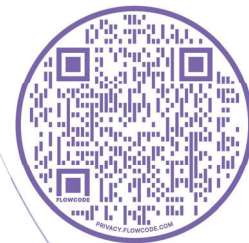


# MiyoNAT ISA

## Isostearic Acid Treated Pigments



- Excellent Dispersibility in Oils
- Stabilizes Pigments in Oils and Solvents
- Natural
- Not Derived from Palm Sourced Material



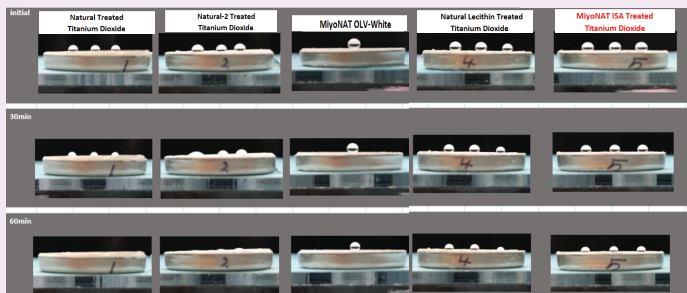
### GENERAL INFORMATION

Isostearic acid is Vegetable-based methyl-branched saturated fatty acid with an 18 - carbon atom chain backbone. It offers a light lubricious feel and can be used in many skincare and color cosmetic applications. Alkylsilane treatment has been the gold standard for surface treatments by many raw material suppliers as well as surface treatment companies like Miyoshi America.

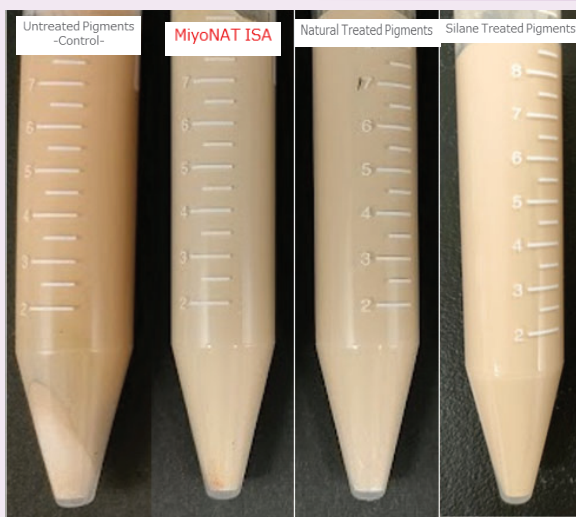
Alkylsilane is used because of its ability to be dispersed easily in many oils and formulations, and because of its relative low cost. With the current trend in “natural” materials, as well as fear of alkylsilane being pitched as a Micro Plastic Bead (MPB) once coated onto a powder, customers will have problems moving forward with no alternative solution. MiyoNAT ISA will be able to provide the “natural version” of alkylsilane treatment with excellent dispersibility in various oils.

### INCI: Isostearic Acid

### Strong Hydrophobicity



Three drops of water were placed on five different pressed cakes to measure the hydrophobicity of the different pigments in the pressed cakes. To measure this, the contact angle of the water droplet was measured after 30 minutes and 60 minutes. MiyoNAT ISA offered excellent hydrophobicity, comparable to Miyoshi America’s MiyoNAT OLV-White.



### Sedimentation:

Samples of different surface treatments were included in a liquid foundation. These vials were then placed in a centrifuge as a form of accelerated stability. All samples showed signs of sedimentation except for the MiyoNAT ISA foundation.

### Product Lineup

Product Lineup	INCI
MiyoNAT ISA White-A2	Titanium Dioxide, Isostearic Acid
MiyoNAT ISA-YELLOW-2	Iron Oxide, Isostearic Acid
MiyoNAT ISA-RED-1	Iron Oxide, Isostearic Acid
MiyoNAT ISA-BLACK-1	Iron Oxide, Isostearic Acid

# MiyoNAT ISA

## Isostearic Acid Treated Pigments

### MiyoNAT ISA Blush

UBL0008

A smooth, light blush with excellent skin adhesion.

TRADE NAME	INCI	Supplier	%
MiyoNAT ISA White A2	Titanium Dioxide (and) Isostearic Acid	Miyoshi America	2.88
MiyoNAT ISA Red-1	Iron Oxides (and) Isostearic Acid	Miyoshi America	8.56
MiyoNAT ISA Yellow-2	Iron Oxides (and) Isostearic Acid	Miyoshi America	0.18
Fine Snow	Rice Starch	Miyoshi America	9.00
MiyoNAT VLS-Mica CM-10	Mica (and) Hydrogenated Lecithin (and) Calcium Chloride	Miyoshi America	15.00
<b>A</b> MiyoNAT VLS Sericite	Mica (and) Hydrogenated Lecithin (and) Calcium Chloride	Miyoshi America	16.00
MiyoSTAY SM	Synthetic Fluorophlogopite (and) Zinc Oxide (and) Hydroxyapatite	Miyoshi America	15.00
MiyoFEEL SXI-L	Mica (and) Silica (and) Hydrogenated Lecithin (and) Calcium Chloride	Miyoshi America	10.00
DRY-FLO® TS	Tapioca Starch (and) Polymethylsilsesquioxane	Nouryon	8.00
Magnesium Stearate	Magnesium Stearate	Making Cosmetics	5.86
Softisan® 100	Hydrogenated Coco-Glycerides	IOI Oleo GmbH	2.54
KF-7312K	Trimethylsiloxyisilicate (and) Dimethicone	Shin-Etsu	2.79
Bronidox® 1160	Phenoxyethanol	BASF	1.00
XIAMETER® PMX-200 Silicone Fluid 20 cSt	Dimethicone	Dow Chemical	3.19
	<b>Total</b>		<b>100.00</b>

#### Procedure:

1. Weigh Phase A in a blender and blend on high speed for 2 minutes.
2. Heat Phase B to 55-60°C in a beaker and mix with a propeller mixer until mixture is clear and homogenous.
3. After Phase B is homogenous, add to Phase A and mix in blender for 2 minutes on high speed.
4. Press into desired blush pans. Pressing parameters will vary with pan size.

### MiyoNAT ISA Waterproof Liquid Lip UES0004

A smooth, longwear formula that gives a matte effect without feeling dry.

TRADE NAME	INCI	Supplier	%
GGEL™ 100V	Dimethicone (and) Ethylhexyl Palmitate (and) Quaternium-90 Bentonite (and) Propylene Carbonate	Applechem	54.00
Gransil SBG 11 #1	Dimethicone Polyisilicone-11 (and) Butyrospermum Parkii Shea Butter	Grant	11.00
<b>A</b> Yellow Carnauba Wax NF	Copernicia Cerifera (Carnauba) Wax	Koster Keunen	5.00
Haiamalate DIS	Diisostearyl Malate	Miyoshi America	6.00
Lipo® IDD 99A	Isododecane	Vantage	4.00
Indoplo® H-300	Polybutene Synthetic Fluorophlogopite	INEOS Oligomers	6.00
<b>B</b> MiyoSYN Matte	Synthetic Fluorophlogopite	Miyoshi America	2.00
Kaolin 2000C	Kaolin	KaMin Solutions	3.00
MiyoNAT ISA White A2	Isostearic Acid (and) Titanium Dioxide	Miyoshi America	1.10
MiyoNAT ISA Yellow-2	Iron Oxides and Isostearic Acid	Miyoshi America	2.60
MiyoNAT ISA Red-1	Iron Oxides and Isostearic Acid	Miyoshi America	1.90
MiyoNAT ISA Black-1	Iron Oxides and Isostearic Acid	Miyoshi America	0.40
<b>C</b> Phytoblend TIPS	Symphytum Officinale Leaf Extract (and) Tilia Cordata Flower Extract (and) Paeonia Suffruticosa Root Extract	Miyoshi America	1.00
<b>D</b> Vitamin E Acetate	Tocopherol Acetate	Spectrum Chemical	1.00
Vanilla Flavor	Vanillin	Bulk Apothecary	1.00
	<b>Total</b>		<b>100.00</b>

#### Procedure:

1. Weigh Phase A into beaker and mix at 140°C until uniform.
2. Add Phase B to the beaker and mix until uniform. About 5 minutes.
3. Add Phase C to the beaker and homogenize at 5000 rpm 130°C for 20 minutes.
4. Add Phase D to the beaker and homogenize at 5000 rpm for 2 minutes.
5. Pour at 75°C into desired component.



Hydrophobicity

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Dispersibility in Oil

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