

**Functional Ingredients &
Formulated Products for
Cosmetics & Pharmaceuticals**



NOF CORPORATION

CONTENTS

[Functional ingredients]

1.LIPIDURE®	
1-1. LIPIDURE - HM, PMB	4
1-2. LIPIDURE - A, C	5
1-3. LIPIDURE - S, NR, NA	6
2.CERACUTE™	7
3.VINOVEIL™	9
4.ALFEEL™	10
5.EXTRACTS (PLANT EXTRACTS)	11
6.HIGH-PURITY SOYBEAN PHOSPHOLIPIDS	20

[Base materials]

7.FATTY ACID	22
8.TRIGLYCERIDE	
8-1.HARDENED OIL	24
8-2.TRIGLYCERIDE SATURATED FATTY ACID	24
9.GLYCERIN	25
10.HIGHER ALCOHOL	26
11.METALLIC SOAP	27
12.FATTY ACID ESTER	28
13.SURFACTANTS	
13-1.ANIONIC SURFACTANTS	29
13-2.CATIONIC SURFACTANTS	30
13-3.AMPHOTERIC SURFACTANTS	32
13-4.NONIONIC SURFACTANTS	
(1) SORBITAN FATTY ACID ESTERS	33
(2) GLYCERINE FATTY ACID ESTERS	33
(3) ALKYROL AMIDES	34
13-5.AMINES	34
14.POLYOXYALKYLENE GLYCOL DERIVATIVES	
14-1.POLYOXYALKYLENE GLYCOL(Double-Chain Form)	35
14-2.POLYOXYALKYLENE GLYCOL(Multiple-Chain Form)	39
14-3.POLYOXYALKYLENE ALKYLEETHER(Double-Chain Form)	43
14-4.POLYOXYALKYLENE ALKYLEETHER(Multiple-Chain Form)	47
14-5.POLYOXYALKYLENE ESTER(Double-Chain Form)	49
14-6.POLYOXYALKYLENE ESTER(Multiple-Chain Form)	
(1) GLYCERIN DERIVATIVES	52
(2) SORBITAN DERIVATIVES	54
(3) CASTOR OIL & HYDROGENATED CASTOR OIL DERIVATIVES	55
(4) SORBITAN DERIVATIVES	56
(5) METHYLGLUCOSIDE DERIVATIVES	58
14-7. POLYOXYETHYLENE DERIVATIVE (NITROGEN CONTAINING FORM)	59
14-8. POLYOXYALKYLENE DERIVATIVES	60
15.HYDROGENATED POLYISOBUTENE	61
16.VEGETABLE OIL	62
17.PURIFIED OLEIC ACID AND ITS DERIVATIVES	63

[Premix products]

18.PHOSPHOLIPID PREMIX SOLUTIONS	
18-1.HIGH-CONCENTRATION EMPTY-LIPOSOME SOLUTION	66
18-2.HIGH-CONCENTRATION CERAMIDE 3 CONTAINED LIPOSOME SOLUTION	67
18-3.PRIMESOME™-MB	67
18-4.LIPID MIXTURE	68
18-5.HYDROGENATED SOYBEAN CYCLIC PHOSPHOLIPID CP7 CONTAINED LIPID MIXTURE EXTRASOME CP7-M	68
19. COMPOSITE OF FOOD DETERGENTS FOR BACTERIAL ERADICATION	69
20. DEFOAMING AGENTS	70

[INDEX]

INCI CODE INDEX	71
TRADE NAME INDEX	74

[Inquiry Address]	77
-------------------	----

Functional ingredients

1. LIPIDURE®
2. CERACUTE™
3. VINOVEIL™
4. ALFEEL™
5. EXTRACTS
(PLANT EXTRACTS)
6. HIGH-PURITY SOYBEAN
PHOSPHOLIPIDS

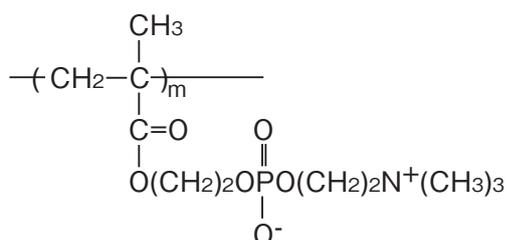
1. LIPIDURE®

1-1. LIPIDURE-HM, PMB

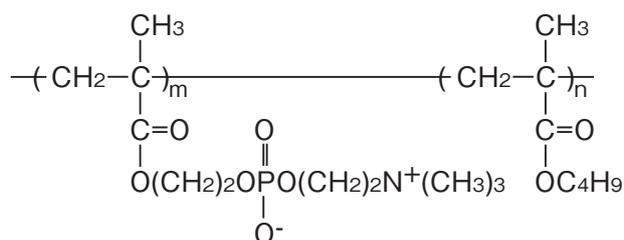
Main Application & Features : For mainly Skincare, Moisturizing, Barrier effect, Stress reduction, Improvement of rough skin

LIPIDURE is the polymer which consists of 2-methacryloyloxyethyl phosphoryl choline(MPC) whose structure is similar to that of phospholipid which is one of the elements of cell membrane.

- LIPIDURE is the polymer designed imitating cell membrane.
- LIPIDURE retain plenty of moisture for skin and hair fiber.
- LIPIDURE is very safe and can improve rough skin thanks to its biocompatibility.



LIPIDURE-HM



LIPIDURE-PMB(m=4, n=1), LIPIDURE-B(m=3, n=7)

Product Name	INCI Code
--------------	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

LIPIDURE-HM	POLYPHOSPHORYLCHOLINE GLYCOL ACRYLATE, WATER, BUTYLENE GLYCOL, METHYLPARABEN
LIPIDURE-PMB	POLYQUATERNIUM-51, WATER
LIPIDURE-PMB(Ph10)	POLYQUATERNIUM-51, WATER, PHENOXYETHANOL
LIPIDURE-PMB(BG)	POLYQUATERNIUM-51, WATER, BUTYLENE GLYCOL

For COSMETIC USE ONLY

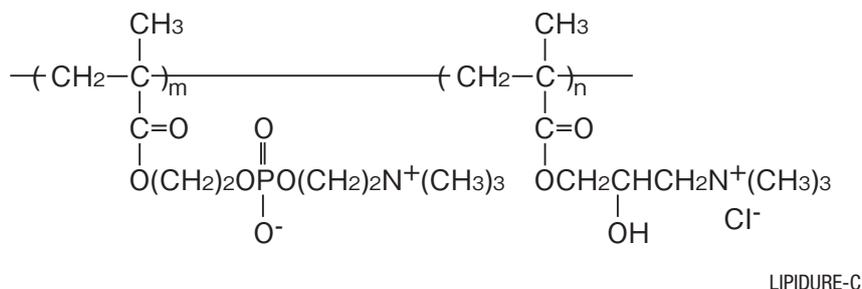
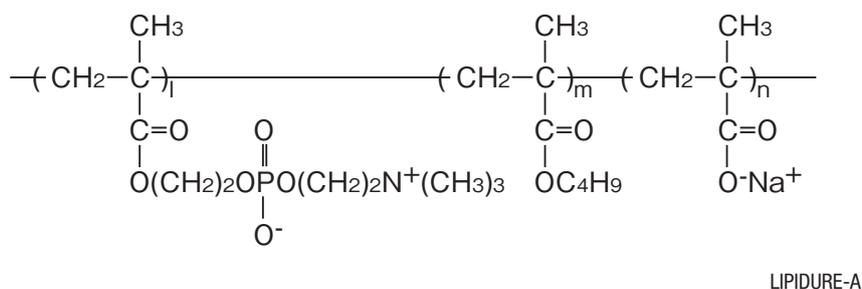
LIPIDURE-HM(Ph10)	POLYPHOSPHORYLCHOLINE GLYCOL ACRYLATE, WATER, PHENOXYETHANOL
LIPIDURE-HM-500	POLYPHOSPHORYLCHOLINE GLYCOL ACRYLATE, WATER, BUTYLENE GLYCOL, METHYLPARABEN
LIPIDURE-PMB(Ph10)-1M	POLYQUATERNIUM-51, WATER, PHENOXYETHANOL
LIPIDURE-B	POLYQUATERNIUM-51, WATER, PHENOXYETHANOL

1-2. LIPIDURE-A, C

Main Application & Features : For hair care, Moisturizing, Anti static electricity, Smooth combing

LIPIDURE-A & LIPIDURE-C has been developed for hair care products. LIPIDURE-A has anionic groups in its structure, that give plenty of moisture to hair fiber and prevent hair from spreading by reducing the static electricity.

LIPIDURE-C has cationic groups in its structure, that form hydrogel on hair fiber uniformly and result in giving smooth combing.



Product Name	INCI Code
--------------	-----------

For COSMETIC USE ONLY

LIPIDURE-A	POLYQUATERNIUM-65, WATER, PHENOXYETHANOL
------------	--

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

LIPIDURE-C	POLYQUATERNIUM-64, WATER, PHENOXYETHANOL
------------	--

1-3. LIPIDURE-S, NR, NA

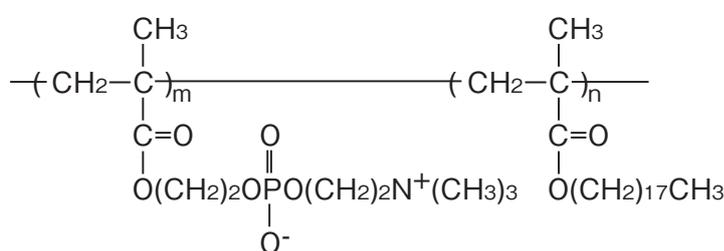
Main Application & Features : Emollience, Barrier effect

LIPIDURE-S consists of MPC and Stearyl methacrylate, moieties and is water-insoluble due to its hydrophobicity. It is formulated in make-up products such as lipstick and foundation.

LIPIDURE-S also has a self-assembly property, that forms, micro polymer micelles in water. When micro polymer micelles suspension is used and dried, lamellar layer is formed on the surface of skin and hair fiber.

This structure generates an excellent barrier on the surface of skin and hair fiber. LIPIDURE-S aqueous suspension can also be formulated for skin care and hair care products.

LIPIDURE-NR is a multivalent alcohol solution which contains 5% LIPIDURE-S, and LIPIDURE-NA is a micro polymer micelle suspension which contains 1% LIPIDURE-S



LIPIDURE-S

Product Name	INCI Code
--------------	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

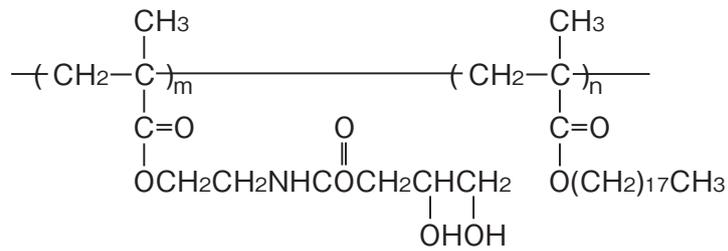
LIPIDURE-S	POLYQUATERNIUM-61
LIPIDURE-NR	POLYQUATERNIUM-61, GLYCERIN, BUTYLENE GLYCOL
LIPIDURE-NA	POLYQUATERNIUM-61, GLYCERIN, BUTYLENE GLYCOL, PCA ETHYL COCOYL ARGINATE, WATER

2. CERACUTE™

2-1. CERACUTE-F, L, V

Main Application & Features : Anti-aging(Improvement of skin elasticity, anti-wrinkle and volumizing of hair)

CERACUTE is an original cosmetic ingredient which is designed imitating natural ceramide structure, and has an excellent affinity to skin and the other properties that natural ceramide does not have due to the polymerization. Once CERACUTE is used on the surface of skin and hair fiber, elastic polymer network is formed there, and hydrogen bonding of intra - or inter molecule of CERACUTE improves skin elasticity, lifts up wrinkles without strained feeling, and volumizes hair.



CERACUTE-F

Product Name	INCI Code
--------------	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

CERACUTE-F	GLYCERYLAMIDOETHYL METHACRYLATE/STEARYL METHACRYLATE COPOLYMER
CERACUTE-L	GLYCERYLAMIDOETHYL METHACRYLATE/STEARYL METHACRYLATE COPOLYMER, GLYCERIN, BUTYLENE GLYCOL
CERACUTE-V	GLYCERYLAMIDOETHYL METHACRYLATE/STEARYL METHACRYLATE COPOLYMER, GLYCERIN, BUTYLENE GLYCOL, PCA ETHYL COCOYL ARGINATE, WATER

3. VINOVEIL™

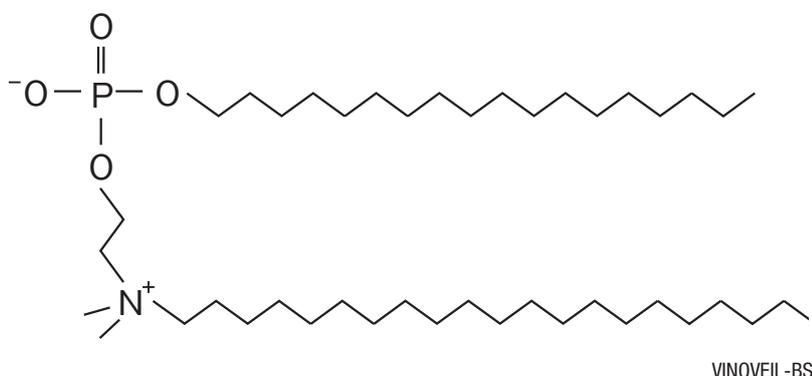
3-1.VINOVEIL-BS

Main Application & Features: Lamellar similar membrane for Skin care, Hair

VINOVEIL-BS is a dialkyl type Gemini compound having phosphorylcholine (PC) mimetic structure as hydrophilic group. PC group is a polar head of phospholipids which is one of the elements of cell membrane. High biocompatibility and Hydrophilicity are noteworthy features of this functional group.

Gemini compound has been known by its unique structure; multiple hydrophilic & hydrophobic groups in a molecule, having high surface activity and self-associating property. The benefits of VINOVEIL-BS are shown below.

- High safety due to its similar structure of phosphorylcholine group.
- Easily forming small multi-lamellar vesicles in water by itself. The vesicles form lamellar body like film on skin and hair.
- Efficacy of lamella body includes improvement of smoothness, moisturizing, and barrier properties, above all for hair care. VINOVEIL penetrates inside of hair and gives consistency.



Product Name	INCI Code
--------------	-----------

For COSMETIC USE ONLY

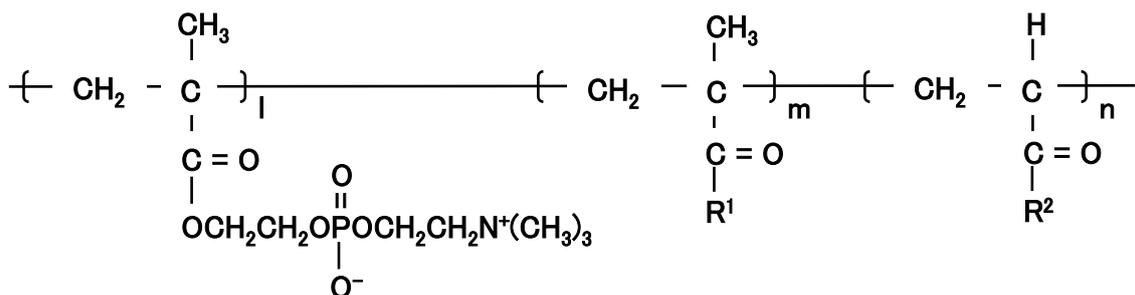
VINOVEIL-BS-100P	BEHENDIMONIUM ETHYL STEARYL PHOSPHATE
VINOVEIL-BS-1D	BEHENDIMONIUM ETHYL STEARYL PHOSPHATE, BEHENTRIMONIUM CHLORIDE, GLYCERIN, ALCOHOL, WATER

4. ALFEEL™

4-1. ALFEEL -SD

Main Application & Features : Improving lubricity of hair in wetting

ALFEEL-SD is a hair care polymer; composition shown as below. Nano-gel particles can be formed by self-association of this polymer in water and it can improve lubricity of hair in wetting. Furthermore, this polymer has high adsorption to hair due to positive charge, but it does not accumulate.



R¹ = Long alkyl chain group
R² = Cationic group

Product Name	INCI Code
--------------	-----------

For COSMETIC USE ONLY

ALFEEL-SD	POLYQUATERNIUM-107, PHENOXYETHANOL, CITRIC ACID, SODIUM CITRATE, WATER
-----------	--

5. EXTRACTS (PLANT EXTRACTS)

5-1. APRICOT JUICE PH

Main Application & Features : Enhance hyaluronan production, Antioxidative activity (SOD mimicking activity), Exfoliating activity

APRICOT JUICE PH boosts the skin's ability to retain moisture by enhancement of the production of hyaluronic acid.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Apricot Juice	PRUNUS ARMENIACA(APRICOT) JUICE	85.0
Concentrated Glycerin	GLYCERIN	15.0

5-2. KUMIS KUCHING EXTRACT BG

Main Application & Features : Endotherin-1 inhibition (Skin-whitening), Antioxidative activity

KUMIS KUCHING EXTRACT BG is utilized as an agent for the treatment of skin pigmentation such as spots and freckles induced by UV.

This product is the material jointly developed with National Institute of Advanced Industrial Science and Technology.
Patent licensing : Patent No. JP4992008

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

For COSMETIC USE ONLY

—	BUTYLENE GLYCOL	59.6
—	WATER	39.5
—	ORTHOSIPHON STAMINEUS EXTRACT	0.9

5-3. CHINPI EXTRACT K65B

Main Application & Features : Suppression of tyrosinase biosynthesis (Skin-whitening), Protection against UV, Blood circulation promotion

Citrus tachibana peel extract is utilized as an agent for the treatment of skin pigmentation such as spots and freckles induced by UV.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Citrus Unshiu Peel Extract	BUTYLENE GLYCOL	64.0
	WATER	34.4
	CITRUS AURANTIUM TACHIBANA PEEL EXTRACT	1.6

5-4. AKEBIA™ EXTRACT BG

Main Application & Features : Stimulation of urea synthesis (moisturizing action)

AKEBIA EXTRACT BG boosts the skin's ability to retain moisture by enhancement of the production of natural moisturizing factor, "Urea" on keratinocytes.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Akebia Extract	AKEBIA TRIFOLIATA STEM EXTRACT	0.9
	WATER	69.1
1,3-Butylene Glycol	BUTYLENE GLYCOL	30.0

5-5. SHEKWASHA EXTRACT BG

Main Application & Features : Suppression of tyrosinase biosynthesis (Skin-whitening), Inhibition of collagenase biosynthesis (Protection of dermal matrix), Inhibition of prostaglandin synthesis (Anti-inflammatory)

Citrus depressa peel extract is utilized as an agent for the treatment of skin pigmentation such as spots and freckles induced by UV.

Patent licensing from the research institute of Ministry of Agriculture, Forestry and Fisheries of Japan
Patent No. JP3010210

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Citrus Unshiu Peel Extract	BUTYLENE GLYCOL	59.2
	WATER	39.4
	CITRUS DEPRESSA PEEL EXTRACT	1.4

5-6. PASSION FRUIT EXTRACT BG

Main Application & Features : Endotherin-1 inhibition (Skin-whitening), Antioxidative activity

Passion fruit extract is a new natural anti-ageing ingredient extracted from pericarp of *Passiflora edulis* in Okinawa. Various polyphenols such as luteolin glycoside are contained as an active components. It has the antioxidative effect and controls the Endotherin-1 production.

This product is the material jointly developed with National Institute of Advanced Industrial Science and Technology.
Patent licensing : Patent No. JP4992008

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

For COSMETIC USE ONLY

—	BUTYLENE GLYCOL	59.3
	WATER	39.5
	PASSIFLORA EDULIS PEEL EXTRACT	1.2

5-7. CAMELLIA FLOWER EXTRACT BG

Main Application & Features : Antioxidative activity, Anti-androgenic mimicking effect

Camellia flower extract is a new natural anti-ageing ingredient extracted from the flower of *Camellia japonica* in Goto islands, Nagasaki. Camellioside A and B are contained as active components. Therefore, it has antioxidative effect and inhibits 5 α -reductase activity.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

For COSMETIC USE ONLY

—	BUTYLENE GLYCOL	49.5
—	WATER	49.5
—	CAMELLIA JAPONICA FLOWER EXTRACT	1.0

5-8. CAMELLIA SEED EXTRACT BG

Main Application & Features : Antioxidative activity

CAMELLIA SEED EXTRACT BG is a new natural anti-ageing ingredient extracted from the seed of *Camellia japonica* in Goto islands, Nagasaki. The extract has estrogen-like effect and antioxidative activity.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Camellia Extract	BUTYLENE GLYCOL	50.0
Camellia Extract	WATER	49.2
Camellia Extract	CAMELLIA JAPONICA SEED EXTRACT	0.8

5-9. BAKUMONDOU EXTRACT BG

Main Application & Features : Stimulation of urea synthesis (moisturizing action)

BAKUMONDOU EXTRACT BG boosts the skin's ability to retain moisture by enhancement of the production of natural moisturizing factor, "Urea" on keratinocytes. Because of its colorless and transparent property, it is possible to use it for many kinds of cosmetics.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Ophiopogon Tuber Extract	WATER	69.0
	BUTYLENE GLYCOL	29.6
	OPHIPOGON JAPONICUS ROOT EXTRACT	1.4

5-10. EUCALYPTUS EXTRACT BG EUCALYPTUS EXTRACT ET

Main Application & Features : Antimicrobial activity, Skin-whitening, Anti-androgenic mimicking effect, Antiinflammatory, Cellular stimulant, Antioxidative activity

EUCALYPTUS EXTRACT BG and ET extracts are extracts from eucalyptus baby leaves (young leaves) from Japan. It has many functions such as tight junction formation promoting action, antioxidant action, whitening action, hair growth action and antibacterial action.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

EUCALYPTUS EXTRACT BG	BUTYLENE GLYCOL	79.2
	WATER	19.8
	EUCALYPTUS GLOBULUS LEAF EXTRACT	1.0
EUCALYPTUS EXTRACT ET	ALCOHOL	49.2
	WATER	19.2
	EUCALYPTUS GLOBULUS LEAF EXTRACT	1.6

5-11. CAMELLIA LEAF EXTRACT BG

Main Application & Features : Anti-oxidative effect, Anti-elastase activity, Collagen promoting effect, Estrogen-like effect

CAMELLIA LEAF EXTRACT BG is a new natural anti-ageing ingredient extracted from the leaves of *Camellia japonica* grown in Goto islands, Nagasaki. Catechins, camelliatannins and camellianosides are contained as active components. The extract has anti-oxidative effect, anti-elastase activity, collagen promoting effect and estrogen-like activity.

Ingredient	INCI Code	Compound Ratio (%)
For COSMETIC USE ONLY		
—	BUTYLENE GLYCOL	49.5
—	WATER	49.5
—	CAMELLIA JAPONICA LEAF EXTRACT	1.0

5-12. TURMERIC EXTRACT BG

Main Application & Features : Anti-oxidative effect, Anti-elastase activity, Estrogen-like effect

TURMERIC EXTRACT BG is obtained by extracting with 1,3-butylene glycol solution from the root of *Curcuma longa* grown in Okinamwa. Curcumin is contained as active component. The extract has anti-oxidative effect, anti-elastase activity and estrogen-like activity.

Ingredient	INCI Code	Compound Ratio (%)
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)		
Turmeric Extract	BUTYLENE GLYCOL	79.8
	WATER	19.9
	CURCUMA LONGA (TURMERIC) ROOT EXTRACT OR RHIZOME EXTRACT	0.3

5-13. CyPA™ - ET (Liquid type) CyPA™ - PW (Powder type)

Main Application & Features : Hyaluronan production enhancing effect, Cytoskeleton enhancing effect, Collagen-gel contracting effect, Transglutaminase expression enhancing effect, Ceramide production enhancing effect, Aquaporin 3 expression enhancing effect

CyPA has been identified as a novel lysophospholipid with quite unique structure and is obtained from the culture medium of slime mold (*Physarum polycephalum*) by Prof. Murofushi in 1985. It has also been found that CyPA is located in human serum and tear. Recently, it has been shown that CyPA has various biological functions. We have introduced the technology of enzymatic process to produce CyPA from Prof. Murofushi, and have applied it to cosmetics.

Product Name	INCI Code	Compound Ratio (%)
--------------	-----------	--------------------

For COSMETIC USE ONLY

CyPA - ET	CYCLIC LYSOPHOSPHATIDIC ACID	20
	ALCOHOL	40
	WATER	40
CyPA - PW	CYCLIC LYSOPHOSPHATIDIC ACID	50
	CYCLODEXTRIN	50

5-14. ECKLEXT™ BG

Main Application & Features : Anti-oxidative effect, MMP-2 inhibitory effect

ECKLEXT BG is obtained by extracting with 1,3-butylene glycol solution from whole algae of *Phaeophyta* (*Ecklonia kurome*) harvested in a marine area of Amakusa, Kumamoto. It contains an abundance of seaweed polyphenols (phlorotannins). The extract has anti-oxidative effect and MMP-2 inhibitory effect.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Seaweed Extract (1)	ECKLONIA KUROME EXTRACT	1.0
	BUTYLENE GLYCOL	79.2
	WATER	19.8

5-15. VERBENA OFFICINALIS EXTRACT BG

Main Application & Features : Anti-allergic effect, Anti-inflammatory effect, Anti-oxidative effect

VERBENA OFFICINALIS EXTRACT BG is obtained by extracting with 1,3-butylene glycol solution from whole plant of *Vervena officinalis* grown in Okinamwa. The extract has an anti-allergic, an anti-inflammatory and anti-oxidative effect.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

For COSMETIC USE ONLY

—	BUTYLENE GLYCOL	79.5
	WATER	19.9
	VERBENA OFFICINALIS EXTRACT	0.6

5-16. YOUKOU SAKURA FLOWER EXTRACT BG

Main Application & Features : Anti-oxidative effect, Estrogen-like effect

YOUKOU SAKURA FLOWER EXTRACT BG is obtained by extracting with 1,3-butylene glycol solution from flower of *Cerasus youkou* grown in Ehime. *Cerasus youkou* is cherry contributed as “a symbol of peace” not only in Japan but everywhere in the world. It has many pink flowers, and is resistant to disease and severe climate. The extract protects your skin and promotes youthful skin. The extract has anti-oxidative effect and estrogen-like activity.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

For COSMETIC USE ONLY

—	BUTYLENE GLYCOL	79.4
	WATER	19.8
	CERASUS YOUKOU FLOWER EXTRACT	0.8

5-17. YOUKOU SAKURA LEAF EXTRACT BG

Main Application & Features : Anti-oxidative effect, Skin-whitening like effect, Estrogen-like effect

YOUKOU SAKURA LEAF EXTRACT BG is obtained by extracting with 1,3-butylene glycol solution from flower of *Cerasus youkou* grown in Ehime. *Cerasus youkou* is cherry contributed as “a symbol of peace” not only in Japan but everywhere in the world. It has many pink flowers, and is resistant to disease and severe climate. The extract protects your skin and promotes youthful skin. The extract has anti-oxidative effect, skin-whitening effect and estrogen-like activity.

Ingredient	INCI Code	Compound Ratio (%)
------------	-----------	--------------------

For COSMETIC USE ONLY

—	BUTYLENE GLYCOL	79.4
	WATER	19.8
	CERASUS YOUKOU LEAF EXTRACT	0.8

6. HIGH-PURITY SOYBEAN PHOSPHOLIPIDS

Main Application & Features : Emulsifiers, Moisturizing agents

These products are high-purity soybean phospholipids and Cholesterol(※) suitable for making various high-quality cosmetics, especially for liposomal cosmetics.

They give excellent effects such as enhancing moisturizing function of skin, promoting recovery of barrier function of skin, delivering and slowly releasing active agents to skin.

※ Marine Cholesterol(fish delivered)

Ingredient	Product Name	INCI Code	PC purity	Appearance
------------	--------------	-----------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Hydrogenated soybean phospholipid	COATSOME™ NC-21	HYDROGENATED LECITHIN	90% or more	White Powder
Hydrogenated soybean phospholipid	COATSOME NC-61	HYDROGENATED LECITHIN	60% or more	Pale yellow Powder

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Cholesterol	CHOLESTEROL M	CHOLESTEROL	White Powder
-------------	---------------	-------------	--------------

Base materials

7. FATTY ACID
8. TRIGLYCERIDE
9. GLYCERIN
10. HIGHER ALCOHOL
11. METALLIC SOAP
12. FATTY ACID ESTER
13. SURFACTANTS
14. POLYOXYALKYLENE
GLYCOL DERIVATIVES
15. HYDROGENATED
POLYISOBUTENE
16. VEGETABLE OIL
17. PURIFIED OLEIC ACID
AND ITS DERIVATIVES

7. FATTY ACID

Main Application & Features : Pharmaceutical Additives, Food Additives, Oily Base

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE PHARMACOPOEIA (JP)

Stearic Acid	JP STEARIC ACID NAA™-180P-1	—	Powder
--------------	--------------------------------	---	--------

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS (JPE)

Refined Oleic Acid	JPE EXTRA™ OS-85	—	Liquid
Behenic Acid	JPE BEHENIC ACID (NAA-222S)	—	Beads

Approved by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES (JSSAF)

Stearic Acid	NAA-180	—	Beads
--------------	---------	---	-------

Ingredient	Product Name	INCI Code	Appearance
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)			
Capric Acid	NAA™-102	CAPRIC ACID	Solid
Lauric Acid	NAA-122	LAURIC ACID	Beads
	NAA-312		Liquid
Myristic Acid	NAA-142	MYRISTIC ACID	Beads
Palmitic Acid	NAA-160	PALMITIC ACID	Beads
	NAA-171		
Stearic Acid	NAA-172	STEARIC ACID	Beads
	NAA-173K		
	NAA-174		
	NAA-175		
	NAA-176		
	NAA-180		
	NAA-1865		
	NAA-1850		
	STEARIC ACID CHERRY		Beads or Powder
Behenic Acid	NAA-222S	BEHENIC ACID	Beads
Oleic Acid	NAA-34	OLEIC ACID	Liquid
	NAA-35		
	NAA-400		
	EXTRA OLEIN™		
	EXTRA OLEIN-80		
	EXTRA OS-85		
Linoleic Acid	EXTRA LINOLEIC 90	LINOLEIC ACID	Liquid
	LINOLEIC ACID 90		
Hydroxystearic Acid	HYDROXYSTEARIC ACID	HYDROXYSTEARIC ACID	Flake
Coconut Acid	COCONUT ACID NAA - 415	COCONUT ACID	Liquid

8. TRIGLYCERIDE

8-1. HARDENED OIL

Main Application & Features : Fatliquors, Oily Base

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Hydrogenated Oil	CASTER™ WAX A	HYDROGENATED CASTOR OIL	Flake
------------------	---------------	-------------------------	-------

8-2. TRIGLYCERIDE SATURATED FATTY ACID

Main Application & Features : Pharmaceutical Additives, Fatliquors, Oily Base

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS (JPE)

Medium Chain Fatty Acid Triglyceride	JPE PANACET™ 800	—	Liquid
	JPE PANACET 810		
	JPE PANACET 810S		
Hard Fat	PHARMASOL™ A-105	—	Solid
	PHARMASOL B-105		
	PHARMASOL B-112		
	PHARMASOL B-115		
	PHARMASOL N-145		

Approved by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES (JSSFA)

Medium Chain Fatty Acid Triglyceride	PANACET 800	—	Liquid
	PANACET 810		
	PANACET 810S		

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Glyceryl Tri-2-ethylhexanoate	PANACET 800B	TRIETHYLHEXANOIN	Liquid
Glyceryl Tricaprylate	PANACET 800	TRICAPRYLIN	
Caprylic / Capric Acid Triglyceride	PANACET 810	CAPRYLIC/CAPRIC TRIGLYCERIDE	
	PANACET 810S		

9. GLYCERIN

Main Application & Features : Medicines, Pharmaceutical Additives, Food Additives, Moisturizers

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE PHARMACOPOEIA (JP)

Glycerin	JP GLYCERIN PG	—	Liquid
	JP GLYCERIN PG-S		
	JP GLYCERIN 85		
	JP GLYCERIN 85-S		
Concentrated Glycerin	JP CONCENTRATED GLYCERIN	—	Liquid
	JP CONCENTRATED GLYCERIN-S		

Approved by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES (JSSFA)

Glycerin	FOOD ADDITIVE GRADE GLYCERIN	—	Liquid
	FOOD ADDITIVE GRADE GLYCERIN-S		

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Glycerin	GLYCERIN 85	GLYCERIN	Liquid
	GLYCERIN 85-S		
CONCENTRATED Glycerin	RG · CO · P™		

10. HIGHER ALCOHOL

Main Application & Features : Oily Base

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Lauryl Alcohol	NAA™-42	LAURYL ALCOHOL	Solid
Myristyl Alcohol	NAA-43	MYRISTYL ALCOHOL	Beads
Cetanol	NAA-44	CETYL ALCOHOL	Beads
Stearyl Alcohol	NAA-45	STEARYL ALCOHOL	Beads
	NAA-46		
Cetostearyl Alcohol	NAA-48	CETEARYL ALCOHOL	Beads
	NAA-49		
Oleyl Alcohol	NAA-51	OLEYL ALCOHOL	Liquid
	NOFABLE™ AO-85S		
Behenyl Alcohol	NAA-422	BEHENYL ALCOHOL	Beads

11. METALLIC SOAP

Main Application & Features : Pharmaceutical Additives, Food Additives, Cosmetics (Powder), Thickening Agents, Glidants, Liquidity Improvers

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE PHARMACOPOEIA (JP)

Calcium Stearate	JP CALCIUM STEARATE	—	Powder
Magnesium Stearate	JP MAGNESIUM STEARATE		
	JP MAGNESIUM STEARATE-S		

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS (JPE)

Aluminum Stearate	ALUMINUM STEARATE 600	—	Powder
	ALUMINUM STEARATE 600 VEGETABLE		

Approved by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES (JSSFA)

Calcium Stearate	AULABRITE™ CA-65	—	Powder
Magnesium Stearate	AULABRITE MA-76		

Approved by JAPANESE STANDARDS OF QUASI-DRUG (JSQI)

Zinc Laurate	POWDERBASE L	ZINC LAURATE	Powder
Zinc Myristate	POWDERBASE M	ZINC MYRISTATE	
Zinc Stearate	ZINC STEARATE	ZINC STEARATE	
	ZINC STEARATE-S		
	ZINC STEARATE VEGETABLE		
Calcium Stearate	CALCIUM STEARATE	CALCIUM STEARATE	
	CALCIUM STEARATE VEGETABLE		
Aluminum Stearate	ALUMINUM STEARATE 600	ALUMINUM DISTEARATE	
	ALUMINUM STEARATE 600 VEGETABLE		
Magnesium Stearate	MAGNESIUM STEARATE	MAGNESIUM STEARATE	
	MAGNESIUM STEARATE-S		

12. FATTY ACID ESTER

Main Application & Features : Pharmaceutical Additives, Food Additives, Cosmetics (Powder), Thickening Agents, Glidants, Liquidity Improvers

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS (JPE)

Isopropyl Myristate	JPE IPM-R™	—	Liquid
---------------------	------------	---	--------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Cetyl Myristate	CETYL MYRISTATE	CETYL MYRISTATE	Liquid
Isopropyl Myristate	IPM-R	ISOPROPYL MYRISTATE	
Isopropyl Palmitate	IPP-R	ISOPROPYL PALMITATE	
Butyl Stearate	BUTYL STEARATE	BUTYL STEARATE	Solid
Stearyl Stearate	UNISTER™ M-9676	STEARYL STEARATE	
Ethyl Oleate	NOFABLE™ EO-85S	ETHYL OLEATE	Liquid
Decyl Oleate	NOFABLE DO-85S	DECYL OLEATE	
Diethylhexyl Sebacate	UNISTER DOS	DIETHYLHEXYL SEBACATE	
Neopentyl Glycol Diethylhexanoate	UNISTER H-208BRS	NEOPENTYL GLYCOL DIETHYLHEXANOATE	
Pentaerythrityl tetraoctanoate	UNISTER H-408BRS	PENTAERYTHRITYL TETRAOCTANONATE	
Ethylene Glycol Distearate	UNISTER E-275 UNISTER E-286	GLYCOL DISTEARATE	
Ethylhexyl Palmitate	UNISTER MB-816	ETHYLHEXYL PALMITATE	Liquid
Ethylhexyl Stearate	UNISTER MB-876	ETHYLHEXYL STEARATE	

13. SURFACTANTS

13-1. ANIONIC SURFACTANTS

Main Application & Features : Detergents, Frothers, Dispersants

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Potassium Soap Base	NONSOU TM LK-2	POTASSIUM LAURATE	Flake
	NONSOU TM LK-5	SEKKEN SOJI-K	
	NONSOU TM LK-30	SEKKEN SOJI-K, WATER	Liquid
	NONSOU TM MK-1	POTASSIUM MYRISTATE	Flake
	NONSOU TM PK-1	POTASSIUM PALMITATE	
	NONSOU TM OK-1	POTASSIUM OLEATE	Liquid
Soap Base	NONSOU TM LN-1	SODIUM LAURATE	Flake
	NONSOU TM SN-1	SODIUM STEARATE	
	NONSOU TM SN-1Powder		
	NONSOU TM SN-1W1		
	NONSOU TM ON-1N	SODIUM OLEATE	
NONSOU TM TN-1	SODIUM TALLOWATE		
Sodium Oleate	NONSOU TM ON-8	SODIUM OLEATE	Solid
Laurylsulfuric Acid Triethanol Amine	PERSOFT TM SF-T	TEA-LAURYL SULFATE, WATER	Liquid
Polyoxyethylene Lauryl Ether Sulfuric Acid Sodium Salt	PERSOFT EL	SODIUM LAURETH SULFATE, WATER	
	PERSOFT EF		
Polyoxyethylene Lauryl Ether Sulfuric Acid Triethanol Amine	PERSOFT EFT	TEA-LAURETH SULFATE, WATER	
Polyoxyethylene Coconut Fatty Acid Monoethanolamide Sulfuric Acid Sodium Salt	SUNAMID TM C-3	SODIUM PEG-4 COCAMIDE SULFATE, WATER	
Sodium N-Dodecanoyl Sarcosinate	FIRET TM L	SODIUM LAUROYL SARCOSINATE, WATER	
Polyoxyethylen lauroyl Sulfosuccinate sodium salt	SUCCINEED TM 1-LMN-30	DISODIUM LAURETH SULFOSUCCINATE, WATER	Paste
Sodium N-Cocoyl Methyltaurate	DIAPON TM K	SODIUM METHYL COCOYL TAURATE, WATER	Paste
	DIAPON K-SF		Liquid
	DIAPON LM		Powder
	DIAPON K-SF POWDER		
Magnesium N-Cocoyl Methyltaurate	DIAPON K-MG	MAGNESIUM METHYL COCOYL TAURATE, WATER	Liquid
Sodium N-Cocoyl Ethyl Ester Sulfonate	DIAPON SCI	SODIUM COCOYL ISETHIONATE	Solid
Maleic Anhydride/Diisobutylene Copolymer Sodium Salt Solution	POLYSTER TM OMR	SODIUM MA/DIISOBUTYLENE COPOLYMER	Liquid
N-Dodecanoyl-N-methyl-β-alanine sodium salt	SOFTILT TM AS-L	SODIUM LAUROYL METHYLAMINOPROPIONATE, WATER	
N-Dodecanoyl-N-methyl-β-alanine Triethanol Amine	SOFTILT AT-L	TEA-LAUROYL METHYLAMINOPROPIONATE , WATER	

13

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

For COSMETIC USE ONLY

—	NONSOUL™ LN-T	SODIUM TAURINE LAURATE, WATER	Paste
—	DIAPON™ HF-SF	SODIUM METHYL CAPROYL TAURATE, WATER	Liquid
—	DIAPON K-SG	SODIUM TAURINE COCOYL METHYL TAURATE, WATER	
—	SOFTILT™ AY-L	TEA-TAURINE LAUROYL METHYL BETA - ALANINATE	

13-2. CATIONIC SURFACTANTS

Main Application & Features : Medicines, Anti-Static Agents, Disinfectants, Emulsifiers, Hair Conditioners

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE PHARMACOPOEIA (JP)

Benzalkonium Chloride	JP Benzalkonium CATION™ M2-100	—	Powder (Crystalline)
Concentrated Benzalkonium Chloride Solution 50	JP Concentrated Benzalkonium Chloride Solution 50 CATION F2-50E		Liquid

For PHARMACEUTICAL USE ONLY

Alkyltrimethylammonium Chloride	CATION PB-40	—	Liquid
---------------------------------	--------------	---	--------

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Benzalkonium Chloride	CATION™ M2-100R	BENZALKONIUM CHLORIDE	Liquid
Benzalkonium Chloride solution	CATION F2-50R	BENZALKONIUM CHLORIDE	
Cetyltrimethyl Ammonium Chloride	CATION PB-300	CETYLTRIMETHYL CHLORIDE, WATER	Paste or Solid
Stearyl Ammonium Chloride	CATION AB-600	STEARTRIMONIUM CHLORIDE, WATER	
	CATION AB-700E	STEARTRIMONIUM CHLORIDE, ETHANOL	Solid
	CATION AB-800S	STEARTRIMONIUM CHLORIDE, ISOPROPANOL	
	CATION AB-250AQ	STEARTRIMONIUM CHLORIDE, WATER	Liquid
Alkyltrimethyl Ammonium Chloride Solution	CATION VB-M FLAKE	BEHENTRIMONIUM CHLORIDE, ISOPROPANOL	Solid (Flake)
	CATION VB-F	BEHENTRIMONIUM CHLORIDE, DENATURED ALCOHOL	
	CATION VB-800E	BEHENTRIMONIUM CHLORIDE, ETHANOL	
Distearyl Dimethyl Ammonium Chloride	CATION 2ABT	DISTEARLYDIMONIUM CHLORIDE, WATER	Semi- Solid

For COSMETIC USE ONLY

—	CATION BB	LAURTRIMONIUM CHLORIDE, WATER	Liquid
—	CATION EQ-01D	BIS-SOYOYL/RAPESEDOYL ETHYL HYDROXYETHYLMONIUM METHOSULFATE, DPG	Paste or Solid

13-3. AMPHOTERIC SURFACTANTS

Main Application & Features : Medicines, Disinfectants, Detergents, Frothers, Anti-Static Agents, Hydrophilic Thickening Agents

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

For PHARMACEUTICAL USE ONLY

Lauryl Diaminoethyl Glycine Sodium Solution	ANON™ LG	—	Liquid
---	----------	---	--------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

2-Alkyl-N-Carboxymethyl-N-Hydroxyethyl Imidazolium Betaine	ANON™ GLM-R-LV	SODIUM COCOAMPHO ACETATE, WATER	Liquid
Lauryldimethylaminoacetic Acid Betaine	ANON BL	LAURYL BETAINE, WATER	
	ANON BL-SF		
Palm Oil Alkyl Betaine Solution	ANON BF	COCOBETAINE, WATER	
Lauric Amide Propyl Betaine Solution	ANON BDL-SF	LAURAMIDOPROPYLBETAINE, WATER	
Palm Oil Fatty Acid Amide Propyl Betaine Solution	ANON BDF-R	COCAMIDOPROPYL BETAINE, WATER	
	ANON BDF-SF		
Palm Kern Fatty Acid Amide Propyl Betaine Solution	ANON BDC-SF	PALM KERNEL AMIDOPROPYL BETAINE, WATER	
	ANON BDB-S		
Laurylamino Bisacetic Acid Sodium Salt Solution	ANON LA	DISODIUM LAURIMINODIACETATE, WATER	Liquid (Cloudy under 20C°)
Lauryldiaminoethyl Glycine Sodium Salt	ANON LG-R	SODIUM LAURYL DIETHYLENEDIAMINOGLYCINATE, WATER, ETHANOL	Liquid

For COSMETIC USE ONLY

—	ANON LA POWDER	DISODIUM LAURIMINODIACETATE, WATER	Powder
---	----------------	------------------------------------	--------

13-4. NONIONIC SURFACTANTS

(1) SORBITAN FATTY ACID ESTERS

Main Application & Features : Food Additives, Emulsifiers

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

APPROVED by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES

Sorbitan Fatty Acid Ester	NONION™ CP-08R	—	Liquid
	NONION LP-20R		
	NONION PP-40R		Pellet
	NONION SP-60R		
	NONION SP-60RP		
	NONION OP-80R		Liquid

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS

Sorbitan mono-laurate	NONION LP-20R	SORBITAN LAURATE	Liquid
Sorbitan mono-palmitate	NONION PP-40R	SORBITAN PALMITATE	Pellet
Sorbitan mono-stearate	NONION SP-60R	SORBITAN STEARATE	
	NONION SP-60RP		
Sorbitan mono-oleate	NOFABLE™ SO-85IS	SORBITAN OLEATE	Liquid
Sorbitan sesqui-oleate	NONION OP-83RAT	SORBITAN SESQUIOLEATE	
	NOFABLE SO-852S		
Sorbitan tri-oleate	NONION OP-85R	SORBITAN TRIOLEATE	
	NOFABLE SO-853S		

(2) GLYCERINE FATTY ACID ESTERS

Main Application & Features : Food Additives, Emulsifiers

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES (JSSAF)

Glycerin Fatty Acid Ester	MONOGLY™ MB	—	Beads
---------------------------	-------------	---	-------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Lipophilic Glyceryl Monostearate	MONOGLY™ MB	GLYCERYL STEARATE	Beads
Lipophilic Glyceryl Monooleate	NOFABLE GO-851S	GLYCERYL OLEATE	Liquid
Polyglycerin laurate	UNIGLY™ GL-106	POLYGLYCERYL-6 LAURATE	

(3) ALKYROL AMIDES

Main Application & Features : Hydrophilic Thickening Agents, Foaming Agents

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Lauryl Diethanol Amide	STAFOAM™ DL	LAURAMIDE DEA	Solid
Palm Oil Fatty Acid Diethanol Amide	STAFOAM DF-4	COCAMIDE DEA	Liquid (Solid in Winter)
	STAFOAM DFC	COCAMIDE DEA, GLYCERIN	
Palm Oil Fatty Acid Diethanol Amide (2)	STAFOAM F	COCAMIDE DEA (1:2)	Liquid
Oleic Acid Diethanol Amide	STAFOAM DO	OLEAMIDE DEA	Liquid
	STAFOAM DOS		

For COSMETIC USE ONLY

—	STAFOAM MF PELLETT	COCAMIDE MEA	Pellet
---	--------------------	--------------	--------

13-5. AMINES

Main Application : Anti-Static Agents, Hair Conditioners

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

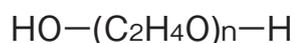
Stearyl Dimethyl Amine	TERTIARY AMINE™ AB	DIMETHYL STEARAMINE	Solid
------------------------	--------------------	---------------------	-------

14. POLYOXYALKYLENE GLYCOL DERIVATIVES

14-1. POLYOXYALKYLENE GLYCOL (Doble-Chain Form)

① POLYETHYLENE GLYCOLS

Main Application & Features : Pharmaceutical Additives, Water-Soluble Polymers, Solvents, Lubricants, Glycocalyx Agents, Moisturizers, Skin Conditioning Agents



Ingredient	Product Name	Average Molecular Weight	INCI Code
------------	--------------	--------------------------	-----------

Approved by JAPANESE PHARMACOPOEIA (JP)

Macrogol 400	MACROGOL 400	※2	380~420	—
	MACROGOL 400R	※3		
	MACROGOL 400H	※3		
Macrogol 4000	MACROGOL 4000	※2	2,600~3,800	
	MACROGOL 4000R	※3		
	MACROGOL 4000PS	※4		
Macrogol 6000	MACROGOL 6000	※2	7,300~9,300	
	MACROGOL 6000R	※3		
	MACROGOL 6000P	※4		
Macrogol 20000	MACROGOL 20000	※1	15,000~25,000	
Macrogol 1500	MACROGOL 1500		Mixture(300,1540)	
	MACROGOL 1500R	※3		
Macrogol Ointment	MACROGOL OINTMENT	※1	Mixture(400,4000)	

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS(JPE)

Macrogol 200	MACROGOL 200		190~210	—
	MACROGOL 200R	※3		
Macrogol 300	MACROGOL 300	※2	285~315	
	MACROGOL 300R	※3		
Macrogol 600	MACROGOL 600	※2	570~630	
Macrogol 1000	MACROGOL 1000	※1	950~1,050	
Macrogol 1540	MACROGOL 1540		1,300~1,600	

※ 1: Production by order ※2: Adapting for Multi-compendial – JP(JPE), EP, NF(USP) , ※3: High quality Polyethylene glycol , ※4: Powder

Ingredient	Product Name	Average Molecular Weight	INCI Code
------------	--------------	--------------------------	-----------

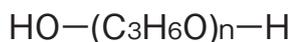
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyethylene Glycol 200	PEG# 200	200	PEG-4
Polyethylene Glycol 300	PEG# 300	300	PEG-6
Polyethylene Glycol 400	PEG# 400	400	PEG-8
Polyethylene Glycol 600	PEG# 600	600	PEG-12
Polyethylene Glycol 1000	PEG#1000	1000	PEG-20
Polyethylene Glycol 1500	PEG# 1500	Mixture (300,1540)	PEG-6, PEG-32
Polyethylene Glycol 1540	PEG# 1540	1540	PEG-32
Polyethylene Glycol 2000	PEG# 2000	2000	PEG-40
Polyethylene Glycol 4000	PEG# 4000 PEG# 4000P※	3100	PEG-75
Polyethylene Glycol 6000	PEG# 6000 PEG# 6000P※	8800	PEG-150
Polyethylene Glycol 11000	PEG# 11000 PEG# 11000P※	11000	PEG-240
Polyethylene Glycol 20000	PEG# 20000	20000	PEG-400

※ Powder

② POLYPROPYLENE GLYCOLS

Main Application & Features : Solvents, Oils, Hairdressings



Propylene Oxide Addition Mole Number = n

Ingredient	Product Name	Average Molecular Weight	INCI Code
------------	--------------	--------------------------	-----------

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS(JPE)

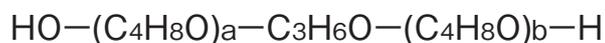
Polypropylene Glycol 2000	POLYPROPYLENE GLYCOL 2000	2000	—
---------------------------	---------------------------	------	---

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polypropylene Glycol	UNIOL™ D-700	700	PPG-12
	UNIOL D-1000	1000	PPG-17
	UNIOL D-1200	1200	PPG-20
	UNIOL D-2000	2000	PPG-34

③ POLYBUTYLENE GLYCOLS

Main Application & Features : Solvents, Oils



Butylene Oxide Addition Mole Number = a + b

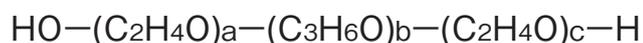
Ingredient	Product Name	Average Molecular Weight	INCI Code
------------	--------------	--------------------------	-----------

For COSMETIC USE ONLY

—	UNIOL™ PB-500	500	POLY(1,2-BUTANEDIOL)-6PROPYLENEGLYCOL
—	UNIOL PB-700	700	POLYBUTYLENEGLYCOL /PPG-9/1COPOLYMER

④ POLYOXYETHYLENE POLYOXYPROPYLENE GLYCOLS

Main Application & Features : Stabilizers, Emulsifiers, Thickening Agents, Gelatinizers, Moisturizers



Ethylene Oxide Addition Mole Number = a + c

Propylene Oxide Addition Mole Number = b

Ingredient	Product Name	EO (WT %)	INCI Code
------------	--------------	-----------	-----------

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS (JPE)

Polyoxyethylene(20) Polyoxypropylene (20) Glycol	PLONON #124P	40	
Polyoxyethylene (160) Polyoxypropylene (30) Glycol	PLONON #188P	80	
Polyoxyethylene (196) Polyoxypropylene (67) Glycol	PLONON #407P	70	

Ingredient	Product Name	EO (WT %)	INCI Code
------------	--------------	----------------	-----------

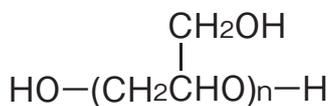
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylenepolyoxypropylene Glycol (5E.O.)(35P.O.)	PLONON #201	10	—
Polyoxyethylenepolyoxypropylene Glycol (12E.O.)(35P.O.)	PLONON #202	20	—
Polyoxyethylenepolyoxypropylene Glycol (30E.O.)(35P.O.)	PLONON #204	40	—
Polyoxyethylenepolyoxypropylene Glycol (150E.O.)(35P.O.)	PLONON #208	80	—
Polyoxyethylenepolyoxypropylene Glycol (200E.O.)(40P.O.)	PLONON #238	80	—
Polyoxyethylenepolyoxypropylene Glycol (200E.O.)(70P.O.)	UNILUBE™ 70DP-950B	70	PEG/PPG-200/70 COPOLYMER
Polyoxyethylenepolyoxypropylene Glycol (26E.O.)(30P.O.)	PLONON #184R	40	POLOXAMER 184
Polyoxyethylenepolyoxypropylene Glycol (240E.O.)(60P.O.)	UNILUBE 75DE-2620R	75	PEG/PPG-240/60 COPOLYMER

14-2. POLYOXYALKYLENE GLYCOL (Multiple Chain Form)

① POLYGLYCERIN

Main Application & Features : Moisturizers, Skin Conditioners



n = GLYCERINE UNIT #

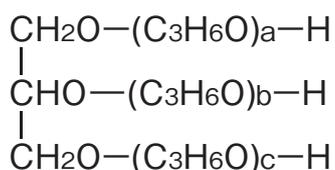
Ingredient	Product Name	n	INCI Code
------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Diglycerin	UNIGLY™ G-2	2	DIGLYCERIN
------------	-------------	---	------------

② POLYOXYPROPYLENE GLYCERIN ETHER

Main Application & Features : Moisturizers, Skin Lubricants, Fatliquors, Oils



n = Propyleneoxide Addition Mole Number = a + b + c

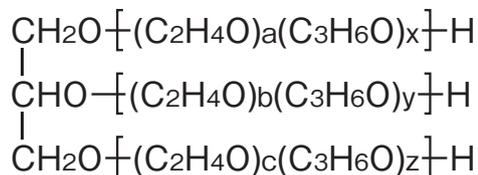
Ingredient	Product Name	n	INCI Code
------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxypropylene Glyceryl Ether	UNIOL™ SGP-65	8	PPG-8 GLYCERYL ETHER
	UNIOL TG-1000	16	PPG-16 GLYCERYL ETHER
	UNIOL TG-3000	50	PPG-50 GLYCERYL ETHER
	UNIOL TG-4000R	70	PPG-70 GLYCERYL ETHER

③ POLYOXYETHYLENE POLYOXYPROPYLENE GLYCERYL ETHERS

Main Application & Features : Water-Soluble Polymers, Moisturizers, Skin Lubricants



[] : Random Addition
 m = Ethyleneoxide Addition Mole Number = a + b + c
 n = Propyleneoxide Addition Mole Number = x + y + z

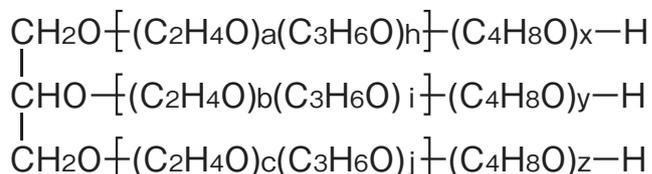
Ingredient	Product Name	m	n	INCI Code
------------	--------------	---	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylenepolyoxypropylene Glyceryl Ether (24E.O.)(24P.O.)	UNILUBE™ 50TG-32	24	24	PPG-24-GLYCERETH-24
---	------------------	----	----	---------------------

④ POLYOXYBUTYLENE POLYOXYETHYLENE POLYOXYPROPYLENE GLYCERYL ETHERS

Main Application & Features : Water-Soluble Moisturizing Oils, Skin Lubricants, Solvents



<Characteristics>

1. High moisturizing effect.
2. Even if it highly combines, there is good touch.(Not sticky feeling)
3. It dissolves in polar oil such as triglycerides and esters as well as water.
4. Because of its low congeal point, it keeps high stability even at low temperature.
5. High safety and stability.

[] : Random Addition
 Ethyleneoxide Addition Mole Number = a + b + c = 8
 Propyleneoxide Addition Mole Number = h + i + j = 5
 Butyleneoxide Addition Mole Number = x + y + z = 3

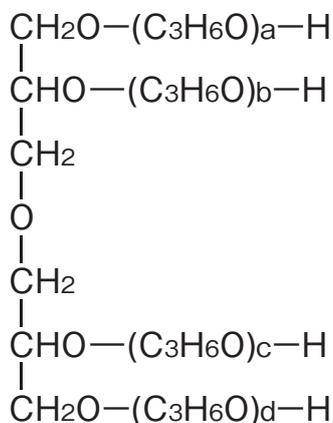
Ingredient	Product Name	INCI Code
------------	--------------	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxybutylenepolyoxyethylene polyoxypropylene Glyceryl Ether (8E.O.)(5P.O.)(3B.O.)	WILBRIDE™ S-753	PEG/PPG/POLYBUTYLENE GLYCOL-8/5/3 GLYCERIN
	WILBRIDE S-753D	PEG/PPG/POLYBUTYLENE GLYCOL-8/5/3 GLYCERIN TOCOPHEROL

⑤ POLYOXYPROPYLENE DIGLYCERYL ETHERS

Main Application & Features : Moisturizers, Skin Lubricants, Fatliquors, Oils



n = Propyleneoxide Addition Mole Number = a + b + c + d

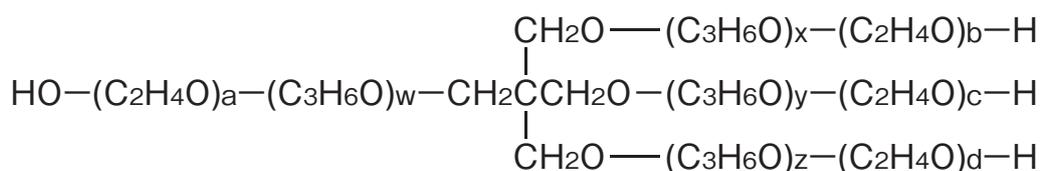
Ingredient	Product Name	n	INCI Code
------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxypropylene Diglyceryl Ether	UNILUBE™ DGP-700	9	PPG-9 DIGLYCERYL ETHER
	UNILUBE DGP-700F		

⑥ POLYOXYETHYLENE POLYOXYPROPYLENE PENTAERYTHRITOL ETHERS

Main Application & Features : Moisturizers, Skin Lubricants, Fatliquors, Oils



m = Ethyleneoxide Addition Mole Number = a + b + c + d

n = Propyleneoxide Addition Mole Number = w + x + y + z

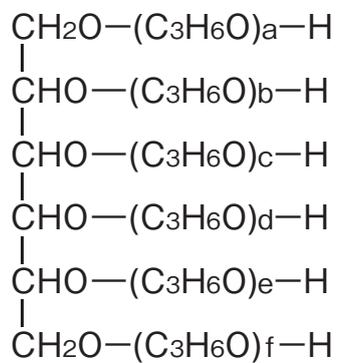
Ingredient	Product Name	m	n	INCI Code
------------	--------------	---	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylenepolyoxypropylene Pentaerythritol Ether (5E.O.)(65P.O.)	UNILUBE™ 5TP-300KB	5	65	PPG-65-PEG-5 PENTAERYTHRITYL ETHER
---	--------------------	---	----	------------------------------------

⑦ POLYOXYPROPYLENE SORBITOLS

Main Application & Features : Skin Protective Agents, Oil for Hairdressings, Form Improvement Agents



n = Propyleneoxide Addition Mole Number
= a + b + c + d + e + f

Ingredient	Product Name	n	INCI Code
------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxypropylene Sorbitol	UNIOL™ HS-1600D	25	PPG-25 SORBITOL
---------------------------	-----------------	----	-----------------

14-3. POLYOXYALKYLENE ALKYLEETHER (Double-Chain Form)

① POLYOXYETHYLENE MONOALKYLEETHERS

Main Application & Features : Pharmaceutical Additives, Nonionic Surfactants (Emulsifiers, Solubilizers, Detergents, etc.) , Foam quality improvement agents



R = Alkyl Group
n= Ethyleneoxide Addition Mole Number

Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE PHARMACOPOEIA (JP)

Lauromacrogol	LAUROMACROGOL NONION™ L-209	9	13.6	—
---------------	-----------------------------	---	------	---

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Laurylether	NONION™ K-204	4	9.7	LAURETH-4
	NONION K-209	9	13.6	LAURETH-9
	NONION K-211	11	14.4	LAURETH-11
	NONION K-220	20	16.5	LAURETH-20
	NONION K-230	30	17.5	LAURETH-30
	NONION K-2100W	100	19.2	LAURETH-100,WATER
Polyoxyethylene Cetylether	NONION P-208	8	11.9	CETETH-8
	NONION P-210	10	12.9	CETETH-10
	NONION P-213	13	14.1	CETETH-13
Polyoxyethylene Oleylether	NONION E-202S	2	4.9	OLETH-2
	NONION E-205S	5	9.0	OLETH-5
	NONION E-215	15	14.2	OLETH-15
	NONION E-230	30	16.6	OLETH-30
Polyoxyethylene Stearylether	NONION S-202	2	4.9	STEARETH-2
	NONION S-207	7	10.7	STEARETH-7
	NONION S-215	15	14.2	STEARETH-15
	NONION S-220	20	15.3	STEARETH-20

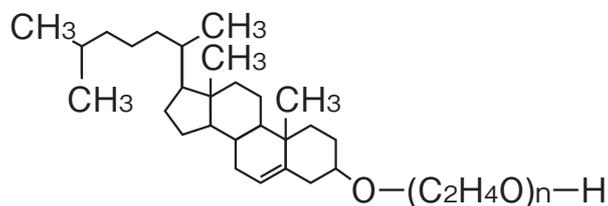
Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Tridecylether	NONION T-208.5	8.5	13.0	TRIDECETH-8
	NONION T-212	12	14.5	TRIDECETH-12
Polyoxyethylene Isostearylether	NONION IS-202	2	4.9	ISOSTEARETH-2
Polyoxyethylene Behenylether	NONION B-205	5	8.1	BEHENETH-5
	NONION B-220	20	14.6	BEHENETH-20
	NONION B-250	50	17.4	BEHENETH-50

② POLYOXYETHYLENE CHOLESTERYLETERS

Main Application & Features : Nonionic Surfactants(Emulsifiers, Solubilizers etc.)



n = Ethyleneoxide Addition Mole Number

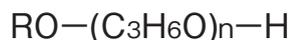
Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Cholesterylether	UNIOX™ CS-800	10	10.7	CHOLETH-10
----------------------------------	---------------	----	------	------------

③ POLYOXYPROPYLENE ALKYLETERS

Main Application & Features : Oil for Hairdressings, Foam Improvement Agents, Skin Lubricants

R = Alkyl Group
n = Propyleneoxide Addition Mole Number

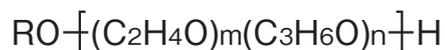
Ingredients	Product Name	n	INCI Code
-------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxypropylene Butylether (1)	UNILUBE MB-7	12	PPG-12 BUTYL ETHER
	UNILUBE MB-11	17	PPG-17 BUTYL ETHER
	UNILUBE MB-14	20	PPG-20 BUTYL ETHER
	UNILUBE MB-19	24	PPG-24 BUTYL ETHER
	UNILUBE MB-38	33	PPG-33 BUTYL ETHER
Polyoxypropylene Butylether (2)	UNILUBE MB-370	40	PPG-40 BUTYL ETHER
	UNILUBE MB-700	52	PPG-52 BUTYL ETHER
	ACROBUTE MB-52		
Polyoxypropylene Stearylether	UNILUBE MS-70K	15	PPG-15 STEARYL ETHER

④ POLYOXYETHYLENE POLYOXYPROPYLENE ALKYLETERS

Main Application & Features : Emulsifiers, Solubilizers, Moisturizers, Hair Oils, Water-Soluble High Polymers



m = Ethyleneoxide Addition Mole Number

n = Propyleneoxide Addition Mole Number

[] : Block or Random addition.

Ingredients	Product Name	m	n	INCI Code
-------------	--------------	---	---	-----------

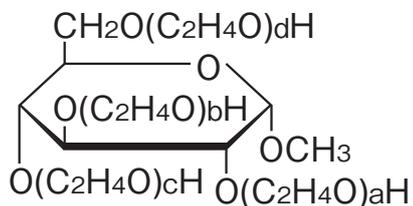
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylenepolyoxypropylene butylether	UNILUBE™ 50MB-11	9	10	PPG-10-BUTETH-9
	UNILUBE 50MB-11D			PPG-10-BUTETH-9 TOCOPHEROL
	UNILUBE 50MB-26	17	17	PPG-17-BUTETH-17
	UNILUBE 50MB-72	30	30	PPG-30-BUTETH-30
	SOLUBULE BR-02			
UNILUBE 50MB-168	37	38	PPG-38-BUTETH-37	
Polyoxyethylenepolyoxypropylene Cetyler (10E.O.)(8P.O.)	UNISAFE 10P-8	10	8	PPG-8-CETETH-10
Polyoxyethylenepolyoxypropylene Cetyler (20E.O.)(8P.O.)	UNISAFE 20P-8	20	8	PPG-8-CETETH-20
Polyoxyethylenepolyoxypropylene Srtearyler	UNILUBE 10MS-250KB	3	34	PPG-34-STEARETH-3
	UNISAFE 34S-23	34	23	PPG-23-STEARETH-34
Polyoxyethylenepolyoxypropylene Decyltetradecyl Ether	UNILUBE MT-0612B	12	6	PPG-6-DECYLTETRADECETH-12
	UNILUBE 50MT-2200B	24	13	PPG-13-DECYLTETRADECETH-24
	SOLUBULE GS-01			
	UNILUBE 20MT-2000B	10	20	PPG-20-DECYLTETRADECETH-10

14-4. POLYOXYALKYLENE ALKYLEETHER (Multiple Chain Form)

① POLYOXYETHYLENE METHYLGLUCOSIDES

Main Application & Features : Moisturizers, Skin Lubricants



n = Ethyleneoxide Addition Mole Number = a + b + c + d

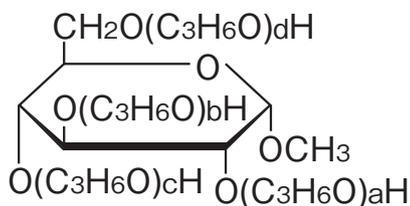
Ingredients	Product Name	n	INCI Code
-------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Methylglucoside	MACBIOBRIDE™ MG-10E	10	METHYL GLUCETH-10
	MACBIOBRIDE MG-20E	20	METHYL GLUCETH-20

② POLYOXYPROPYLENE METHYLGLUCOSIDES

Main Application & Features : Moisturizers, Skin Lubricants, Fatliquors



n = Propyleneoxide Addition Mole Number = a + b + c + d

Ingredients	Product Name	n	INCI Code
-------------	--------------	---	-----------

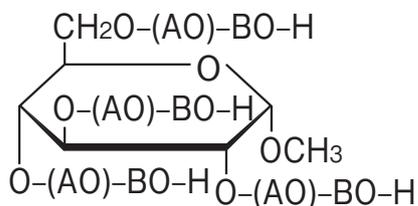
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxypropylene Methylglucoside	MACBIOBRIDE MG-10P	10	PPG-10 METHYL GLUCOSE
	MACBIOBRIDE MG-20P	20	PPG-20 METHYL GLUCOSE

③ POLYOXYBUTYLENE POLYOXYETHYLENE POLYOXYPROPYLENE METHYLGLUCOSIDES

Main Application : Moisturizers , Skin Lubricants

[Concept] Silky Emollient Sugar



AO : Ethylene Oxide and Propylene Oxide Random copolymer
BO : Butylene Oxide

Contained Tocopherol 100 ppm

Product Name	INCI Code
--------------	-----------

For COSMETIC USE ONLY

WILBRIDE™ MG-2070	Approved
-------------------	----------

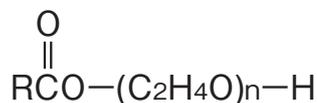
<Characteristics>

1. Provides smooth feeling derived from sugar base.
2. Provides silky and emollient feeling to skin in spite of hydrophilic ingredient.
3. High and long-lasting moisturizing effect.
4. Enhances penetration of whitening agents.
5. No bitter taste and odorless.
6. It is easy to handle because of transparent liquid.

14-5. POLYOXYALKYLENE ESTER (Double-Chain Form)

① POLYOXYETHYLENE MONOESTERS

Main Application & Features : Pharmaceutical Additives, Nonionic Surfactants (Emulsifiers, Solubilizer, Dispersant, etc.)



RCOO = Fatty Acid Residue
n = Ethyleneoxide Mole Number

Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE PHARMACOPOEIA (JP)

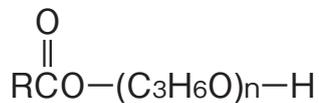
Polyoxyl Stearate 40	JP Polyoxyl Stearate 40	40	17.0	—
----------------------	-------------------------	----	------	---

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Monooleic Acid Polyethylene Glycol	NONION L-2	4.5	9.9	PEG-4 LAURATE
	NONION L-4	9	13.3	PEG-8 LAURATE
	NONION O-2	4.5	8.3	PEG-4 OLEATE
	NONION O-4	9	11.7	PEG-8 OLEATE
	NONION O-6	14	13.7	PEG-12 OLEATE
Monostearic Acid Polyethylene Glycol	NONION S-1	2	4.7	PEG-2 STEARATE
	NONION S-4	9	11.6	PEG-9 STEARATE
	NONION S-15.4	35	16.9	PEG-32 STEARATE
	NONION S-40	70	18.3	PEG-75 STEARATE

② POLYPROPYLENE GLYCOL MONOESTERS

Main Application & Features : Viscosity Adjustment Agents, Oils for Cosmetics



RCOO = Fatty Acid Residue
n = Propyleneoxide Addition Mole Number

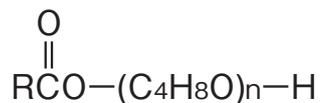
Ingredients	Product Name	n	INCI Code
-------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polypropylene Glycol Monolaurate	UNISAFE™ PGML	1	PROPYLENE GLYCOL LAURATE
----------------------------------	---------------	---	--------------------------

③ POLYBUTYLENE GLYCOL MONOESTERS

Main Application & Features : Viscosity Adjustment Agents, Oils for Cosmetics



RCOO = Fatty Acid Residue
n = Butyleneoxide Addition Mole Number

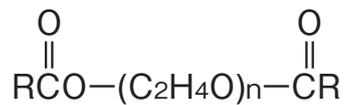
Ingredients	Product Name	n	INCI Code
-------------	--------------	---	-----------

For COSMETIC USE ONLY

—	COMUPOAL™ BL	1	BUTYLENE GLYCOL LAURATE
—	COMUPOAL BS	1	BUTYLENE GLYCOL STEARATE

④ POLYOXYETHYLENE GLYCOL DIESTERS

Main Application & Features : Emulsifiers, Solubilizers, Thickening Agents, Gelatinizers



RCOO = Fatty Acid Residue
n = Ethyleneoxide Addition Mole Number

Ingredients	Product Name	INCI Code
-------------	--------------	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

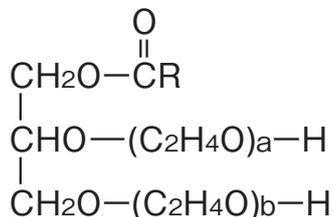
Polyethylene Glycol Dilaurate	NONION™ DL-4HN	PEG-8 DILAURATE
	NONION DL-40HNW	PEG-75 DILAURATE , WATER
Polyethylene Glycol Distearate	NONION DS-60HN	PEG-150 DISTEARATE

14-6. POLYOXYALKYLENE ESTER (Multiple Chain Form)

(1) GLYCERIN DERIVATIVES

① POLYOXYETHYLENE GLYCERYL FATTY ACIDS

Main Application & Features : Emulsifiers, Fatliquors, Thickening Agents



RCOO = Fatty Acid Residue
 n = Ethyleneoxide Addition Mole Number = a + b

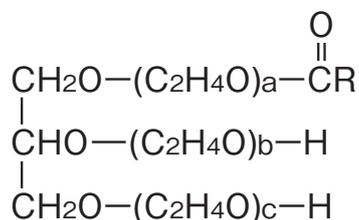
Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

POLYOXYETHYLENE (CAPRYLATE/CAPRATE) GLYCERIDES	UNIGLY™ MC-208	8	15.0	PEG-8 CAPRYLIC/CAPRIC GLYCERIDES
Polyoxyethylene Glyceryl Monococoate	UNIGLY MK-207	7	13.0	PEG-7 GLYCERYL COCOATE
	UNIGLY MK-207G	7	13.0	PEG-7 GLYCERYL COCOATE
	UNIGLY MK-230	30	17.4	PEG-30 GLYCERYL COCOATE
Polyoxyethylene Glyceryl Monococoate	UNIGLY MK-278	78	18.9	PEG-78 GLYCERYL COCOATE

② POLYOXYRTHYLENE GLYCERYL ISOSTEARATES

Main Application & Features : Nonionic Surfactants (Emulsifiers, Solubilizers, etc.)



RCOO = Isostearic Acid Residue
 n = Ethyleneoxide Additional Mole Number = a + b + c

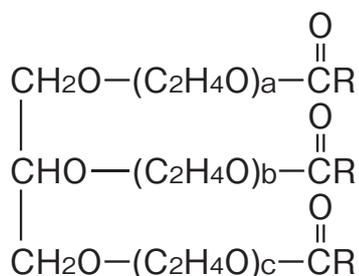
Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Glyceryl Isostearate	UNIOX™ GM-8IS	8	12.0	PEG-8 GLYCERYL ISOSTEARATE
	UNIOX GM-60IS(D)	60	18.1	PEG-60 GLYCERYL ISOSTEARATE

③ POLYOXYETHYLENE GLYCERYL TRI-ISOSTEARATES

Main Application & Features : Nonionic Surfactants (Emulsifiers, Solubilizers, etc.)



RCOO = Isostearic Acid Residue
 n = Ethyleneoxide Additional Mole Number = a + b + c

Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

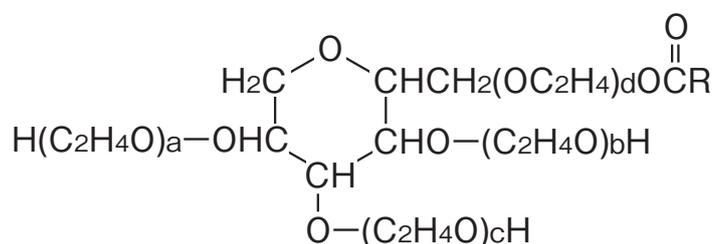
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Glyceryl Tri-Isostearate	UNIOX GT-20IS	20	10.4	PEG-20 GLYCERYL TRIISOSTEARATE
--	---------------	----	------	--------------------------------

(2) SORBITAN DERIVATIVES

① POLYOXYETHYLENE SORBITAN MONO-FATTY ACID ESTERS

Main Application & Features : Nonionic Surfactants (Emulsifiers, Solubilizers, Dispersants, etc.), Pharmaceutical Additives



RCOO = Fatty Acid Residue
 n = Ethyleneoxide Addition Mole Number = a + b + c + d

Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE PHARMACOPOEIA (JP)

Polysorbate 80	POLYSORBATE 80	20	15.7	—
	POLYSORBATE 80(GS)			
	POLYSORBATE 80(RS)			
	POLYSORBATE 80(SS)			

Approved by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES (JSSFA)

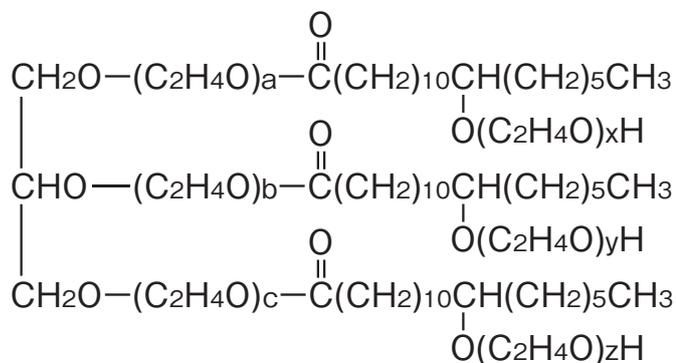
Polysorbate 20	WILSURF™ TF-20	20	16.7	—
Polysorbate 60	WILSURF TF-60	20	15.7	
Polysorbate 80	WILSURF TF-80	20	15.7	

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Sorbitan Monolaurate (20 E.O.)	NONION LT-221	20	16.7	POLYSORBATE 20
	NONION LT-20			
Polyoxyethylene Sorbitan Monoleate (20 E.O.)	NONION OT-221	20	15.7	POLYSORBATE 80
	NONION OT-221R			
	NONION OT-80			
Polyoxyethylene Sorbitan Monostearate (20E.O.)	NONION ST-221	20	15.7	POLYSORBATE 60
	NONION ST-60			
Polyoxyethylene Sorbitan Monolaurate	NONION LT-280	80	19.0	PEG-80 SORBITAN LAURATE

(3) CASTOR OIL & HYDROGENATED CASTOR OIL DERIVATIVES**① POLYOXYETHYLENE HYDROGENATED CASTOR OILS**

Main Application & Features :Nonionic Surfactants (Emulsifiers, Solubilizers, etc.), Pharmaceutical Additives



n = Ethyleneoxide Addition Mole Number
= a + b + c + x + y + z

Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE PHARMACEUTICAL EXCIPIENTS (JPE)

Polyoxyethylene Hydrogenated Castor Oil 40	UNIOX HC-40	40	13.3	—
Polyoxyethylene Hydrogenated Castor Oil 60	UNIOX HC-60	60	15.0	—

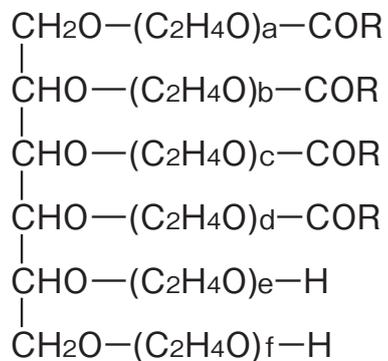
Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Hydrogenated Castor Oil	UNIOX HC-40	40	13.3	PEG-40 HYDROGENATED CASTOR OIL
	UNIOX HC-60	60	15.0	PEG-60 HYDROGENATED CASTOR OIL
	UNIOX HC-60S			
	UNIOX HC-100	160	16.6	PEG-100 HYDROGENATED CASTOR OIL

(4) SORBITAN DERIVATIVES

① TETRAOLEYL POLYOXYETHYLENE SORBITOLS

Main Application & Features : Nonionic Surfactants (Emulsifiers, Solubilizers, etc.)



RCOO = Oleic Acid Residue
N = Ethyleneoxide Addition Mole Number
= a + b + c + d + e + f

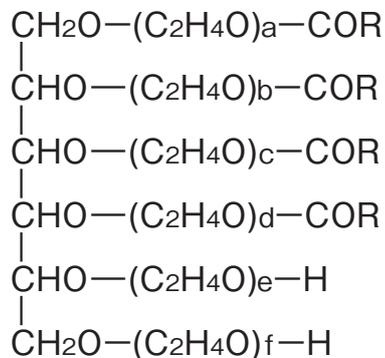
Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Tetraoleyl Polyoxyethylene Sorbitol	UNIOX™ ST-6E	6	5.0	SORBETH-6 TETRAOLEATE
	UNIOX ST-30E	30	11.2	SORBETH-30 TETRAOLEATE
	UNIOX ST-30EC	30	11.2	SORBETH-30 TETRAOLEATE
	UNIOX ST-40E	40	12.5	SORBETH-40 TETRAOLEATE
	UNIOX ST-60E	60	14.2	SORBETH-60 TETRAOLEATE

② TETRAISOSTEARYL POLYOXYETHYLENE SORBITOLS

Main Application & Features : Nonionic Surfactants (Emulsifiers, Solubilizers, etc.)



RCOO = Isostearic Acid Residue
 n = Ethyleneoxide Addition Mole Number
 = a + b + c + d + e + f

<Characteristics>

1. High ability to emulsify and solubilize.
2. High safety.
3. Because of its low congeal point, keeps high stability at low temperature.
4. Low odor and color (using extra pure(85%) oleic acid derived from vegetables)

Ingredients	Product Name	n	HLB	INCI Code
-------------	--------------	---	-----	-----------

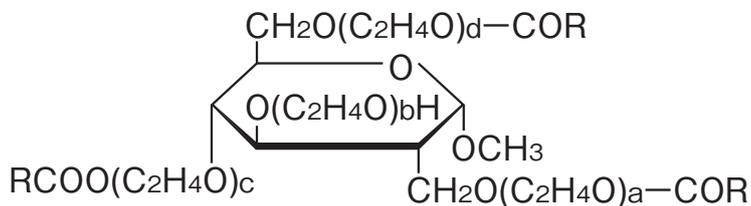
For COSMETIC USE ONLY

—	UNIOX™ ST-30IS	30	11.1	SORBETH-30 TETRAISOSTEARATE
---	----------------	----	------	-----------------------------

(5) METHYLGLUCOSIDE DERIVATIVES

① TRIISOSTEARIC ACID POLYOXYETHYLENE METHYLGLUCOSIDES

Main Application & Features :Viscosity Adjustment Agents



RCOO = Isostearic Acid Residue
 n = Ethyleneoxide Addition Mole Number
 =a + b + c + d

<Characteristics>

1. Highly efficient viscosity builder.
2. Synergistic effect with other viscosity builder.
3. Keeps formulation's foam.
4. Excellent moisturizer.
5. Non-irritating to eyes and skin.
6. High stability.

Product Name	n	HLB	INCI Code
--------------	---	-----	-----------

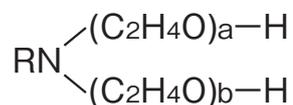
For COSMETIC USE ONLY

MACBIOBRIDE™ MG-120TIS	120	17.3	PEG-120 METHYLGLUCOSE TRIISOSTEARATE
MACBIOBRIDE MG-T			PEG-120 METHYLGLUCOSE TRIISOSTEARATE, WATER

14-7. POLYOXYETHYLENE DERIVATIVE(NITROGEN CONTAINING FORM)

① POLYOXYETHYLENE ALKYL AMINES

Main Application & Features :Hair Rinses/Hair Conditioner Base, etc.



R = Alkyl Group
n = Ethyleneoxide Addition Mole Number = a + b

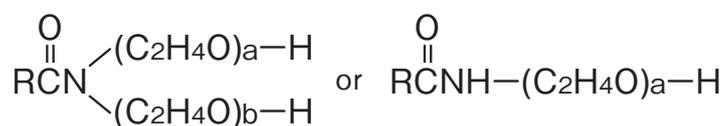
Ingredient	Product Name	n	INCI Code
------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Polyoxyethylene Cocoalkyl Amine	NYMEEN™ F-202	2	PEG-2 COCAMINE
	NYMEEN F-215	15	PEG-15 COCAMINE
Polyoxyethylene Oleylamine	NYMEEN O-205	5	PEG-5 OLEAMINE
Polyoxyethylene Stearylamine	NYMEEN S-202	2	PEG-2 STEARAMINE

② POLYOXYETHYLENE ALKYL AMIDES

Main Application & Features : Thickening Agents, Foam Stabilizers, Cleansing Power Improvement Agents, Emulsifiers



RCO = Fatty Acid Residue
n = Ethyleneoxide Addition Mole Number

Ingredient	Product Name	n	INCI Code
------------	--------------	---	-----------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

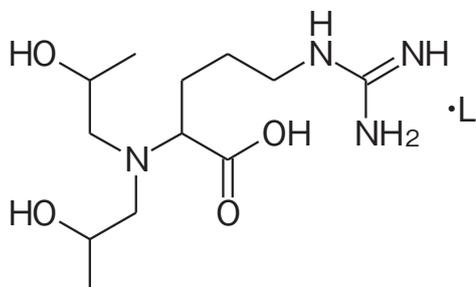
Polyoxyethylene Coconut Fatty Acid Monoethanolamide	NYMID™ MF-203	3	PEG-3 COCAMIDE
	NYMID MF-210	11	PEG-11 COCAMIDE

14-8. POLYOXYALKYLENE DERIVATIVES

① AMINO ACID DERIVATIVES

Main Application : Repair of Damage Hair , Improvement of Gloss

[Concept] Glossy Amino Moisture



L: Lactic acid

Pale yellow liquid
Concentration: 50wt%aq.
pH: ca. 7.0

Product Name	INCI Code
--------------	-----------

For COSMETIC USE ONLY

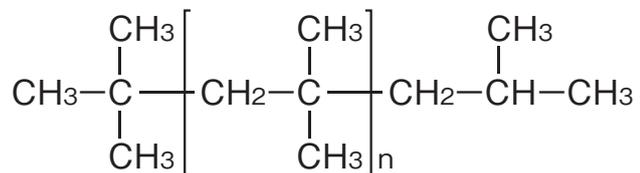
WILBRIDE™ R-PL	PPG-2 ARGININE, LACTIC ACID, WATER
----------------	------------------------------------

<Characteristics>

1. Acting on internal hair, and providing natural gloss with damage hair.
2. Alcohol solution makes it easy to dissolve in formulation.
3. Improving the cohesion of damage hairs.
4. Providing smooth feeling with the surface of hair.

15. HYDROGENATED POLYISOBUTENE

Main Application & Features : Base Oil, Emollient agents, Lipophilic Thickeners, Glossy Agents



Ingredient	Product Name	Kinematic Viscosity		INCI Code
		37.8°C	98.9°C	
Light Isoparaffin	PARLEAM® 3	1.4	–	HYDROGENATED POLYISOBUTENE
Light Liquid Isoparaffin	PARLEAM 4	3.1	–	
Liquid Isoparaffin	PARLEAM LITE	10.6	2.5	
	PARLEAM	20.1	3.6	
Heavy Liquid Isoparaffin	PARLEAM V	–	300	
	PARLEAM HV	–	800	
	PARLEAM SV	–	4700	

16. VEGETABLE OIL

MACADAMIA NUT OIL

Main Application & Features :

Macadamia Nut Oil contains a much higher amount of palmitoleic acid than any other vegetable oils. It has light texture, great affinity for human skin and fatty acid composition similar to that of human skin sebum. Macadamia Nut Oil, which is nearly colorless and odorless, exhibits much better oxidative stability than other liquid vegetable oils.

Ingredient	Product Name	INCI Code
Macademia nut oil Vitamin E	Macademia nut oil	MACADEMIA TERNIFOLIA SEED OIL

Specifications:

Acid value	1.0 max.
Color (APHA method)	80.0 max.
Specific gravity (at 25 deg C)	0.907 - 0.914
Refractive index (at 25 deg C)	1.465 - 1.468
Saponification value	190.0 - 200.0
Palmitoleic acid	18.0 % min.
Iodine value	70.0 - 80.0
Unsaponifiable matter	1.5 % max.
Heavy metals (as Pb)	20 ppm max
Arsenic	2 ppm max

17. PURIFIED OLEIC ACID AND ITS DERIVATIVES

Main Application & Features : Emulsifier, Emollient

Our oleic acid's purity is higher than 99% and impurities such as poly-unsaturated fatty acids (linoleic acid etc.) are removed by our unique techniques, so that it gives excellent oxidation stability and high affinity to skin. That is the reason why it can be used in various cosmetics and quasi-drugs as emollient and texture modifiers.

Ingredient	Product Name	INCI Code	Appearance
------------	--------------	-----------	------------

Approved by JAPANESE STANDARDS OF QUASI-DRUG INGREDIENTS (JSQI)

Oleic acid	CLEARBRIGHT™ 81S	OLEIC ACID	Pale yellow Liquid (Solid at low temperatures)
Ethyl oleate	CLEARBRIGHT E-81S	ETHYL OLEATE	Pale yellow Liquid

Premix products

18. PHOSPHOLIPID
PREMIX SOLUTIONS

19. COMPOSITE OF
DETERGENTS

20. DEFOAMING AGENTS

Functional ingredients

Base materials

Premix products

Index

18. PHOSPHOLIPID PREMIX SOLUTIONS

18-1. High-concentration empty-liposome solution EXTRASOME AQUA™

Main Application & Features :

This product is a highly concentrated empty-liposome solution that can be mixed with extracts, texture modifiers and viscosity improvers etc. to easily prepare essences, lotions and skin refreshers.

Being a single lamellar liposome, EXTRASOME AQUA efficiently penetrates and remains in stratum corneum, giving moisture, smoothness and resilience to skin.

- Lipid (phospholipid, cholesterol etc.) concentration: 5%
- Typical particle size: 100-300nm

Main Ingredients	Appearance
Hydrogenated soybean phospholipid, cholesterol, alcohol, viscosity improver, water, antiseptic	White emulsion

EXTRASOME AQUA(BG)

Main Application & Features:

This product is a highly concentrated empty liposomes solution containing no alcohol or thickener. It's easy to prepare essences, lotions and skin refreshers.

EXTRASOME AQUA(BG) efficiently penetrates and remains in stratum corneum, giving moisture, smoothness and resilience to skin.

- Lipid (phospholipid, cholesterol etc.) concentration: 5%
- Typical particle size: 100-300nm

Main Ingredients	Appearance
Hydrogenated soybean phospholipid, cholesterol, butylene glycol, water, antiseptic	White emulsion

EXTRASOME NANO™

Main Application & Features :

This product is a highly concentrated empty liposome solution with particle size smaller than 100nm, which is suitable size to efficiently penetrate and remains in stratum corneum. Being a single lamellar liposome, EXTRASOME NANO efficiently penetrates and remains in stratum corneum, giving moisture, smoothness and resilience to skin. It is mixed with extracts, texture modifiers and viscosity improver etc. to easily prepare essences, lotions and skin refreshers.

- Lipid (phospholipid, cholesterol etc.) concentration: 5%
- Typical particle size: 100nm

Main Ingredients	Appearance
Hydrogenated soybean phospholipid, cholesterol, alcohol, viscosity improver, water, antiseptic	White emulsion

18-2. High-concentration Ceramide 3 contained liposome solution EXTRASOME™ C3-L

Main Application & Features :

This product is a highly concentrated empty-liposome solution containing Ceramide 3 well stabilized in the liposome membrane, despite the fact that Ceramide 3 is a difficult substance to be dispersed in aqueous solution.

Being a single lamellar liposome: EXTRASOME C3-L efficiently penetrates and remains in stratum corneum, giving moisture, smoothness and resilience to skin. Also, it rapidly provides its Ceramide 3 with skin to give delicate and thin layer touch.

By simply mixing with extracts, texture modifiers and viscosity improver etc., EXTRASOME C3-L easily prepares Ceramide 3 contained aqueous cosmetics and quasi-drugs.

- Lipid (phospholipid, cholesterol etc.) concentration: 5%
- Ceramide 3 concentration : 0.1%
- Typical particle size : 100-300nm

Main Ingredients	Appearance
Hydrogenated soybean phospholipid, cholesterol, Ceramide 3, viscosity improver, water, antiseptic	White emulsion

18-3. PRIMESOME™ -MB

Main Application & Features:

Advanced empty liposome solution.

This product is a LIPIDURE™-PMB conjugated liposome.

This product has synergy effect of moisturizing by LIPIDURE-PMB and liposome.

LIPIDURE-PMB gives moisture mainly on the surface of the skin and liposome gives it to the inner skin, therefore, comparing with general liposome, it has good texture and improves moisturizing effect.

Favorable stability of liposome due to LIPIDURE conjugation has improved the stability of water based formulation,

- Lipid (phospholipid, cholesterol etc.) concentration: 5%
- Typical particle size:100-300nm

Main Ingredients	Appearance
Hydrogenated soybean phospholipid, cholesterol, polyquaternium-51, butylene glycol, water, antiseptic	White emulsion

18-4. Lipid Mixture

Main Application & Features:

Lipid Mixture is containing hydrogenated soybean phospholipid and cholesterol uniformly. When it is added to water, it is easily dispersed in water by using homogenizer to get loations or creams.

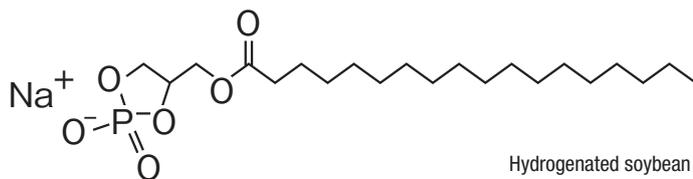
Product Name	Main Ingredients	Appearance
EXTRASOME™ HC	Hydrogenated soybean phospholipid (PC purity:90%), cholesterol	White powder
EXTRASOME MC	Hydrogenated soybean phospholipid (PC purity:60%), cholesterol	Pale yellow powder

18-5. Hydrogenated soybean cyclic phospholipid CP7 contained lipid mixture EXTRASOME™ CP7-M

Main Application & Features :

This product is a lipid mixture containing a novel antiaging ingredient, cyclic Phosphatidic acid(cPA), which is normally present in human body, and acts on skin surface and gives antiaging effect of improving reconstruction of cytoskeleton (actin fibers) and enhancing production of hyaluronic acid.

Our high-purity cPA, “hydrogenated soybean cyclic phospholipid CP7” (INCI code: Hydrogenated Sodium Cyclic Lysophosphatidic Acid) does not contain any animal-based materials and is colorless and odorless. By adding CP7 in cosmetic formulation, anti-aging effect is easily obtained.



Hydrogenated soybean cyclic phospholipid CP7

Ingredients	Appearance
Hydrogenated soybean phospholipid, cholesterol, hydrogenated soybean cyclic phospholipid CP7	White powder

19. Composite of Food Detergents for Bacterial Eradication

WILSURF™ EX

<feature of a product>

Antimicrobial Activity, Food Additives, High Detergency, High Foaming, Easy to Use

Ingredients	Appearance	pH (25°C, Undiluted solution)	Viscosity mPa · s, 25°C
Polysorbate etc	Light Yellow or Yellow Liquid	5.0~7.0	Ca. 250

20. DEFOAMING AGENTS

Main Application & Features: Defoaming , Food Additive

Ingredients	Product Name	Appearance
-------------	--------------	------------

Approved by JAPAN'S SPECIFICATIONS AND STANDARDS FOR FOOD ADDITIVES(JSSAF)

Sorbitan Fatty Acid Ester etc	DISFOAM™ FD-2 DISFOAM FC-1 DISFOAM FC-2	Pale yellow liquid
-------------------------------	---	--------------------

INCI CODE INDEX

A		E	
AKEBIA TRIFOLIATA STEM EXTRACT	12	ECKLONIA KUROME EXTRACT	18
ALUMINUM DI STEARATE	27	ETHYLHEXYL PALMITATE	28
		ETHYLHEXYL STEARATE	28
		ETHYL OLEATE	28,63
		EUCALYPTUS GLOBULUS LEAF EXTRACT	15
B		G	
BEHENETH-5	44	GLYCERIN	25
BEHENETH-20	44	GLYCERYL OLEATE	33
BEHENETH-50	44	GLYCERYL STEARATE	33
BEHENIC ACID	23	GLYCERYLAMIDOETHYL METHACRYLATE/ STEARYL METHACRYLATE COPOLYMER	7
BEHENDIMONIUM ETHYL STEARYL PHOSPHATE	9	GLYCOL DISTEARATE	28
BEHENTRIMONIUM CHLORIDE	31		
BEHENYL ALCOHOL	26	H	
BENZALKONIUM CHLORIDE	31	HYDROGENATED CASTOR OIL	24
BIS-SOYOYL/RAPESEDOYL ETHYL HYDROXYETHYLMONIUM METHOSULFATE	31	HYDROGENATED LECITHIN	20
BUTYLENE GLYCOL LAURATE	50	HYDROGENATED POLYISOBUTENE	61
BUTYLENE GLYCOL STEARATE	50	HYDROXYSTEARIC ACID	23
BUTYL STEARATE	28		
		I	
C		ISOPROPYL MYRISTATE	28
CALCIUM STEARATE	27	ISOPROPYL PALMITATE	28
CAMELLIA JAPONICA FLOWER EXTRACT	14	ISOSTEARETH-2	44
CAMELLIA JAPONICA LEAF EXTRACT	16		
CAMELLIA JAPONICA SEED EXTRACT	14	L	
CAPRIC ACID	23	LAURAMIDE DEA	34
CAPRYLIC/CAPRIC TRIGLYCERIDE	24	LAURAMIDOPROPYLBETAINE	32
CERASUS YOUKOU FLOWER EXTRACT	19	LAURETH-4	43
CERASUS YOUKOU LEAF EXTRACT	19	LAURETH-9	43
CETEARYL ALCOHOL	26	LAURETH-11	43
CETETH-8	43	LAURETH-20	43
CETETH-10	43	LAURETH-30	43
CETETH-13	43	LAURETH-100	43
CETYL ALCOHOL	26	LAURIC ACID	23
CETYL MYRISTATE	28	LAURTRIMONIUM CHLORIDE	31
CETYLTRIMETHYL CHLORIDE	31	LAURYL ALCOHOL	26
CHOLESTEROL	20	LAURYL BETAINE	32
CHOLETH-10	45	LINOLEIC ACID	23
CITRUS AURANTIUM TACHIBANA PEEL EXTRACT	12		
CITRUS DEPRESSA PEEL EXTRACT	13	M	
COCAMIDE DEA	34	MACADEMIA TERNIFOLIA SEED OIL	62
COCAMIDE DEA (1:2)	34	MAGNESIUM METHYL COCOYL TAURATE	29
COCAMIDE MEA	34	MAGNESIUM STEARATE	27
COCAMIDOPROPYL BETAINE	32	METHYL GLUCETH-10	47
COCOBETAINE	32	METHYL GLUCETH-20	47
COCONUT ACID	23	MYRISTIC ACID	23
CURCUMA LONGA (TURMERIC) ROOT EXTRACT	16	MYRISTYL ALCOHOL	26
CYCLIC LYSOPHOSPHATIDIC ACID	17		
		N	
D		NEOPENTYL GLYCOL DIETHYLHEXANOATE	28
DECYL OLEATE	28		
DIETHYLHEXYL SEBACATE	28		
DIGLYCERIN	39		
DIMETHYL STEARAMINE	34		
DISODIUM LAURETH SULFOSUCCINATE	29		
DISODIUM LAURIMINODIACETATE	32		
DISTEARYLDIMONIUM CHLORIDE	31		

INCI CODE INDEX

O			
OLEAMIDE DEA	34	PEG-32 STEARATE	49
OLEIC ACID	23,63	PEG-75 STEARATE	49
OLETH-2	43	PENTAERYTHRITYL TETRAOCTANOATE	28
OLETH-5	43	POLOXAMER 184	38
OLETH-15	43	POLY(1,2-BUTANEDIOL)-6PROPYLENEGLYCOL	37
OLETH-30	43	POLYPHOSPHORYLCHOLINE GLYCOL ACRYLATE	4
OLEYL ALCOHOL	26	POLYBUTYLENEGLYCOL/PPG-9/1COPOLYMER	37
OPHIPOGON JAPONICUS ROOT EXTRACT	15	POLYGLYCERYL-6 LAURATE	33
ORTHOSIPHON STAMINEUS EXTRACT	11	POLYSORBATE 20	54
		POLYSORBATE 60	54
		POLYSORBATE 80	54
P		POLYQUATERNIUM-51	4
PALMITIC ACID	23	POLYQUATERNIUM-61	6
PALM KERNEL AMIDOPROPYL BETAINE	32	POLYQUATERNIUM-64	5
PASSIFLORA EDULIS PEEL EXTRACT	13	POLYQUATERNIUM-65	5
PEG-4	36	POLYQUATERNIUM-92	8
PEG-6	36	POLYQUATERNIUM-107	10
PEG-6, PEG-32	36	POTASSIUM LAURATE	29
PEG-8	36	POTASSIUM MYRISTATE	29
PEG-12	36	POTASSIUM OLEATE	29
PEG-20	36	POTASSIUM PALMITATE	29
PEG-32	36	PPG-12	36
PEG-40	36	PPG-17	36
PEG-75	36	PPG-20	36
PEG-150	36	PPG-34	36
PEG-240	36	PPG-2 ARGININE	60
PEG-400	36	PPG-10-BUTETH-9	46
PEG-8 CAPRYLIC/CAPRIC GLYCERIDES	52	PPG-17-BUTETH-17	46
PEG-3 COCAMIDE	59	PPG-30-BUTETH-30	46
PEG-11 COCAMIDE	59	PPG-38-BUTETH-37	46
PEG-2 COCAMINE	59	PPG-12 BUTYL ETHER	45
PEG-15 COCAMINE	59	PPG-17 BUTYL ETHER	45
PEG-8 DILAURATE	51	PPG-20 BUTYL ETHER	45
PEG-75 DILAURATE	51	PPG-24 BUTYL ETHER	45
PEG-150 DISTEARATE	51	PPG-33 BUTYL ETHER	45
PEG-7 GLYCERYL COCOATE	52	PPG-40 BUTYL ETHER	45
PEG-30 GLYCERYL COCOATE	52	PPG-52 BUTYL ETHER	45
PEG-78 GLYCERYL COCOATE	52	PPG-8-CETETH-10	46
PEG-8 GLYCERYL ISOSTEARATE	53	PPG-8-CETETH-20	46
PEG-60 GLYCERYL ISOSTEARATE	53	PPG-6-DECYLTETRADECETH-12	46
PEG-20 GLYCERYL TRIISOSTEARATE	53	PPG-13-DECYLTETRADECETH-24	46
PEG-40 HYDROGENATED CASTOR OIL	55	PPG-20-DECYLTETRADECETH-10	46
PEG-60 HYDROGENATED CASTOR OIL	55	PPG-9 DIGLYCERYL ETHER	41
PEG-100 HYDROGENATED CASTOR OIL	55	PPG-24-GLYCERETH-24	40
PEG-4 LAURATE	49	PPG-8 GLYCERYL ETHER	39
PEG-8 LAURATE	49	PPG-16 GLYCERYL ETHER	39
PEG-120 METHYLGLUCOSE TRIISOSTEARATE	58	PPG-50 GLYCERYL ETHER	39
PEG-5 OLEAMINE	59	PPG-70 GLYCERYL ETHER	39
PEG-4 OLEATE	49	PPG-10 METHYL GLUCOSE	47
PEG-8 OLEATE	49	PPG-20 METHYL GLUCOSE	47
PEG-12 OLEATE	49	PPG-65-PEG-5 PENTAERYTHRITYL ETHER	41
PEG/PPG-200/70 COPOLYMER	38	PPG-25 SORBITOL	42
PEG/PPG-240/60 COPOLYMER	38	PPG-34-STEARETH-3	46
PEG/PPG/POYLBUTYLENE GLYCOL-8/5/3 GLYCERIN	40	PPG-23-STEARETH-34	46
PEG-80 SORBITAN LAURATE	54	PPG-15 STEARYL ETHER	45
PEG-2 STEARAMINE	59	PROPYLENE GLYCOL LAURATE	50
PEG-2 STEARATE	49	PRUNUS ARMENIACA(APRICOT) JUICE	11
PEG-9 STEARATE	49		

R
RHIZOME EXTRACT 16

S
SEKKEN SOJI-K. 29
SODIUM COCOAMPHO ACETATE 32
SODIUM COCOYL ISETHIONATE 29
SODIUM LAUROYL SARCOSINATE 29
SODIUM LAURATE 29
SODIUM LAURETH SULFATE 29
SODIUM LAUROYL METHYLAMINOPROPIONATE 29
SODIUM LAURYL DIETHYLENEDIAMINOGLYCINATE 32
SODIUM MA/DIISOBUTYLENE COPOLYMER 29
SODIUM METHYL CAPROYL TAURATE 30
SODIUM METHYL COCOYL TAURATE 29
SODIUM OLEATE 29
SODIUM PEG-4 COCAMIDE SULFATE 29
SODIUM STEARATE 29
SODIUM TALLOWATE 29
SORBETH-30 TETRAISOSTEARATE 57
SORBETH-6 TETRAOLEATE 56
SORBETH-30 TETRAOLEATE 56
SORBETH-40 TETRAOLEATE 56
SORBETH-60 TETRAOLEATE 56
SORBITAN LAURATE 33
SORBITAN OLEATE 33
SORBITAN PALMITATE 33
SORBITAN SESQUIOLEATE 33
SORBITAN STEARATE 33
SORBITAN TRIOLEATE 33
STEARIC ACID 23
STEARETH-2 43
STEARETH-7 43
STEARETH-15 43
STEARETH-20 43
STEARTRIMONIUM CHLORIDE 31
STEARYL ALCOHOL 26
STEARYL STEARATE 28

T
TEA-LAURETH SULFATE 29
TEA-LAUROYL METHYLAMINOPROPIONATE 29
TEA-LAURYL SULFATE 29
TRICAPRYLIN 24
TRIDECETH-8 44
TRIDECETH-12 44
TRIETHYLHEXANOIN 24

V
VERBENA OFFICINALIS EXTRACT 18

Z
ZINC LAURATE 27
ZINC MYRISTATE 27
ZINC STEARATE 27

INDEX

TRADE NAME INDEX

A

ACROBUTE	45
AKEBIA EXTRACT BG	12
ALFEEL	10
ALUMINUM STEARATE 600	27
ALUMINUM STEARATE 600 VEGETABLE	27
ANON BDB	32
ANON BDC	32
ANON BDL	32
ANON BDF	32
ANON BF	32
ANON BL	32
ANON GLM	32
ANON LA	32
ANON LG	32
APRICOT JUICE PH	11
AULABRITE	27

B

BAKUMONDOU EXTRACT BG	15
BUTYL STEARATE	28

C

CALCIUM STEARATE	27
CALCIUM STEARATE VEGETABLE	27
CAMELLIA FLOWER EXTRACT BG	14
CAMELLIA LEAF EXTRACT BG	16
CAMELLIA SEED EXTRACT BG	14
CASTER WAX A	24
CATION	31
CATION 2ABT	31
CATION AB	31
CATION BB	31
CATION EQ-01D	31
CATION F2	31
CATION M2	31
CATION PB	31
CATION VB	31
CERACUTE-F,L,V	7
CERACUTE-G	8
CETYL MYRISTATE	28
CLEARBRIGHT	63
CHINPI EXTRACT K65B	12
COATSOME	20
COCONUT ACID	23
COMUPOAL	50
CyPA-ET	17
CyPA-PW	17

D

DIAPON K, LM	29,30
DIAPON HF	29,30
DIAPON SCI	29
DISFOAM	70

E

ECKLEXT BG	18
EUCALYPTUS EXTRACT BG · ET	15
EXTRA LINOLEIC 90	23
EXTRA OLEIN	23
EXTRA OS- 85	23
EXTRASOME	66,67

F

FIRET L	29
FOOD ADDITIVE GRADE GLYCERIN	25

G

GLYCERIN	25
----------	----

H

HYDROXYSTEARIC ACID	23
---------------------	----

I

IPM-R	28
IPP-R	28

J

JP Benzalkonium	30
JP Concentrated Benzalkonium Chloride Solution 50	30
JP CALCIUM STEARATE	27
JP CONCENTRATED GLYCERIN	25
JP GLYCERIN	25
JP MAGNESIUM STEARATE	27
JP STEARIC ACID	22
JPE EXTRA OS-85	22
JPE BEHENIC ACID	22
JPE IPM-R	28
JPE PANACET	24

K

KUMIS KUCHING EXTRACT BG	11
--------------------------	----

L

LAUROMACROGOL NONION L-209	43
LINOLEIC ACID 90	23
LIPIDURE-HM, PMB, B	4
LIPIDURE-A, C	5
LIPIDURE-S, NR, NA	6

M

MACADAMIA NUT OIL	62
MACBIOBRIDE MG	47,58
MACROGOL	35
MAGNESIUM STEARATE	27
MAGNESIUM STEARATE-S	27

MONOGLY 33

N

NAA 22,23,26
 NOFABLE AO 26
 NOFABLE DO 28
 NOFABLE EO 28
 NOFABLE GO 33
 NOFABLE SO 33
 NONION B 44
 NONION CP 33
 NONION DL 51
 NONION DS 51
 NONION E 43
 NONION IS 44
 NONION K 43
 NONION L 49
 NONION LP 33
 NONION LT 54
 NONION O 49
 NONION OP 33
 NONION OT 54
 NONION P 43
 NONION PP 33
 NONION S 43,49
 NONION SP 33
 NONION ST 54
 NONION T 44
 NONSOUL 29
 NYMEEN F 59
 NYMEEN O 59
 NYMEEN S 59
 NYMID MF 59

P

PANACET 24
 PASSION FRUIT EXTRACT BG 13
 PARLEAM 61
 PEG 36
 PERSOFT 29
 PHARMASOL 24
 PLONON 37,38
 POLYPROPYLENE GLYCOL 2000 36
 POLYSTER 29
 POLYSORBATE 54
 POWDERBASE L 27
 POWDERBASE M 27
 PRIMESOME MB 67

R

RG · CO · P 25

S

SHEKWASHA EXTRACT BG 13
 SOFTILT 29

SOLUBULE 46
 STAFOAM DF 34
 STAFOAM DL 34
 STAFOAM DO 34
 STAFOAM F 34
 STAFOAM MF 34
 STEARIC ACID CHERRY 23
 SUNAMID 29

T

TERTIARY AMINE AB 34
 TURMERIC EXTRACT BG 16

U

UNIGLY G-2 39
 UNIGLY GL-106 33
 UNIGLY MC 52
 UNIGLY MK 52
 UNILUBE 5TP-300KB 41
 UNILUBE 10MS-250KB 46
 UNILUBE 20MT-2000B 46
 UNILUBE 50MB 46
 UNILUBE 50MT-2200B 46
 UNILUBE 50TG-32 40
 UNILUBE 70DP-950B 38
 UNILUBE 75DE-2620R 38
 UNILUBE DGP 45
 UNILUBE MB 45
 UNILUBE MS 45
 UNILUBE MT 46
 UNIOL D 36
 UNIOL HS 42
 UNIOL PB 37
 UNIOL SGP 39
 UNIOL TG 39
 UNIOX CS 45
 UNIOX GM 53
 UNIOX GT 53
 UNIOX HC 55
 UNIOX ST 56,57
 UNISAFE 34S-23 46
 UNISAFE 10P, 20P 46
 UNISAFE PGML 50
 UNISTER D 28
 UNISTER E 28
 UNISTER H 28
 UNISTER M 28
 UNISTER MB 28

V

VERBENA OFFICINALIS EXTRACT BG 18
 VINOVEIL 9

W

WILBRIDE R-PL 60

INDEX

TRADE NAME INDEX

WILBRIDE S-753.....	40
WILBRIDE S-753D.....	40
WILSURF EX.....	69
WILSURF TF.....	54

Y

YOUKOU SAKURA FLOWER EXTRACT BG.....	19
YOUKOU SAKURA LEAF EXTRACT BG.....	19

Z

ZINC STEARATE.....	27
ZINC STEARATE S.....	27
ZINC STEARATE VEGETABLE.....	27

INQUIRY ADDRESS

NOF CORPORATION <http://www.nof.co.jp>

Oleo & Speciality Chemicals Division E-mail: yukagizyutu@nof.co.jp

Head Office Yebisu Garden Place Tower, 20-3, Ebisu 4-chome, Shibuya-ku, Tokyo 150-6019, Japan
TEL.+81-3-5424-6700 (Internal directory inquiries) FAX.+81-3-5424-6810

Functional ingredients

Base materials

Premix products

Index

Disclaimers:

The contents of this catalog were made based on documents, information and data which are available at present. However, NOF CORPORATION does not acknowledge and undertake any guarantees for any data, evaluation results, chemical hazards etc.

Also, the contents are intended to normal use of the products.

In case of special handling, you should take appropriate measures to ensure the safety.

Trademarks:

Product names and servicemarks on this catalog are trademarks registered in Japan or trademarks used in Japan, which are possessed by NOF CORPORATION or published on this catalog with the right holder's consent.

