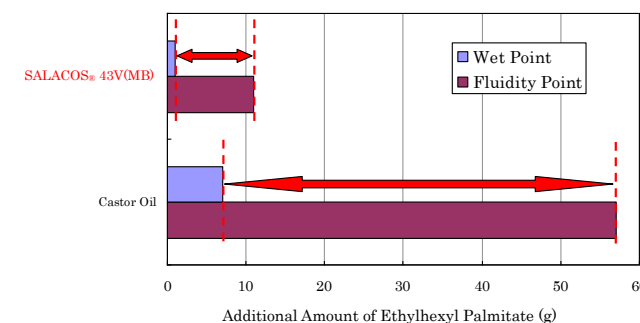
#### Combination Results of Ester and Moisturizers



### Pigment Dispersing

SALACOS® 43V(MB) is superior to Castor Oil and other oils in pigment dispersing ability with Titanium Dioxide.

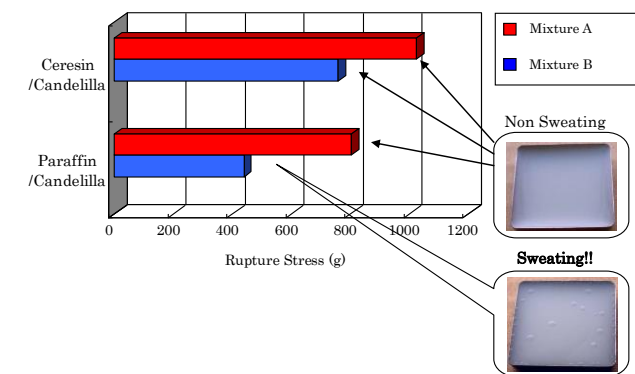
#### Wet Point and Fluidity Point for Titanium Dioxide



### Hardness and Sweating of the Mixtures with Two Waxes

Mixture A (with SALACOS® 43V(MB)) has superior hardness and sweating prevention.

#### Rupture Stress and Sweating of the Mixtures with Two Waxes



#### Oil Sample - Two Waxes Mixture Formulation

| Oil Sample | Ingredient                            | Mixture A | Mixture B |
|------------|---------------------------------------|-----------|-----------|
|            | Castor Oil                            | 70        | 80        |
| Wax        | SALACOS® 43V(MB)                      | 10        | —         |
|            | Candelilla Wax                        | 10        | 10        |
|            | Hydrocarbon Wax (Ceresin or Paraffin) | 10        | 10        |
| Total      |                                       | 100       | 100       |

## SALACOS® 43V(MB)

INCI name:

POLYGLYCERYL-2 TRIISOSTEARATE

已使用化妆品原料名称

(IECIC 2015):聚甘油-2 三异硬脂酸酯

CAS number:

73296-86-3, 120486-24-0

EC number:

277-361-8

### Characteristic

- Triester of Diglycerin (Mass Balance) and Isostearic Acid.
- All raw materials are vegetable origin.
- Good compatibility with other oils and waxes.
- Excellent pigment dispersing ability.
- Excellent preventing ability from sweating of lipsticks and oil based foundations.
- Recommended for creams, lipstick, foundations.