Cosmetics General Catalog

From the Biosphere to Outer Space

NOF CORPORATION

From the Biosphere to Outer Space

Cosmetic Solution Designer

Material design Technology
×
Application Technology

NOF supports your development through our Technology

Table of Contents

Product index by function

・Chinese INCI is based on "「2021 版 _ 已使用化妆品原料名称目録」".
・Some of additional ingredients are not listed in this catalog.
・Natural Origin Index (N.O.I.) is calculated by carbon method or molecular method.

About Us

From the Biosphere to Outer Space

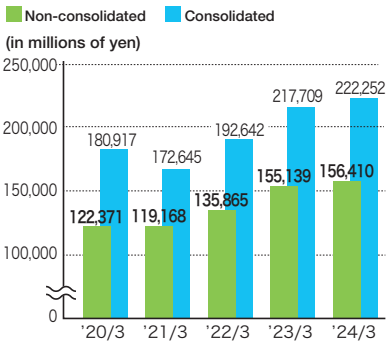
NOF CORPORATION is a chemical manufacturer that provides products in a wide variety of fields, ranging from the biosphere to outer space.

Established June 1, 1937
Net Sales $1,53 billion
Operating profit $290 million as of March, 2024 *Exchanging rate 145JPY/USD

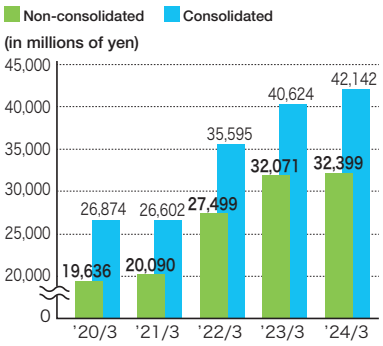
Net Sales

*Exchanging rate 145JPY/USD

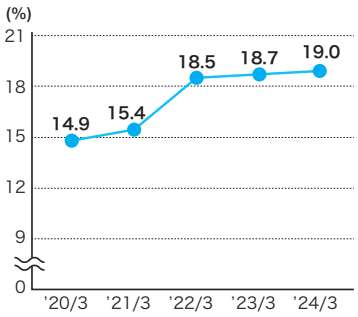
Sales



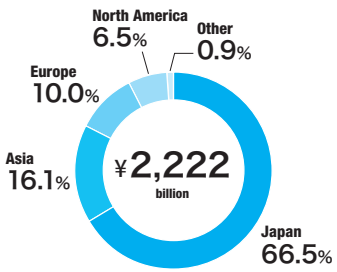
Operating profit



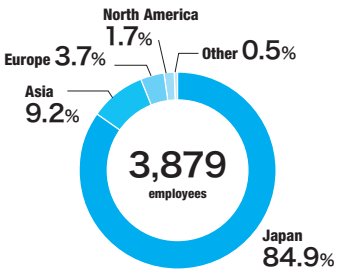
Operating margin (Consolidated)



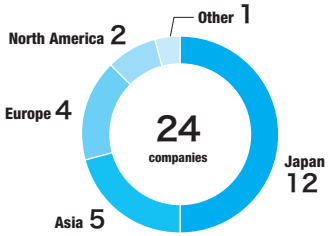
Net sales



Number of Group employees



Number of Group companies



Our Products and Technology ECO Products

NOF CORPORATION's Eco-friendly Products

Based on its technologies and experiences built up over the years, NOF CORPORATION continues to develop eco-friendly products.

Contribution to the SDGs

NOF CORPORATION aims to contribute to SDGs through initiatives for materiality as presented in the table below.

Response to climate change

By recognizing the risks and opportunities posed by climate change and promoting countermeasures, NOF CORPORATION will co-create new value with the power of chemistry toward the realization of a prosperous and sustainable society.

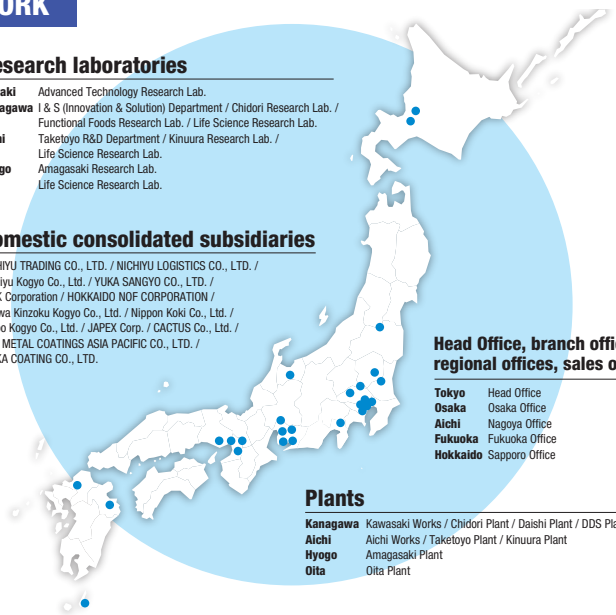
NET WORK

Research laboratories

Ibaraki	Advanced Technology Research Lab.
Kanagawa	I & S (Innovation & Solution) Department / Chidori Research Lab. / Functional Foods Research Lab. / Life Science Research Lab.
Aichi	Taketoyo R&D Department / Kinuura Research Lab. / Life Science Research Lab.
Hyogo	Amagasaki Research Lab.
Oita	Life Science Research Lab.

Domestic consolidated subsidiaries

NICHIYU TRADING CO., LTD. / NICHIYU LOGISTICS CO., LTD. / Nichiyu Kogyo Co., Ltd. / YUKA SANGYO CO., LTD. / NiGK Corporation / HOKKAIDO NOF CORPORATION / Showa Kinzoku Kogyo Co., Ltd. / Nippon Koki Co., Ltd. / Nippo Kogyo Co., Ltd. / JAPEX Corp. / CACTUS Co., Ltd. / NOF METAL COATINGS ASIA PACIFIC CO., LTD. / NIKKA COATING CO., LTD.



Head Office, branch offices, regional offices, sales offices

Tokyo	Head Office
Osaka	Osaka Office
Aichi	Nagoya Office
Fukuoka	Fukuoka Office
Hokkaido	Sapporo Office

Plants

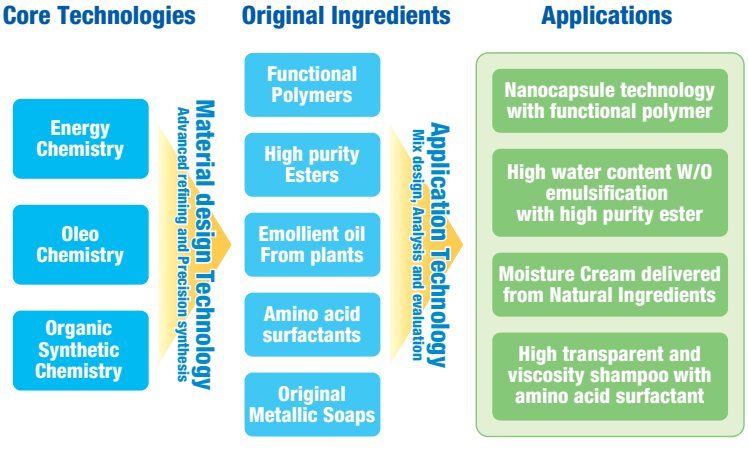
Kanagawa	Kawasaki Works / Chidori Plant / Daishi Plant / DDS Plant
Aichi	Aichi Works / Taketoyo Plant / Kinuura Plant
Hyogo	Amagasaki Plant
Oita	Oita Plant

Plants manufacturing cosmetic ingredients

Research Lab. developing cosmetic ingredients

Overseas Business

Technologies and materials of NOF Group



Cosmetic Solution Designer

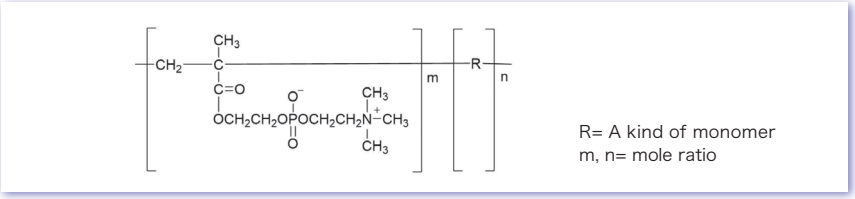
Technologies
No.1 Share of cosmetic ingredients*
*in Japan ref. TPC Marketing Research

Original Ingredients
Many high functional ingredients

Technologies × Original Ingredients
We can support you with our applications.

01 / Functional ingredient

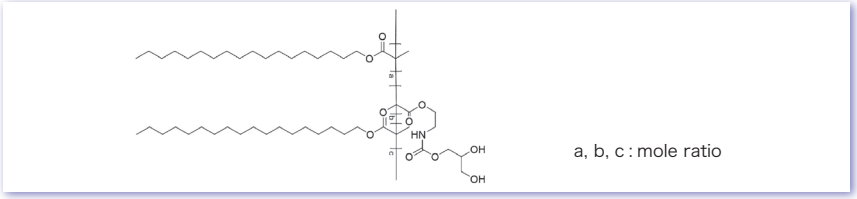
LIPIDURE®



R= A kind of monomer
m, n= mole ratio

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
Lipidure®-PMB	POLYQUATERNIUM-51	聚季铵盐 -51	125275-25-4	5	0.95
	WATER	水	7732-18-5	95	
Lipidure®-PMB(BG)	POLYQUATERNIUM-51	聚季铵盐 -51	125275-25-4	3.5	0.67
	WATER	水	7732-18-5	66.5	
	BUTYLENE GLYCOL	丁二醇	107-88-0	30	
Lipidure®-PMB(Ph10)	POLYQUATERNIUM-51	聚季铵盐 -51	125275-25-4	5	0.94
	WATER	水	7732-18-5	94	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
Lipidure®-PMB(Ph10)-1M	POLYQUATERNIUM-51	聚季铵盐 -51	125275-25-4	5	0.94
	WATER	水	7732-18-5	94	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
Lipidure®-HM	POLYPHOSPHORYLCHOLINE GLYCOL ACRYLATE	聚磷酸胆碱乙二醇丙烯酸酯	67881-99-6	40	0.55
	WATER	水	7732-18-5	54.85	
	BUTYLENE GLYCOL	丁二醇	107-88-0	5	
	METHYLPARABEN	羟苯甲酯	99-76-3	0.15	
Lipidure®-HM(Ph10)	POLYPHOSPHORYLCHOLINE GLYCOL ACRYLATE	聚磷酸胆碱乙二醇丙烯酸酯	67881-99-6	39.6	0.59
	WATER	水	7732-18-5	59.4	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
Lipidure®-HM-500	POLYPHOSPHORYLCHOLINE GLYCOL ACRYLATE	聚磷酸胆碱乙二醇丙烯酸酯	67881-99-6	5	0.90
	BUTYLENE GLYCOL	丁二醇	107-88-0		
	METHYLPARABEN	羟苯甲酯	99-76-3	0.15	
	WATER	水	7732-18-5	89.85	
Lipidure®-S	POLYQUATERNIUM-61	聚季铵盐 -61	144514-08-9	100	Contact us
Lipidure®-NR	POLYQUATERNIUM-61	聚季铵盐 -61	144514-08-9	5	-
	GLYCERIN	甘油	56-81-5	47.5	
	BUTYLENE GLYCOL	丁二醇	107-88-0	47.5	
Lipidure®-NA	POLYQUATERNIUM-61	聚季铵盐 -61	144514-08-9	1	0.90
	GLYCERIN	甘油	56-81-5	9.5	
	BUTYLENE GLYCOL	丁二醇	107-88-0	9.5	
	PCA ETHYL COCOYL ARGINATE	PCA 椰油酰精氨酸乙酯盐	95370-65-3	0.25	
	WATER	水	7732-18-5	79.75	
Lipidure®-MS-FB *Prototype	POLYACRYLATE-47	-	-	50	Contact us
	ALCOHOL	乙醇	64-17-5	50	
Lipidure®-A	POLYQUATERNIUM-65	聚季铵盐 -65	649747-63-7	5	0.94
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
	WATER	水	7732-18-5	94	
Lipidure®-B-PF	POLYQUATERNIUM-51	聚季铵盐 -51	125275-25-4	5	0.94
	WATER	水	7732-18-5	95	

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
Lipidure®-C	POLYQUATERNIUM-64	聚季铵盐 -64	478015-82-6	5	0.94
	WATER	水	7732-18-5	94	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
Alfeel®-SD	POLYQUATERNIUM-107	-	1379467-09-0	1	0.98
	PHENOXYETHANOL		122-99-6	1	
	CITRIC ACID		5949-29-1	0.006	
	SODIUM CITRATE		6132-04-3	0.004	
	WATER		7732-18-5	97.99	



a, b, c : mole ratio

CERACUTE®

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
Ceracute®-F	GLYCERYLAMIDOETHYL METHACRYLATE/STEARYL METHACRYLATE COPOLYMER	甘油酰胺乙醇甲基丙烯酸酯 / 硬脂醇甲基丙烯酸酯共聚物	934371-81-0	100	-
Ceracute®-L	GLYCERYLAMIDOETHYL METHACRYLATE/STEARYL METHACRYLATE COPOLYMER	甘油酰胺乙醇甲基丙烯酸酯 / 硬脂醇甲基丙烯酸酯共聚物	934371-81-0	5	0.67
	GLYCERIN	甘油	56-81-5	66.5	
	BUTYLENE GLYCOL	丁二醇	107-88-0	28.5	
Ceracute®-LL	GLYCERYLAMIDOETHYL METHACRYLATE/STEARYL METHACRYLATE COPOLYMER	甘油酰胺乙醇甲基丙烯酸酯 / 硬脂醇甲基丙烯酸酯共聚物	934371-81-0	5	0.67
	GLYCERIN	甘油	56-81-5	66.5	
	BUTYLENE GLYCOL	丁二醇	107-88-0	28.5	
Ceracute®-G	POLYQUATERNIUM-92	-	1083195-17-8	3.5	0.67
	BUTYLENE GLYCOL		107-88-0	30	
	CITRIC ACID		5949-29-1	0.005	
	WATER		7732-18-5	66.495	
Ceracute®-V	GLYCERYLAMIDOETHYL METHACRYLATE/STEARYL METHACRYLATE COPOLYMER	甘油酰胺乙醇甲基丙烯酸酯 / 硬脂醇甲基丙烯酸酯共聚物	934371-81-0	1	0.93
	GLYCERIN	甘油	56-81-5	13.3	
	BUTYLENE GLYCOL	丁二醇	107-88-0	5.7	
	PCA ETHYL COCOYL ARGINATE	PCA 椰油酰精氨酸乙酯盐	95370-65-3	0.25	
	WATER	水	7732-18-5	79.75	

MACBIOBRIDE®

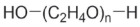
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
MACBIOBRIDE®SP *Prototype	POLY(1,2-BUTANEDIOL) -55/PEG-90 PENTAERYTHRITYLETHER	Contact us	191549-26-5	100	-

02 Moisturizer

Glycerin

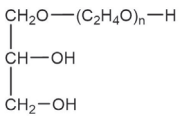
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
RG・CO・P	GLYCERIN	甘油	56-81-5	100	1.00
Keshoyou Glycerin 85-S	GLYCERIN	甘油	56-81-5	85	1.00
	WATER	水	56-81-5	15	

Polyethers



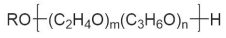
n= The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
PEG#200	PEG-4	聚乙二醇 -4	25322-68-3	100	-
PEG#300	PEG-6	聚乙二醇 -6	25322-68-3	100	-
PEG#400	PEG-8	聚乙二醇 -8	25322-68-3	100	-
PEG#600	PEG-12	聚乙二醇 -12	25322-68-3	100	-
PEG#1000	PEG-20	聚乙二醇 -20	25322-68-3	100	-
PEG#1500	PEG-6	聚乙二醇 -6	25322-68-3	50	-
	PEG-32	聚乙二醇 -32	25322-68-3	50	
PEG#1540	PEG-32	聚乙二醇 -32	25322-68-3	100	-
PEG#2000	PEG-40	聚乙二醇 -40	25322-68-3	100	-
PEG#4000	PEG-75	聚乙二醇 -75	25322-68-3	100	-
PEG#6000	PEG-150	聚乙二醇 -150	25322-68-3	100	-
PEG#6000P	PEG-150	聚乙二醇 -150	25322-68-3	100	-
PEG#11000	PEG-240	聚乙二醇 -240	25322-68-3	100	-
PEG#20000	PEG-400	聚乙二醇 -400	25322-68-3	100	-



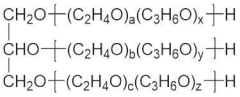
n= The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
GLYMOIST® ME-26 *Prototype	GLYCERETH-26	甘油聚醚 -26	Contact us	100	-



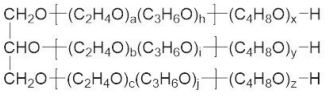
R= Alkyl part
[ ] Block or Ramdam
m=The number of ethylene oxide moles
n= The number of proplylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ACROBUTE® 60MB-63	PPG-28-BUTETH-35	PPG-28- 丁醇聚醚 -35	9038-95-3	100	-
WILBRIDE® BS-03	PPG-7-BUTETH-10	PPG-7- 丁醇聚醚 -10	9038-95-3	100	-
UNILUBE® 50MB-11	PPG-10-BUTETH-9	PPG-10- 丁醇聚醚 -9	Contact us	100	-
UNILUBE® 50MB-26	PPG-17-BUTETH-17	PPG-17- 丁醇聚醚 -17	Contact us	100	-
UNILUBE® 50MB-72	PPG-30-BUTETH-30	PPG-30- 丁醇聚醚 -30	Contact us	100	-



[ ] Ramdam
m=The number of ethylene oxide moles =a+c
n=The number of proplylene oxide moles =b

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNILUBE® 50TG-32	PPG-24-GLYCERETH-24	PPG-24- 甘油聚醚 -24	9082-00-2	100	-

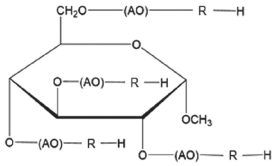


[ ] Ramdam
The number of ethylene oxide moles =a+b+c=8
The number of proplylene oxide moles =h+i+j=5
The number of buthylene oxide moles =x+y+z=3

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
WILBRIDE® S-753	PEG/PPG/POLYBUTYLENE GLYCOL-8/5/3 GLYCERIN	PEG/PPG/ 聚丁二醇 -8/5/3 甘油	220144-83-2	100	-
WILBRIDE® S-753D	PEG/PPG/POLYBUTYLENE GLYCOL-8/5/3 GLYCERIN	PEG/PPG/ 聚丁二醇 -8/5/3 甘油	220144-83-2	100*	-

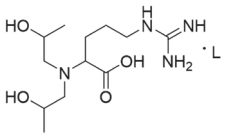
* (Tocopherol 200ppm)

02 / Moisturizer



AO = Ethyllene Oxide, R = nothing
or
AO = Proplylene Oxide, R = nothing
or
AO = Ramdam of Ethyllene Oxide and Proplylene Oxide, R =Butlylene Oxide

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
WILBRIDE® MG-2070R	POLY(1,2-BUTANEDIOL)-4 PEG/ PPG-29/9 METHYL GLUCOSE	Contact us	1436713-43-7	100	-
MACBIOBRIDE® MG-10E	METHYL GLUCETH-10	甲基葡糖醇聚醚 -10	53026-67-8	100	-
MACBIOBRIDE® MG-20E	METHYL GLUCETH-20	甲基葡糖醇聚醚 -20	53026-67-8	100	-
MACBIOBRIDE® MG-10P	PPG-10 METHYL GLUCOSE ETHER	PPG-10 甲基葡糖醚	52673-60-6	100	-
MACBIOBRIDE® MG-20P	PPG-20 METHYL GLUCOSE ETHER	PPG-20 甲基葡糖醚	52673-60-6	100	-



L: Lactic acid

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
WILBRIDE® R-PL	PPG-2 ARGININE	-	1232775-53-9	40	0.70
	LACTIC ACID		598-82-3	10	
	WATER		7732-18-5	50	

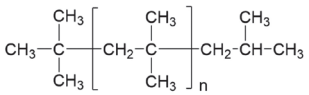
Polyethers derivered from Natural

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NATUWIL® TP-01 *Prototype	PROPANEDIOL/TRIETHYLENE GLYCOL COPOLYMER	-	Contact us	100	1.00

BIOLEAM

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
BIOLEAM®-A	C9-12 ALKANE	C9-12 烷	93924-07-3	99	1.00
	C14-22 ALCOHOLS	C14-22 醇	84539-77-5	1	
BIOLEAM®-L	C9-12 ALKANE	C9-12 烷	93924-07-3	51.5	1.00
	C13-15 ALKANE	C13-15 烷	93924-07-3	47.5	
	C14-22 ALCOHOLS	C14-22 醇	84539-77-5	1	
BIOLEAM®-EL *Prototype	C14-22 ALCOHOLS	C14-22 醇	84539-77-5	100	1.00
BIOLEAM®-S *Prototype	C9-12 ALKANE	C9-12 烷	93924-07-3	35	0.935
	POLYDECENE	聚癸烯	25189-70-2	65	
BIOLEAM®-R *Prototype	POLYDECENE	聚癸烯	25189-70-2	100	0.9

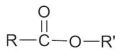
Hydrocarbon



n= The number of isobuten moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
PARLEAM® BH-300P	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68937-10-0	100	-
PARLEAM® 3	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68551-17-7	100	-
PARLEAM® 4	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68551-20-2	100	-
PARLEAM® EX	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68937-10-0	100	-
PARLEAM® 6	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68937-10-0	100	-
PARLEAM® 18	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68937-10-0	100	-
PARLEAM® 24	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68937-10-0	100	-
PARLEAM® 46	HYDROGENATED POLYISOBUTENE	氢化聚异丁烯	68937-10-0	100	-

Ester

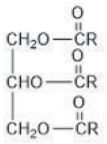


R= Fatty acid part
R'= Alkyl part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
IPM®-R	ISOPROPYL MYRISTATE	肉豆蔻酸异丙酯	110-27-0	100	0.78
NOFABLE® EO-85S	ETHYL OLEATE	油酸乙酯	111-62-6	100	0.85
CLEARBRIGHT® E-81S	ETHYL OLEATE	油酸乙酯	111-62-6	100	0.85

03 / Oil

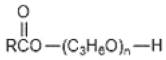
Ester



R= Fatty acid part

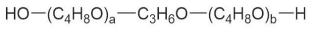
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
PANACET® 800B	TRIETHYLHEXANOIN	甘油三（乙基己酸）酯	7360-38-5	100	-
PANACET® 810S	CAPRYLIC/CAPRIC TRIGLYCERIDE	辛酸 / 癸酸甘油三酯	65381-09-1	100	1.00

Polyethers



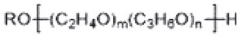
RCO= Fatty acid part
n= The number of proplylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIOL® D-1200	PPG-20	聚丙二醇 -20	25322-69-4	100	-



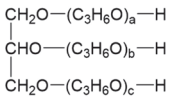
a, b : The number of butlylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIOL® PB-700	POLYBUTYLENE GLYCOL/PPG-9/1 COPOLYMER	聚丁二醇 /PPG-9/1 共聚物	31923-86-1	100	-



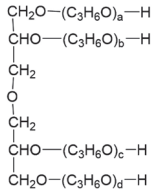
R= Alkyl part
[ ] Block or Ramdam
m= The number of ethylene oxide moles
n= The number of proplylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ACROBUTE® MB-52	PPG-52 BUTYL ETHER	PPG-52 丁醚	9003-13-8	100	-
ACROBUTE® MB-90	PPG-90 BUTYL ETHER	-	9003-13-8	100	-
UNILUBE® MB-11	PPG-17 BUTYL ETHER	PPG-17 丁醚	Contact us	100	-
UNILUBE® MB-22	PPG-24 BUTYL ETHER	PPG-24 丁醚	Contact us	100	-
UNILUBE® MB-370	PPG-40 BUTYL ETHER	PPG-40 丁醚	Contact us	100	-
UNILUBE® MB-700	PPG-52 BUTYL ETHER	PPG-52 丁醚	Contact us	100	-
UNILUBE® MS-70K	PPG-15 STEARYL ETHER	PPG-15 硬脂醇醚	25231-21-4	100	-



a, b, c :
The number of proplylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIOL® SGP-65	PPG-8 GLYCERYL ETHER	-	25791-96-2	100	-



a, b, c, d :
The number of proplylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNILUBE® DGP-700	PPG-9 DIGLYCERYL ETHER	PPG-9 二聚甘油醚	61710-63-2	100	-

04 / Nonion

Polyethers

$HO—(C_2H_4O)_a—(C_3H_6O)_b—(C_2H_4O)_c—H$

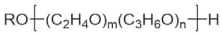
a, c : The number of ethylene oxide moles
b : The number of proplylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
PLONON® #204	PEG/PPG-30/33 COPOLYMER	PEG /PPG-30/33 共聚物	9003-11-6	100	-
PLONON® #208	PEG/PPG-150/35 COPOLYMER	-	9003-11-6	100	-
UNILUBE® 70DP-950B	PEG/PPG-200/70 COPOLYMER	PEG /PPG-200/70 共聚物	9003-11-6	100	-

$RO—(C_2H_4O)_n—H$

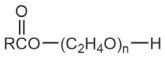
R= Alkyl or Alkenyl Part
n= The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NONION T-208.5	TRIDECETH-8	-	78330-21-9	100	-
NONION K-2100W	LAURETH-100	-	68439-50-9	50	0.51
	WATER		7732-18-5	49	
	PHENOXYETHANOL		122-99-6	1	
NONION S-2200W *Prototype	STEARETH-200	硬脂醇聚醚 -200	68154-96-1	50	0.50
	WATER	水	7732-18-5	47.5	
	PENTYLENE GLYCOL	1,2- 戊二醇	5343-92-0	1.5	
	ETHYLHEXYLGLYCERIN	乙基己基甘油	70445-33-9	1	
NONION P-210	CETETH-10	鯨蜡醇聚醚 -10	9004-95-9	100	-
NONION P-213	CETETH-13	鯨蜡醇聚醚 -13	9004-95-9	100	-
NONION S-202	STEARETH-2	硬脂醇聚醚 -2	68439-49-6	100	0.75
NONION E-202S	OLETH-2	油醇聚醚 -2	9004-98-2	100	0.75
NONION E-205S	OLETH-5	油醇聚醚 -5	9004-98-2	100	0.55
NONION B-220	BEHENETH-20	山嵛醇聚醚 -20	69227-20-9	100	-



R= Alkyl part
[ ] Block or Ramdam
m= The number of ethylene oxide moles
n= The number of proplylene oxide moles

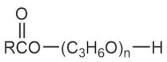
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
SOLUBULE® BR-02	PPG-30-BUTETH-30	PPG-30- 丁醇聚醚 -30	9038-95-3	100	-
SOLUBULE® GS-01	PPG-13-DECYL TETRADECETH-24	PPG-13- 癸基十四醇聚醚 -24	72484-69-6	97	-
			7732-18-5	3	
SOLUBULE® GS-01P	PPG-13-DECYL TETRADECETH-24	PPG-13- 癸基十四醇聚醚 -24	72484-69-6	97	-
			7732-18-5	3	
UNISAFE® 10P-8	PPG-8-CETETH-10	PPG-8- 鯨蜡醇聚醚 -10	37311-01-6	100	-
UNISAFE® 20P-8	PPG-8-CETETH-20	PPG-8- 鯨蜡醇聚醚 -20	37311-01-6	100	-
UNILUBE® 10MS-250KB	PPG-34-STEARETH-3	-	68002-96-0	100	-
UNILUBE® 20MT-2000B	PPG-20-DECYL TETRADECETH-10	PPG-20- 癸基十四醇聚醚 -10	72484-69-6	100	-
UNILUBE® 50MT-2200B	PPG-13-DECYL TETRADECETH-24	PPG-13- 癸基十四醇聚醚 -24	72484-69-6	100	-



RCO= Fatty acid part
n= The number of ethylene oxide moles

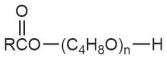
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NONION S-40	PEG-75 STEARATE	PEG-75 硬脂酸酯	9004-99-3	100	-
NONION S-40P	PEG-75 STEARATE	PEG-75 硬脂酸酯	9004-99-3	100	1.00

04 Nonion



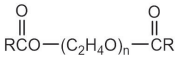
RCO= Fatty acid part
n= The number of proplylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNISAFE® PGML	PROPYLENE GLYCOL LAURATE	丙二醇月桂酸酯	27194-74-7	100	0.77



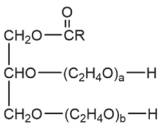
RCO= Fatty acid part
n= The number of buthylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
COMPOL® BL	BUTYLENE GLYCOL LAURATE	丁二醇月桂酸酯	32074-61-6	100	0.73



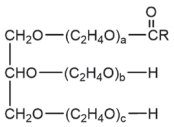
RCO= Fatty acid part
n=The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NONION D-IS400	PEG-8 DIISOSTEARATE	PEG-8 二异硬脂酸酯	68958-56-5	100	0.62
NONION D-IS600	PEG-12 DIISOSTEARATE	PEG-12 二异硬脂酸酯	68958-56-5	100	0.52
NONION DL-40HN(W)	PEG-75 DILAURATE	PEG-75 二月桂酸酯	9005-02-1	65	-
	WATER	水	7732-18-5	35	



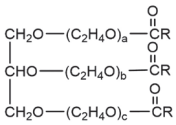
RCO= Fatty acid part
a, b : The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIGLY® MK-207	PEG-7 GLYCERYL COCOATE	PEG-7 甘油 椰油酸酯	68201-46-7	100	-
UNIGLY® MK-207G	PEG-7 GLYCERYL COCOATE	PEG-7 甘油 椰油酸酯	68201-46-7	100	-
UNIGLY® MC-208	PEG-8 CAPRYLIC/CAPRIC GLYCERIDES	PEG-8 辛酸 / 癸酸甘油酯类	127281-18-9	100	-



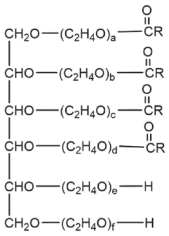
RCO= Isostearic acid part
a, b, c : The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIOX® GM-8IS	PEG-8 GLYCERYL ISOSTEARATE	PEG-8 甘油 异硬脂酸酯	69468-44-6	100	0.50
UNIOX® GM-60IS(D)	PEG-60 GLYCERYL ISOSTEARATE	PEG-60 甘油异硬脂酸酯	69468-44-6	100	-



RCO= Isostearic acid part
a, b, c : The number of ethylene oxide moles

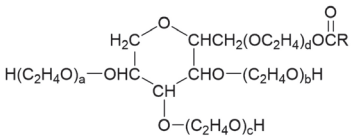
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIOX® GT-20IS	PEG-20 GLYCERYL TRIISOSTEARATE	PEG-20 甘油三异 硬脂酸酯	86846-21-1	100	0.50



RCO= Fatty acid part
a, b, c, d, e, f :
The number of ethylene oxide moles

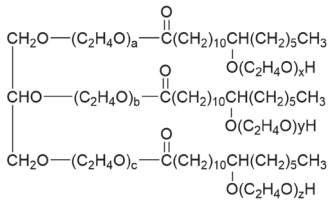
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIOX® ST-30E	SORBETH-30 TETRAOLEATE	山梨醇聚醚 -30 四油酸酯	63089-86-1	100	-
UNIOX® ST-30IS	SORBETH-30 TETRAISOSTEARATE	山梨醇聚醚 -30 四异硬脂酸酯	64364-10-9	100	-
UNIOX® ST-40E	SORBETH-40 TETRAOLEATE	山梨醇聚醚 -40 四油酸酯	63089-86-1	100	-
UNIOX® ST-60E	SORBETH-60 TETRAOLEATE	山梨醇聚醚 -60 四油酸酯	63089-86-1	100	-

04 Nonion



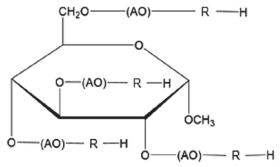
RCO= Fatty acid part
a, b, c, d :
The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NONION LT-221	POLYSORBATE 20	聚山梨醇酯 -20	9005-64-5	100	-
NONION LT-280	PEG-80 SORBITAN LAURATE	PEG-80 失水山梨醇 月桂酸酯	9005-64-5	100	-
NONION LT-280W	PEG-80 SORBITAN LAURATE	PEG-80 失水山梨醇 月桂酸酯	9005-64-5	60	-
	WATER	水	7732-18-5	39	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
NONION OT-80	POLYSORBATE 80	聚山梨醇酯 -80	9005-65-6	100	-
NONION ST-60	POLYSORBATE 60	聚山梨醇酯 -60	9005-67-8	100	-



a, b, c, x, y, z :
The number of ethylene oxide moles

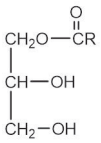
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNIOX® HC-40	PEG-40 HYDROGENATED CASTOR OIL	PEG-40 氫化蓖麻油	61788-85-0	100	-
UNIOX® HC-60	PEG-60 HYDROGENATED CASTOR OIL	PEG-60 氫化蓖麻油	61788-85-0	100	-
UNIOX® HC-100	PEG-100 HYDROGENATED CASTOR OIL	PEG-100 氫化蓖麻油	63089-86-1	100	-



AO= Ethylene oxide
R= Isostearic acid part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
MACBIOBRIDE® MG-120TIS	PEG-120 METHYL GLUCOSE TRIISOSTEARATE	PEG-120 甲基葡糖三异硬脂酸酯	1356033-54-9	100	-
MACBIOBRIDE® MG-T	PEG-120 METHYL GLUCOSE TRIISOSTEARATE	PEG-120 甲基葡糖三异硬脂酸酯	1356033-54-9	75	-
	WATER	水	7732-18-5	25	

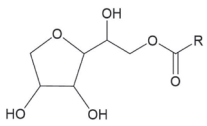
Ester



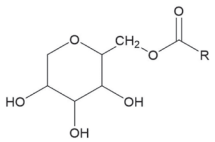
R= Fatty acid part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
GLYMOIST® MO	GLYCERYL OLEATE	甘油油酸酯	37220-82-9	80	0.89
	GLYCERIN	甘油	56-81-5	20	

Sorbitan Fatty Acid Ester

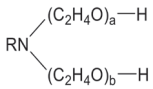


R= Fatty acid part



Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NONION LP-20R	SORBITAN LAURATE	山梨坦月桂酸酯	1338-39-2	100	1.00
NOFABLE® SO-852S	SORBITAN SESQUIOLEATE	山梨坦倍半油酸酯	8007-43-0	100	1.00

Amine

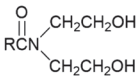


R= Alkyl part
a, b : The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NYMEEN® F-202	PEG-2 COCAMINE	-	61791-14-8	100	0.64

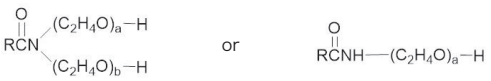
04 / Nonion

Amide



RCO= Alkyl part

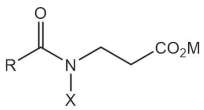
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
STAFORM® DF-4	COCAMIDE DEA	椰油酰胺 DEA	68603-42-9	97	0.65
			111-42-2	3	
STAFORM® DFC	COCAMIDE DEA	椰油酰胺 DEA	68603-42-9	87.5	Contact us
			111-42-2	5.5	
	By-product (mainly glycerin)	-	-	8	
STAFORM® DL	LAURAMIDE DEA	月桂酰胺 DEA	120-40-1 111-42-2	100	0.64
STAFORM® F	COCAMIDE DEA (AND) DIETHANOLAMINE	-	68440-04-0	75	-
			111-42-2	25	



RCO= acyl part
a, b : The number of ethylene oxide moles

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NYMID® MF-210	PEG-11 COCAMIDE	PEG-11 椰油酰胺	68425-44-5 141-43-5	100	-

Alanines

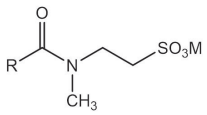


RCO= Fatty acid part
X=CH_3, CH_2CH_2OH
M=H, Na, $HN(CH_2CH_2OH)_3$, $H_3NCH_2CH_2SO_3Na$

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
SOFTILT® AH-L *Prototype	LAUROYL METHYL BETA-ALANINE	-	21539-57-1	100	0.80
SOFTILT® AH-ME	MYRISTOYL METHYL BETA-ALANIN	肉豆蔻酰 甲基 β 氨基丙酸	21539-71-9	48.1	0.72
	By-product	-	-	1.9	
	CETYL ETHYL HEXANOATE	鲸 蜡醇乙基己酸 酯	59130-69-7	50	
SOFTILT® AS-L	SODIUM LAUROYL METHYLAMINO-PROPIONATE	月桂酰基 甲基氨基丙酸钠	21539-58-2	30	0.88
	WATER	水	7732-18-5	70	
SOFTILT® AT-L	TEA-LAUROYL METHYLAMINO-PROPIONATE	月桂酰基 甲氨基丙酸 TEA 盐	89353-55-9	30	0.70
	WATER	水	7732-18-5	70	
SOFTILT® AX-L	SODIUM TAURINE LAUROYL METHYL BETA-ALANINATE	-	21539-58-2	25	0.86
	WATER		7732-18-5	75	
LUMINOVEIL® HS-K *Prototype	SODIUM COCOYL HYDROXYETHYL BETA-ALANINATE	-	-	26	0.84
	WATER		7732-18-5	70	
	By-product		-	4	
LUMINOVEIL® HS-L	SODIUM LAUROYL HYDROXYETHYL BETA-ALANINATE	-	69003-48-1	26	0.84
	WATER		7732-18-5	70	
	By-product		-	4	

05 / Anion

Taurates



RCO= Fatty acid part
M=Na, $H_3NCH_2CH_2SO_3Na$

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
DIAPON® K	SODIUM METHYL COCOYL TAURATE	甲基椰油酰基牛磺酸钠	61791-42-2	25	0.82
	WATER	水	7732-18-5	68	
	By-product	-	-	7	
DIAPON® K-SF	SODIUM METHYL COCOYL TAURATE	甲基椰油酰基牛磺酸钠	61791-42-2	30	0.86
	WATER	水	7732-18-5	70	
DIAPON® K-SF POWDER	SODIUM METHYL COCOYL TAURATE	甲基椰油酰基牛磺酸钠	61791-42-2	100	0.54
DIAPON® K-SG	SODIUM TAURINE COCOYL METHYLTAURATE	椰油酰甲基牛磺酸牛磺酸钠	61791-42-2 107-35-7	28	0.83
	WATER	水	7732-18-5	71	
	By-product	-	7647-14-5	1	
DIAPON® K-MG	MAGNESIUM METHYL COCOYL TAURATE	甲基椰油基牛磺酸镁	223705-12-2	25	0.83
	WATER	水	7732-18-5	69	
	By-product	-	-	6	
DIAPON® HF-SF	SODIUM CAPROYL METHYLTAURATE	-	20461-70-5	26	0.74
	WATER		7732-18-5	74	

Sulfates

$RO—(C_2H_4O)_n—SO_3M$

n=0, 2, 3
M=Na, $HN(CH_2CH_2OH)_3$, HNH_3

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
SUNAMIDE® C-3	SODIUM PEG-4 COCAMIDE SULFATE	PEG-4 椰油酰胺硫酸酯钠	78125-59-4	28	0.72
	WATER	水	7732-18-5	72	
PERSOFT® EF	SODIUM LAURETH SULFATE	月桂醇聚醚硫酸酯钠	68891-38-3	25	0.75
	WATER	水	7732-18-5	75	
PERSOFT® EFT	TEA-LAURETH SULFATE	月桂醇聚醚硫酸酯 TEA 盐	27028-82-6	36	0.64
	WATER	水	7732-18-5	64	
PERSOFT® EL	SODIUM LAURETH SULFATE	月桂醇聚醚硫酸酯钠	68585-34-2	25	0.75
	WATER	水	7732-18-5	75	
PERSOFT® SF-T	TEA- LAURYL SULFATE	月桂醇硫酸酯 TEA 盐	139-96-8	39	0.61
	WATER	水	7732-18-5	61	

Soap

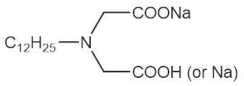
RCOOM

RCO= Fatty acid part
M=Na, $H_3NCH_2CH_2SO_3Na$

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NONSOUL® LK-2	SEKKEN SOJI-K	-	10124-65-9	100	0.84
NONSOUL® LK-30	SEKKEN SOJI-K	-	61789-30-8	30	0.91
	WATER		7732-18-5	66	
	By-product		-	4	
NONSOUL® LN-1	SEKKEN SOJI	-	629-25-4	87	0.91
	WATER		7732-18-5	13	
NONSOUL® MK-1	POTASSIUM MYRISTATE	肉豆蔻酸钾	13429-27-1	100	0.85
NONSOUL® PK-1	POTASSIUM PALMITATE	棕榈酸钾	2624-31-9	100	0.87

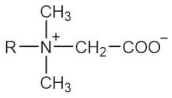
06 / Amphoteric

Iminodiacetic Acid



Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ANON® LA	DISODIUM LAURIMINODIACETATE	月桂亚氨基二乙酸二钠	34359-86-9 or 141421-68-8	28	0.72
	WATER	水	7732-18-5	72	
ANON® LA POWDER *Prototype	DISODIUM LAURIMINODIACETATE	月桂亚氨基二乙酸二钠	34359-86-9 or 141421-68-8	100	-

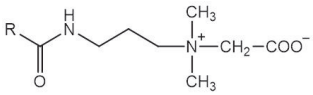
Alkyl Betaine



RCO= Alkyl part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ANON® BF	COCO-BETAINE	椰油基甜菜碱	68424-94-2 683-10-3	25	0.86
	WATER	水	7732-18-5	67	
	By-product（mainly inorganic salt）	-	-	8	
ANON® BL	LAURYL BETAINE	月桂基甜菜碱	683-10-3	35	0.82
	WATER	水	7732-18-5	60	
	By-product（mainly inorganic salt）	-	-	5	
ANON® BL-SF	LAURYL BETAINE	月桂基甜菜碱	683-10-3	35	0.86
	WATER	水	7732-18-5	64	
	By-product（mainly inorganic salt）	-	-	1	

Alkylamido Betaines

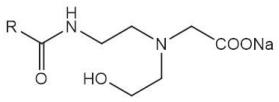


RCO= Fatty acid part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ANON® BDB-S	PALM KERNELAMIDOPROPYL BETAINE	棕榈仁油酰胺丙基甜菜碱	4292-10-8	30	0.80
	WATER	水	7732-18-5	64	
	By-product（mainly inorganic salt）	-	-	6	
ANON® BDC-SF	PALM KERNELAMIDOPROPYL BETAINE	棕榈仁油酰胺丙基甜菜碱	4292-10-8	30	0.86
	WATER	水	7732-18-5	70	

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ANON® BDF-R	COCAMIDOPROPYL BETAINE	椰油酰胺丙基甜菜碱	61789-40-0	28	0.83
	WATER	水	7732-18-5	65	
	By-product（mainly inorganic salt）	-	-	7	
ANON® BDF-SF	COCAMIDOPROPYL BETAINE	椰油酰胺丙基甜菜碱	61789-40-0	31	0.86
	WATER	水	7732-18-5	69	
ANON® BDL-SF	LAURAMIDOPROPYL BETAINE	月桂酰胺丙基甜菜碱	4292-10-8	30	0.86
	WATER	水	7732-18-5	70	
ANON® BDL-SFK	LAURAMIDOPROPYL BETAINE	月桂酰胺丙基甜菜碱	4292-10-8	29.67	0.86
	WATER	水	7732-18-5	69.23	
	SODIUM BENZOATE	苯甲酸钠	532-32-1	0.8	
	CITRIC ACID	柠檬酸	5949-29-1	0.3	

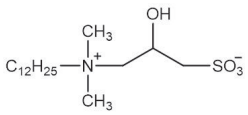
Imidazolinium betaine



RCO= Fatty acid part

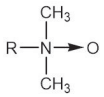
Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ANON® GLM-R-LV	SODIUM COCOAMPHOACETATE	椰油酰两性基乙酸钠	68334-21-4	27	0.67
	WATER	水	7732-18-5	67	
	By-product（mainly inorganic salt）	-	-	6	

Sulfobetaine



Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
ANON® L-SB	LAURYL HYDROXYSULTAINE	月桂基羟基磺基甜菜碱	13197-76-7	30	0.55
	WATER	水	7732-18-5	55	
	By-product	-	-	15	

Amine Oxide

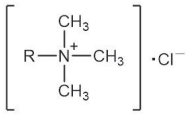


RCO= Alkyl part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
UNISAFE® A-LM	LAURAMINE OXIDE	月桂基胺氧化物	1643-20-5 7722-84-1	35	0.90
	WATER	水	7732-18-5	65	
UNISAFE® A-SM	STEARAMINE OXIDE	硬脂胺氧化物	2571-88-2	35	0.93
	WATER	水	7732-18-5	65	

07 Cation

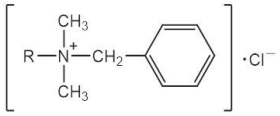
Mono Alkyl Cation



R= Alkyl part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
CATION AB-250AQ	STEARTRIMONIUM CHLORIDE	硬脂基三甲基氯化铵	112-03-8	25	0.93
	WATER	水	7732-18-5	75	
CATION AB-600	STEARTRIMONIUM CHLORIDE	硬脂基三甲基氯化铵	112-03-8	63	0.51
	WATER	水	7732-18-5	5	
	ISOPROPYL ALCOHOL	异丙醇	67-63-0	32	
CATION AB-700E	STEARTRIMONIUM CHLORIDE	硬脂基三甲基氯化铵	112-03-8	70	0.56
	WATER	水	7732-18-5	5	
	ALCOHOL	乙醇	122-99-6	25	
CATION BB	LAURTRIMONIUM CHLORIDE	月桂基三甲基氯化铵	112-00-5	30	0.74
	WATER	水	7732-18-5	55	
	By-product	-	-	15	
CATION PB-300	CETRIMONIUM CHLORIDE	西曲氯铵	112-02-7	28	0.92
	WATER	水	7732-18-5	72	
CATION VB-800E	BEHENTRIMONIUM CHLORIDE	山嵛基三甲基氯化铵	68607-24-9	80	0.61
	ALCOHOL	乙醇	122-99-6	20	
CATION VB-F	BEHENTRIMONIUM CHLORIDE	山嵛基三甲基氯化铵	68607-24-9	80	0.61
	ALCOHOL DENAT.	变性乙醇	64-17-5	20	
CATION VB-M FLAKE	BEHENTRIMONIUM CHLORIDE	山嵛基三甲基氯化铵	68607-24-9	80	0.61
	ISOPROPYL ALCOHOL	异丙醇	67-63-0	20	

Mono Alkyl Benzyl Cation



R= Alkyl part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
CATION F2-50R	BENZALKONIUM CHLORIDE	苯扎氯铵	61789-71-7	50	0.76
	WATER	水	7732-18-5	50	
CATION M2-100R	BENZALKONIUM CHLORIDE	苯扎氯铵	139-08-2	91	0.56
	WATER	水	7732-18-5	9	

Dialkyl Caticon

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
CATION 2AB-S	DISTEARYLDIMONIUM CHLORIDE	二硬脂基二甲基氯化铵	107-64-2	75	0.81
	WATER	水	7732-18-5	10	
	ISOPROPYL ALCOHOL	异丙醇	67-63-0	15	
CATION EQ-01D	BIS-SOYOYL/ RAPESEEDOYL ETHYL HYDROXYETHYLMONIUM METHOSULFATE	-	91995-81-2	85	Contact us
	DIPROPYLENE GLYCOL		25265-71-8	15	

Amine

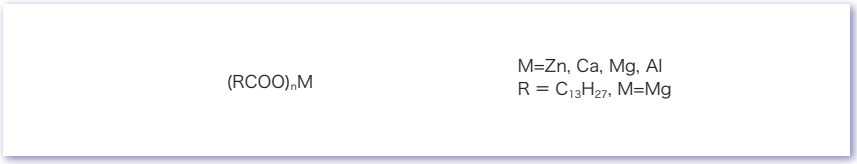
R= Alkyl part

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
TERTIARY AMINE AB	DIMETHYL STEARAMINE	二甲基硬脂基胺	124-28-7	100	0.85

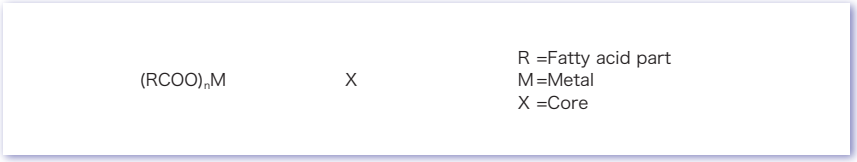
08 Fatty acid / Hydrogenated oil

RCOOH

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
NAA®-102	CAPRIC ACID	癸酸	334-48-5	100	1.00
NAA®-122	LAURIC ACID	月桂酸	143-07-7	100	1.00
NAA®-312	LAURIC ACID	月桂酸	334-48-5	10	1.00
			143-07-7	75	
			544-63-8	15	
NAA®-415	COCONUT ACID	椰油酸	61788-47-4	100	1.00
NAA®-142	MYRISTIC ACID	肉豆蔻酸	544-63-8	100	1.00
NAA®-160	PALMITIC ACID	棕榈酸	57-10-3	100	1.00
NAA®-400 OLEIC ACID	OLEIC ACID	油酸	112-80-1	100	1.00
EXTRA OS-85	OLEIC ACID	油酸	112-80-1	100	1.00
CLEARBRIGHT® 81S	OLEIC ACID	油酸	112-80-1	100	1.00
CASTER® WAX A FLAKE	HYDROGENATED CASTOR OIL	氢化蓖麻油	8001-78-3	100	1.00
12-HYDROXYSTEARIC ACID	HYDROXYSTEARIC ACID	羟基硬脂酸	106-14-9	100	1.00
LINOLEIC ACID 90	LINOLEIC ACID	亚油酸	60-33-3	100	1.00
NAA®-222S BEADS	BEHENIC ACID	山嵛酸	112-85-6	100	1.00



Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
POWDERBASE® L	ZINC LAURATE	月桂酸锌	2452-01-9	100	0.86
POWDERBASE® M	ZINC MYRISTATE	肉豆蔻酸锌	16260-27-8	100	0.87
MZ-2	ZINC STEARATE	硬脂酸锌	557-05-1	100	0.90
ALUMINUM STEARATE 600 VEGETABLE	ALUMINUM DISTEARATE	二硬脂酸铝	300-92-5	100	0.92
CALCIUM STEARATE VEGETABLE	CALCIUM STEARATE	硬脂酸钙	1592-23-0	100	0.93
ZINC STEARATE VEGETABLE	ZINC STEARATE	硬脂酸锌	557-05-01	100	0.90
MAGNESIUM STEARATE-S	MAGNESIUM STEARATE	硬脂酸镁	557-04-0	100	0.96



Functional Metal Soap

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
POWDERBASE® BM14 *Prototype	MAGNESIUM MYRISTATE	肉豆蔻酸镁	4086-70-8	84	1.00
	BORON NITRIDE	一氮化硼	10043-11-5	16	
POWDERBASE® BZ12 *Prototype	ZINC LAURATE	月桂酸锌	2452-01-9	84	1.00
	BORON NITRIDE	一氮化硼	10043-11-5	16	

10 Extract

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
AKEBIA® EXTRACT BG	AKEBIA TRIFOLIATA STEM EXTRACT	三叶木通 (AKEBIA TRIFOLIATA) 茎提取物	891863-03-9	0.9	0.70
	WATER	水	7732-18-5	69.1	
	BUTYLENE GLYCOL	丁二醇	107-88-0	30	
APRICOT JUICE PH™	PRUNUS ARMENIACA (APRICOT) JUICE	杏 (PRUNUS ARMENIACA) 汁	68650-44-2	85	0.99
	GLYCERIN	甘油	56-81-5	15	
ECKLEXT® BG	ECKLONIA KUROME EXTRACT	山茶 (CAMELLIA JAPONICA) 籽提取物	なし	1	-
	WATER	水	7732-18-5	19.8	
	BUTYLENE GLYCOL	丁二醇	107-88-0	79.2	
KUMIS KUCHING EXTRACT BG™	ORTHOSIPHON STAMINEUS EXTRACT	肾茶 (ORTHOSIPHON STAMINEUS) 提取物	84012-29-3	0.9	-
	BUTYLENE GLYCOL	丁二醇	107-88-0	59.5	
	WATER	水	7732-18-5	39.6	
SHEKWASHA EXTRACT Plant-BG™	CITRUS DEPRESSA PEEL EXTRACT	扁平橘 (CITRUS DEPRESSA) 果皮提取物	1007871-77-3	1.4	1.00
	WATER	水	7732-18-5	39.4	
	BUTYLENE GLYCOL	丁二醇	107-88-0	59.2	
MULBERRY ROOT BARK EXTRACT™	MORUS ALBA ROOT EXTRACT	桑 (MORUS ALBA) 根提取物	94167-05-2	1	0.98
	WATER	水	7732-18-5	19.8	
	BUTYLENE GLYCOL	丁二醇	107-88-0	79.2	
CHINPI EXTRACT K65B™	CITRUS AURANTIUM TACHIBANA PEEL EXTRACT	酸橙 (CITRUS AURANTIUM TACHIBANA) 果皮提取物	1007871-75-1	1.6	-
	WATER	水	7732-18-5	34.4	
	BUTYLENE GLYCOL	丁二醇	107-88-0	64	
CHINPI EXTRACT PM-F (N)™	CITRUS AURANTIUM DULCIS (ORANGE) PEEL EXTRACT	甜橙 (CITRUS AURANTIUM DULCIS) 果皮提取物	8028-48-6	1.5	1.00
	WATER	水	7732-18-5	19.7	
	BUTYLENE GLYCOL	丁二醇	107-88-0	78.8	
CAMELLIA FLOWER EXTRACT BG™	CAMELLIA JAPONICA FLOWER EXTRACT	山茶 (CAMELLIA JAPONICA) 花提取物	223748-13-8	1	-
	BUTYLENE GLYCOL	丁二醇	107-88-0	49.5	
	WATER	水	7732-18-5	49.5	
CAMELLIA SEED EXTRACT Plant-BG™	CAMELLIA JAPONICA SEED EXTRACT	山茶 (CAMELLIA JAPONICA) 籽提取物	223748-13-8	0.8	1.00
	WATER	水	7732-18-5	49.2	
	BUTYLENE GLYCOL	丁二醇	107-88-0	50	
CAMELLIA LEAF EXTRACT BG™	CAMELLIA JAPONICA LEAF EXTRACT	山茶 (CAMELLIA JAPONICA) 叶提取物	223748-13-8	1	-
	BUTYLENE GLYCOL	丁二醇	107-88-0	49.5	
	WATER	水	7732-18-5	49.5	

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
TSUYAHIME RICE BRAN EXTRACT™	ORYZA SATIVA (RICE) BRAN EXTRACT	稻 (ORYZA SATIVA) 糠提取	936843-29-7	1	-
	WATER	水	7732-18-5	49.5	
	BUTYLENE GLYCOL	丁二醇	107-88-0	49.5	
VERBENA OFFICINALIS EXTRACT BG™	VERBENA OFFICINALIS EXTRACT	马鞭草 (VERBENA OFFICINALIS) 提取物	84961-67-1	0.6	-
	BUTYLENE GLYCOL	丁二醇	107-88-0	79.5	
	WATER	水	7732-18-5	19.9	
BAKUMONDOU EXTRACT Plant-BG™	OPHIOPOGON JAPONICUS ROOT EXTRACT	麦冬 (OPHIOPOGON JAPONICUS) 根提取物	952500-62-8	1.4	1.00
	WATER	水	7732-18-5	69	
	BUTYLENE GLYCOL	丁二醇	107-88-0	29.6	
PASSION FRUIT EXTRACT BG™	PASSIFLORA EDULIS PEEL EXTRACT	鸡蛋果 (PASSIFLORA EDULIS) 果皮提取物	91770-48-8	1.2	-
	BUTYLENE GLYCOL	丁二醇	107-88-0	59.3	
	WATER	水	7732-18-5	39.5	
PEACANNUTS EXTRACT BG-2™	CARYA ILLINOINENSIS (PECAN) SHELL EXTRACT	美国山核桃 (CARYA ILLINOENSIS) 壳提取物	246166-03-0	1.3	0.70
	WATER	水	7732-18-5	69.1	
	BUTYLENE GLYCOL	丁二醇	107-88-0	29.6	
GRAPE EXTRACT BG™	VITIS VINIFERA (GRAPE) FRUIT EXTRACT	葡萄 (VITIS VINIFERA) 果提取物	84929-27-1	0.5	1.00
	WATER	水	7732-18-5	49.75	
	BUTYLENE GLYCOL	丁二醇	107-88-0	49.75	
PROTEOGLYCAN™ (PLANT)	SOLUBLE PROTEOGLYCAN	可溶性蛋白多糖	9000-01-5	1	0.98
	WATER	水	7732-18-5	96.7	
	PENTYLENE GLYCOL	1,2- 戊二醇	5343-92-0	2	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	0.2	
	SODIUM CITRATE	柠檬酸钠	6132-04-3	0.1	
EUCALYPTUS EXTRACT Plant-BG™	EUCALYPTUS GLOBULUS LEAF EXTRACT	蓝桉 (EUCALYPTUS GLOBULUS) 叶提取物	84625-32-1	1	1.00
	WATER	水	7732-18-5	19.8	
	BUTYLENE GLYCOL	丁二醇	107-88-0	79.2	
EUCALYPTUS EXTRACT ET™	EUCALYPTUS GLOBULUS LEAF EXTRACT	蓝桉 (EUCALYPTUS GLOBULUS) 叶提取物	84625-32-1	1.6	1.00
	WATER	水	7732-18-5	49.2	
	ALCOHOL	乙醇	64-17-5	49.2	
TURMERIC EXTRACT Plant-BG™	CURCUMA LONGA(TURMERIC) RHIZOME EXTRACT or CURCUMA LONGA(TURMERIC) ROOT EXTRACT	姜黄 (CURCUMA LONGA) 根提取物	84775-52-0	0.3	1.00
	BUTYLENE GLYCOL	丁二醇	107-88-0	79.8	
	WATER	水	7732-18-5	19.9	
YOUKOU SAKURA FLOWER EXTRACT BG™	CERASUS YOUKOU FLOWER EXTRACT	-	-	0.8	-
	BUTYLENE GLYCOL		107-88-0	79.4	
	WATER		7732-18-5	19.8	

11 Gemini-type

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
Vinoveil®-BS-100P	BEHENDIMONIUM ETHYL STEARYL PHOSPHATE	-	1151518-05-6	100	0.80
Vinoveil®-BS-1D	BEHENDIMONIUM ETHYL STEARYL PHOSPHATE	-	1151518-05-6	1	1.00
	GLYCERIN		56-81-5	50	
	BEHENTRIMONIUM CHLORIDE		68607-24-9	0.3	
	ALCOHOL		64-17-5	0.075	
	WATER		7732-18-5	48.625	

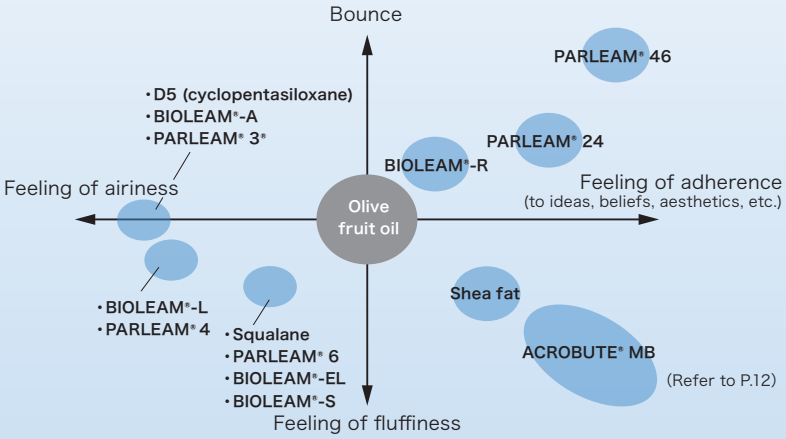
12 Phospholipid

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
CyPA®-QD Plant-BG	LYSOLECITHIN	溶血卵磷脂	85711-58-6	20	1.00
	GLYCERIN	甘油	56-81-5	50	
	BUTYLENE GLYCOL	丁二醇	107-88-0	30	
CyPA®-PW	CYCLIC LYSOPHOSPHATIDIC ACID	-	11626272-17-4	50	1.00
	CYCLODEXTRIN		10016-20-3	50	
COATSOME® NC-21	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	100	1.00
COATSOME® NC-61	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	100	1.00

Product Name	INCI	Chinies INCI	CAS No.	Composition	N.O.I.
EXTRASOME® AQUA(BG)	BUTYLENE GLYCOL	丁二醇	107-88-0	10	0.89
	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	4	
	CHOLESTEROL	胆甾醇	57-88-5	1	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
	SODIUM COCOYL SARCOSINATE	椰油酰肌氨酸钠	61791-59-1	0.05	
	WATER	水	7732-18-5	0.12	
	TOCOPHEROL	生育酚（维生素 E）	119-13-1	0.02	
	WATER	水	7732-18-5	83.81	
EXTRASOME® C3-L	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	4	1.00
	CHOLESTEROL	胆甾醇	57-88-5	1	
	CERAMIDE NP	神经酰胺 NP	100403-19-8	0.1	
	XANTHAN GUM	黄原胶	11138-66-2	0.1	
	METHYLPARABEN	羟苯甲酯	99-76-3	0.15	
	ETHYLPARABEN	羟苯乙酯	120-47-8	0.05	
	SODIUM STEAROYL GLUTAMATE	硬脂酰谷氨酸钠	79811-24-8	0.05	
	WATER	水	7732-18-5	94.55	
EXTRASOME® HC	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	76	0.99
	CHOLESTEROL	胆甾醇	57-88-5	19	
	SODIUM COCOYL SARCOSINATE	椰油酰肌氨酸钠	Contact us	5	
EXTRASOME® MC	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	82.6	1.00
	CHOLESTEROL	胆甾醇	57-88-5	17.4	
EXTRASOME® NANO	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	4	Contact us
	ALCOHOL	乙醇	64-17-5	2.25	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1.25	
	CHOLESTEROL	胆甾醇	57-88-5	1	
	XANTHAN GUM	黄原胶	11138-66-2	0.1	
	SODIUM COCOYL SARCOSINATE	椰油酰肌氨酸钠	61791-59-1	0.05	
	WATER	水	7732-18-5	0.12	
	WATER	水	7732-18-5	91.23	
PRIMESOME® -MB	BUTYLENE GLYCOL	丁二醇	107-88-0	10	0.88
	HYDROGENATED LECITHIN	氢化卵磷脂	92128-87-5	4	
	CHOLESTEROL	胆甾醇	57-88-5	1	
	PHENOXYETHANOL	苯氧乙醇	122-99-6	1	
	POLYQUATERNIUM-51	聚季铵盐 -51	125275-25-4	0.5	
	WATER	水	7732-18-5	9.5	
	SODIUM COCOYL SARCOSINATE	椰油酰肌氨酸钠	61791-59-1	0.05	
	WATER	水	7732-18-5	0.12	
	TOCOPHEROL	生育酚（维生素 E）	119-13-1	0.02	
	WATER	水	7732-18-5	73.81	

Texture Mapping for Functional Oil emollient

We have lined up PARLEAM® and BIOLEAM® series as oils with various functions. PARLEAM® 3 and BIOLEAM®-A exhibit a feel equivalent to cyclopentasiloxane, PARLEAM® 4 and BIOLEAM®-L have a high plumping effect, and PARLEAM® 6 has a feel equivalent to squalane. In addition, PARLEAM®-24 and PARLEAM®-46 have excellent firmness and adhesion.



High quality hydrocarbons that can produce various textures

PARLEAM®/POLYSYNLANE® series

INCI : Hydrogenated polyisobutene

The PARLEAM® series is a colorless, odorless, and tasteless high-purity hydrocarbon that exhibits good stability. 7 different lineups are available to create a variety of textures. We recommend PARLEAM® EX and 6 for skincare. Moreover, to enhance the richness skincare formulations, high-viscosity products such as 18, 24, and 46 can be blended with low-viscosity PARLEAM®, offering a diverse range of textures to suit various product needs. +Plus! NOF Formulation is P.42, 44, (51, 52, 70)

viscosity	Low viscosity products				High Viscosity Products		
grade	3	4	LITE	-	V	HV	SV
Kinematic viscosity (37.8℃、mm^2/s)	1.4	3.1	10.6	20.1	-	-	-
Kinematic viscosity (98.9℃、mm^2/s)	-	-	2.5	3.6	300	800	4,700
Refractive index	1.429	1.442	1.456	1.458	1.494	1.499	1.505
Special Features	Volatility Airy feeling	Good compatibility with silicone high detergency	Balanced lightness and emollient feeling	Squalane-like texture	An essential ingredient in makeup cosmetics due to its good adhesionA trace amount added (0.1-0.5%) gives richness to skin care products,Hair care products add luster.		

A newly developed oil formulation that combines excellent usability with the unique characteristics of high-viscosity PARLEAM®/POLYSYNLANE®

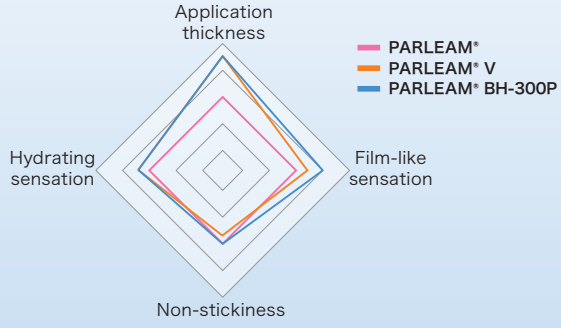
PARLEAM®/POLYSYNLANE® BH-300P

INCI : Hydrogenated polyisobutene

PARLEAM® BH-300P is a newly developed product that combines the ease of handling found in low-viscosity PARLEAM® with the outstanding properties of high-viscosity PARLEAM®. When used in skincare formulations, it delivers excellent film-forming properties, enhances the sensation of hydration, and reduces stickiness after drying.

※ Kinematic viscosity (40.0℃ , mm^2/s) 145.5,
Refractive index (20℃) 1.470

Sensory evaluation



Test method : 5-point grading with PARLEAM® as the standard (3 points)
Average of 5 subjects (3 males and 2 females)
Formulation : (PARLEAM® BH-300P, PARLEAM® V) 5.0 wt% Glycerin 5.0 wt%, oil 12.6wt%, Emulsifier 2.8wt% , water balance

Natural Emollient Agent Series with Superior Functionality and handling

BIOLEAM®/Green PARLEAM®

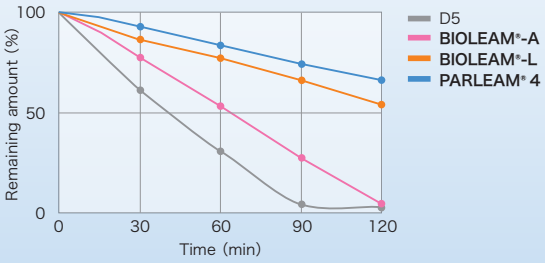
INCI : Listed in the table on the right

The BIOLEAM® series is comprised of high-quality, natural-origin emollient agents, offering five distinct products to create a variety of unique textures. BIOLEAM®-A, BIOLEAM®-L and BIOLEAM®-EL are a 100% natural origin index emollient agents. BIOLEAM®-A serves as an alternative to D5 or dimethicone, while BIOLEAM®-A and BIOLEAM®-L exhibit volatility, ensuring ease of application and a smooth, skin-friendly.

+Plus! NOF Formulation is P.45, (52)

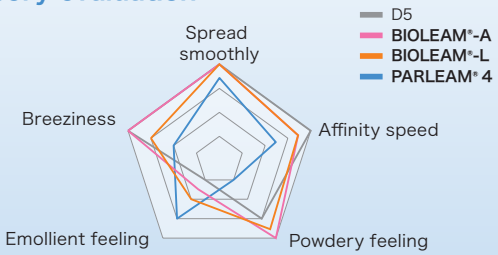
grade	A	L	S	EL	R
Display name	C9-12 Alkane, C14-22 Alcohols	C9-12 Alkane, C13-15 Alkane, C14-22 Alcohols	Polydecene, C9-12 Alkane	C14-22 Alcohols	Polydecene
Kinematic viscosity (40.0℃、mm^2/s)	1.5	1.7	20	28	300
Refractive index (20℃)	1.422	1.426	1.455	1.454	1.474
NOI	1	1	0.9	1	0.9
Specia Features	Highly volatile oil Produces good skin affinity	Volatile oil Good skin affinity and emollient feel	Good skin affinity Emollient feel Water Resistance Inhibition of α-gel crystallization	Squalane-like texture Improved powder dispersion stability	Rich feeling Inhibition of α-gel crystallization

Volatility Evaluation



Test method : 0.4 g of each oil was soaked into filter paper, placed in a thermostatic bath at 20°C, and the weight of the filter paper was measured at each time.

Sensory evaluation



Test method : Sensory evaluation of the feeling of each ingredient when applied in appropriate quantities to the upper arm was conducted using a 5-point sensory evaluation.

Skin Care Functional Polymers

Moisture film protects skin from dryness and irritation

LIPIDURE® series

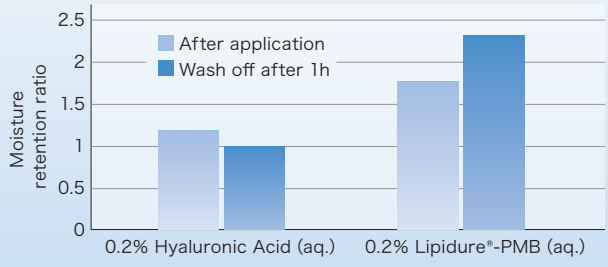
INCI : Listed in the table on the right

The LIPIDURE® series is a cosmetic ingredient renowned for its superior moisturizing capabilities, closely resembling the 'cell membrane' that encases human cells. By forming a moisture-retaining film on the skin, LIPIDURE® protects and hydrates effectively. Its high biocompatibility also makes it suitable for use in eye drops and contact lenses.

+Plus! NOF Formulation is P.42, 43, 44, 45, (52, 61, 65, 67, 70, 76)

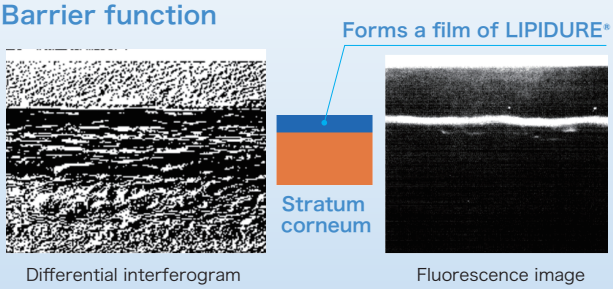
Product name	INCI name
LIPIDURE®-HM	Polymethacryloyloxyethylphosphorylcholine
LIPIDURE®-PMB	Polyquaternium-51
LIPIDURE®-A	Polyquaternium-65
LIPIDURE®-C	Polyquaternium-64
LIPIDURE®-S、-NR、-NA	Polyquaternium-61

Outstanding moisturizing power



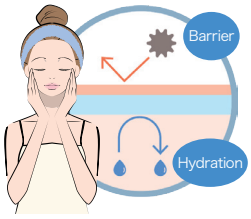
Test method : Samples were applied to the arms, immediately after application and 1 hour after washing with water. Moisture retention capacity was measured.

Barrier function



Test method : Fluorescently labeled LIPIDURE® was applied to LSE, Rinsed 10 times in phosphate buffer

Biocompatibility

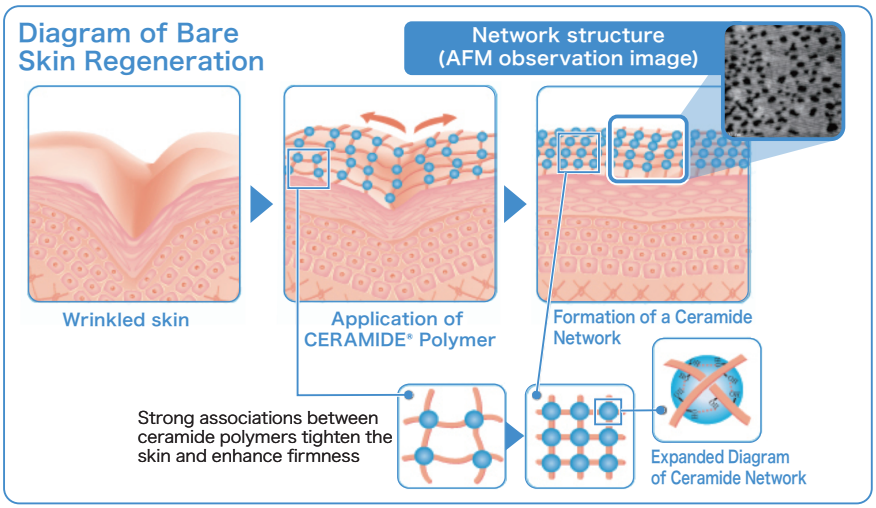


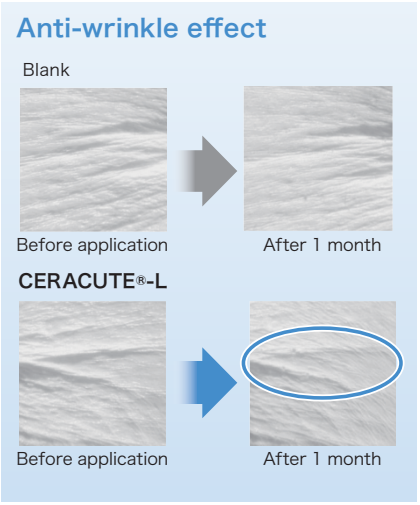
Test method : Gauze containing the irritant was applied to the arm and removed 4 hours later.

Polymer that mimics the structure of ceramide

CERACUTE® series

When applied to the skin, the CERACUTE® series forms a polymer network that provides an anti-wrinkle effect. This network enhances skin elasticity (soft skin regeneration) by utilizing the strong aggregation of ceramide polymers, which results in firmer and more elastic skin. Additionally, despite being an anti-wrinkle material, it offers a natural feel with no slippery sensation. With its ceramide-like structure, CERACUTE® is distinguished by its excellent skin compatibility and high safety profile. +Plus! NOF Formulation is P.45, (76)



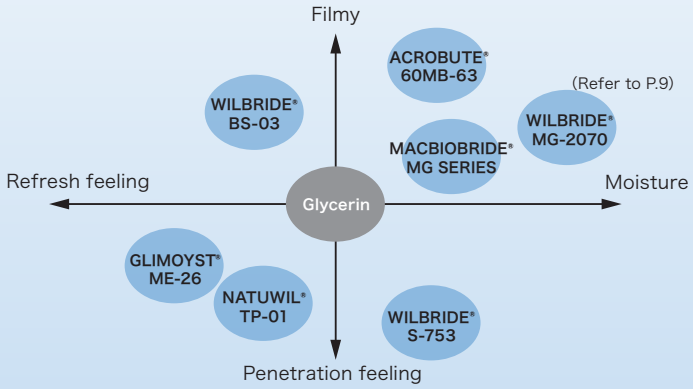


Test method : 5wt% CERACUTE®-L water dispersion was applied to the outer corner of the eyes twice a day for 4 weeks.

Skin Care Moisturizing Ingredients

Functional Moisturizer Usability Mapping

NOF offers a diverse lineup of moisturizers with unique functionalities and textures to suit various needs. ACROBUTE® 60MB-63 and MACBIOBRIDE® MG series provide a rich, filmy, and moist feeling. WILBRIDE® BS-03 delivers a refreshing yet filmy sensation, GLYMOST® ME-26 offers a light and penetrating feel, while WILBRIDE® S-753 creates a deeply moist and penetrating texture.

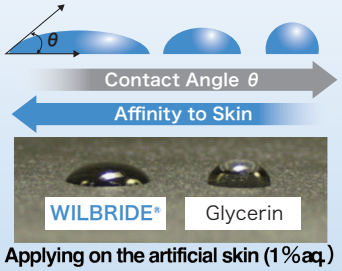


Water-based moisturizing oil with selective transdermal absorption control function, creating a higher grade of luxury and permeability

WILBRIDE® S-753D

INCI : PEG/PPG/polybutylene glycol-8/5/3 glycerin

WILBRIDE® S-753 offers moisturizing properties comparable to glycerin while imparting an oil-based emollient texture to water-based formulations such as lotions and serums. It enhances the transdermal absorption of hydrophilic drugs while inhibiting the absorption of oil-soluble drugs. With its broad compatibility, ranging from water to polar oils, it is also suitable for use in cleansing formulations. +Plus! NOF Formulation is P.43, (50, 76)



Applying on the artificial skin (1%aq.)

Shine and makeup breakdown can also be suppressed! Water-based moisturizing oil that provides both a filmy and refreshing feeling

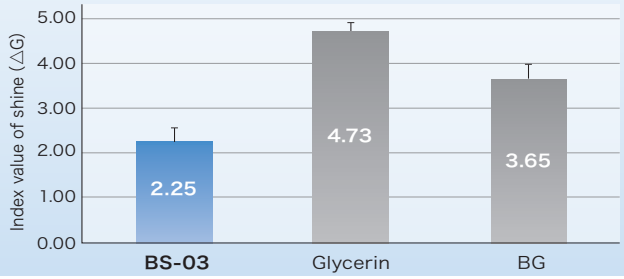
WILBRIDE® BS-03

INCI : PPG-7-Buteth-10

WILBRIDE® BS-03 offers a distinctive feel and functionality compared to conventional moisturizers, made possible through NOF's original technology. It delivers a non-sticky sensation while providing both a membrane-like and refreshing texture. Additionally, it effectively controls shine and prevents makeup breakdown caused by sebum. WILBRIDE® BS-03 also enhances radiance and improves the penetration of active ingredients, making it a versatile ingredient for cosmetic formulations.

+Plus! NOF Formulation is P.42

Shine control effect



Test : A 5% aqueous solution of the moisturizer was applied to artificial leather, followed by the application of oleic acid. The difference in specular reflected light was then calculated.

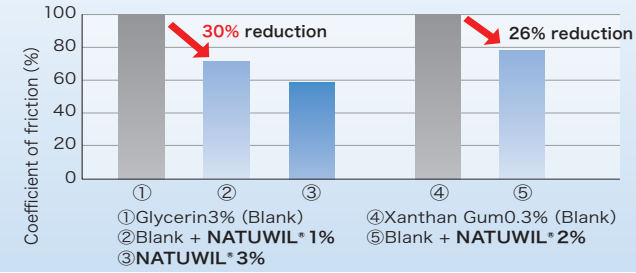
100% plant-derived! Next generation water-based moisturizing oil

NATUWIL® TP-01

INCI : (propanediol/triethylene glycol) copolymer

NATUWIL® TP-01 is a water-based moisturizing oil made entirely from plant-derived raw materials, ensuring 100% plant-derived content in compliance with ISO 16128 standards. Its amphiphilic nature allows it to deliver exceptional moisturizing properties and a rich, non-sticky texture in aqueous formulations. With a high cloud point (approximately 65°C), it seamlessly integrates into various aqueous formulations, making it a versatile choice for a wide range of applications.

Stickiness Reduction Effect



Test : The dynamic friction coefficient of the aqueous solutions below was measured, and the stickiness reduction rate with NATUWIL® was calculated.

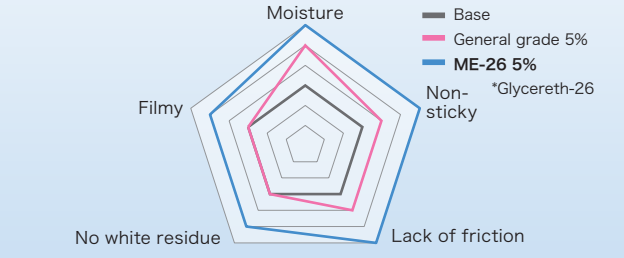
Water-based moisturizing oil that combines the moisturizing power of glycerin with a refreshing feeling

GLYMOIST® ME-26

INCI : Glycereth-26

GLYMOST® ME-26 is an AO derivative designed through a proprietary manufacturing process, where EO is added exclusively to the first hydroxyl group of glycerin. In contrast, the general product, Glycereth-26, features EO added to all three hydroxyl groups of glycerin. GLYMOST® ME-26 is distinguished by its superior moisturizing properties, attributed to its glycerin skeleton and PEG chain. It is also highly effective in sunscreen formulations, suppressing the creakiness of UV scattering agents, enhancing SPF values by improving the dispersibility of scattering agents, minimizing white cast, and improving formulation stability.

Improvement in Sensory Characteristics



Test : A W/O sunscreen cream was prepared with each moisturizer added at 5wt%. Seven participants (4 men and 3 women) used the samples and conducted relative evaluations using glycerin-containing formulations as the standard, based on a 7-point scale.

New water-based moisturizing oil with flexible fragrance control

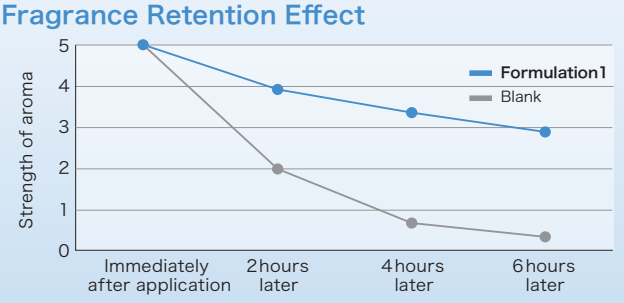
ACROBUTE® 60MB-63

INCI : PPG-28-Buteth-35

ACROBUTE® 60MB-63 is a high molecular weight PPG derivative that is challenging to synthesize. Leveraging our proprietary manufacturing process, it features an asymmetric molecular weight distribution with ultra-high molecular weight components. This unique characteristic enhances the longevity of fragrances and suppresses unpleasant odors, including body and household odors. Additionally, it improves the retention of hydrophilic active ingredients on the skin, making it an exceptional ingredient for advanced formulations.

+Plus! NOF Formulation is P.44, (62)

Fragrance Retention Effect



Formula : Formula 1 : 10% Aclobute® 60MB-63, 0.5% Fragrance (Citrus Note), remainder Ethanol. Blank: 0.5% Fragrance (Citrus Note), remainder Ethanol.
Test Method : Each formulation was applied to filter paper, and the intensity of the fragrance was evaluated through sensory testing, with the initial intensity after application rated as 5 points (N=5).

Penetration-supporting water-based moisturizing oil that enhances beauty benefits

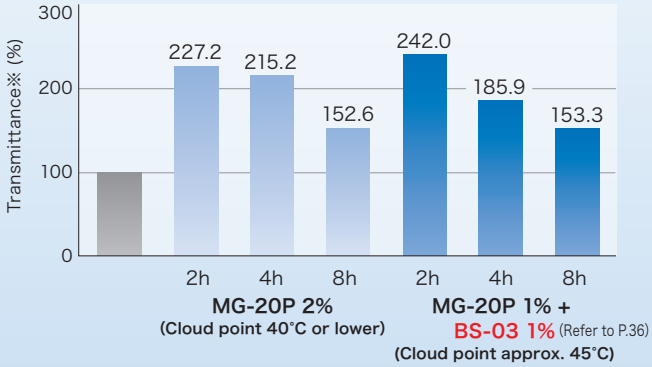
MACBIOBRIDE® MG-20P

INCI : PPG-20 methylglucose

MACBIOBRIDE® MG-20P is a water-based moisturizing oil made from corn-derived raw materials that brings a luxurious feel to cosmetics. It has a water-soluble active ingredient penetration-promoting effect and has antiseptic properties, reducing the use of preservatives. It can also impart a smooth film feeling.

+Plus! NOF Formulation is P.45

Penetration-Enhancing Effect of Active Ingredients



*Transmittance Niacinamide permeability with negative control (N.C.) as 100%.

Test : Prepare donor solution (a water solution containing AA2G and additives) and receptor solution (phosphate buffer solution: pH 7.2). Allow the donor solution to permeate through an artificial membrane into the receptor solution for 8 hours. Measure the amount of AA2G in the receptor solution using HPLC.

Skin Care Emulsifiers

Highly moisturizing W/O emulsifier with both water resistance and a refreshing feeling

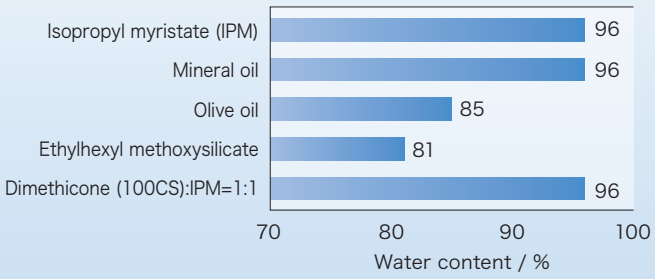
GLYMOIST® MO

INCI : Glyceryl Oleate, Glycerin

GLYMOIST® MO is a high-purity monoester emulsifier developed using our proprietary manufacturing process. It enables the formation of inverse hexagonal liquid crystals, allowing for W/O emulsions with exceptional water resistance and temperature stability. Additionally, it facilitates the creation of high internal aqueous phase W/O emulsions, emulsifying more than 80% of the aqueous phase. This results in W/O emulsions that combine superior water resistance and high moisture retention with a fresh and light texture. GLYMOIST® MO also enhances the dispersibility of powders such as UV scattering agents, making it a versatile ingredient for advanced formulations.

+Plus! NOF Formulation is P.45, (76)

Moisture Content of GRIMOIST® MO



Test : Weigh 2g of oil and 2g of MO, mix thoroughly at 80°C until uniform, and gradually add water while stirring at 80°C until phase separation occurs.

Non-sticky O/W emulsifier with excellent handling properties

SOLUBULE® GS-01/ SOLUBULE® GS-01P*

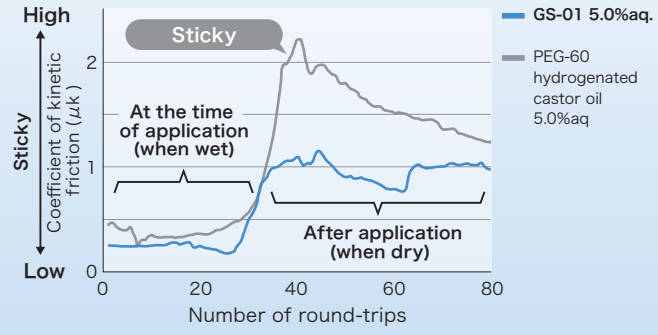
INCI : PPG-13 decyltetradeceth-24

SOLUBULE® GS-01 is a liquid at room temperature, achieved through a proprietary manufacturing process that ensures easy handling. It offers excellent solubilizing power across a wide range of oil types and provides high moisturizing benefits for both skin and hair. SOLUBULE® GS-01 enhances skin compatibility, imparts a sense of penetration, and boosts cleansing performance. With its superior emulsifying properties and reduced stickiness compared to general-purpose surfactants, it is also ideal for creating D-phase emulsions with ease.

+Plus! NOF Formulation is P.42, 43, 44, 45, (52, 76)

*P contains partially plant-derived ingredients.

Evaluation of Stickiness During Application



Measurement method : A sample was applied to the inside of the arm and the coefficient of kinetic friction was measured.

Skin Care　Solubilizers

Excellent solubilizer with a good ability to various oils

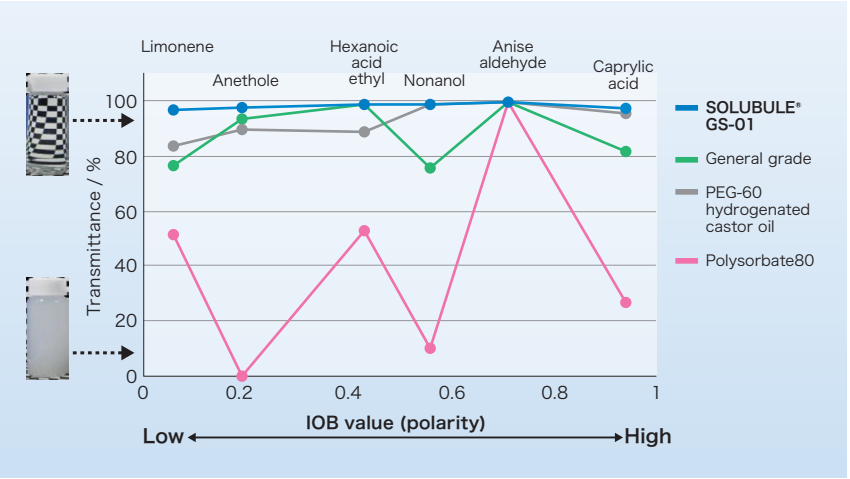
SOLUBULE® GS-01/ SOLUBULE® GS-01P*

INCI : PPG-13 decyltetradeceth-24

SOLUBULE® GS-01 has excellent solubilizing power for a wide range of oils. Our proprietary manufacturing process makes it liquid at room temperature, making it easy to handle. It has a high moisturizing effect on skin and hair, and is expected to improve skin familiarity, impart a sense of penetration, and enhance cleansing power. It is also characterized by its extremely low stickiness, even at high dosage.

+Plus! NOF Formulation is P.42, 43, 44, 45, (52, 76)

*P contains partially plant-derived ingredients.



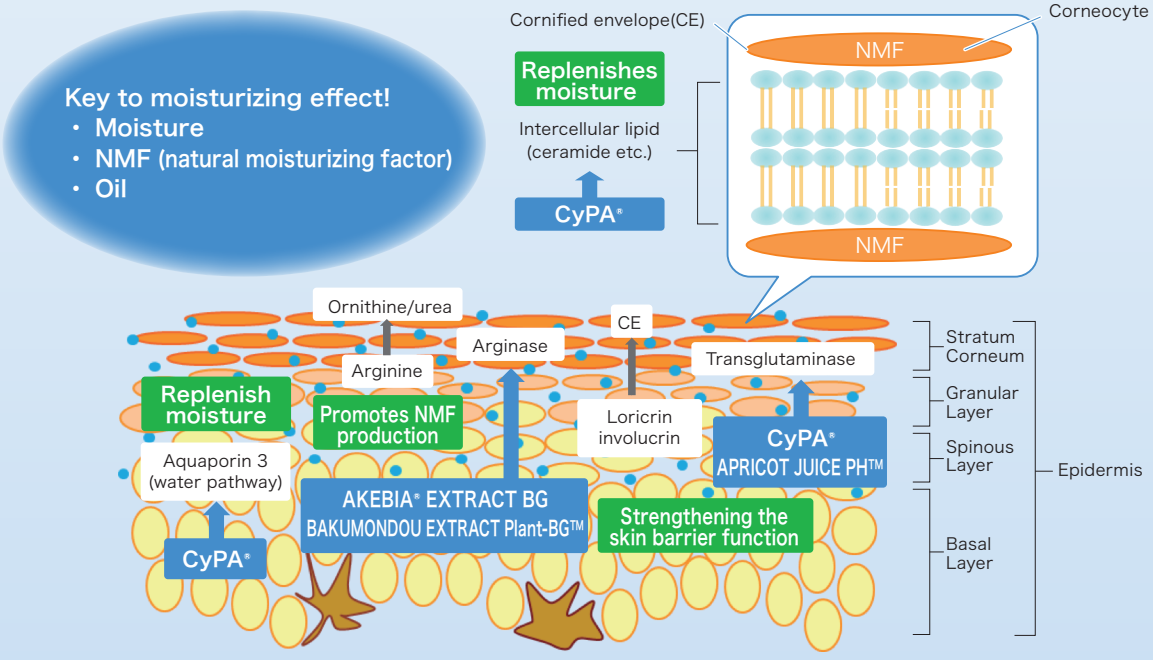
Formulation : oil 0.5%, solubilizer 2.0%, water 97.5

Skin Care　Functional Ingredients

Plant extracts/Phospholipid with moisturizing effect

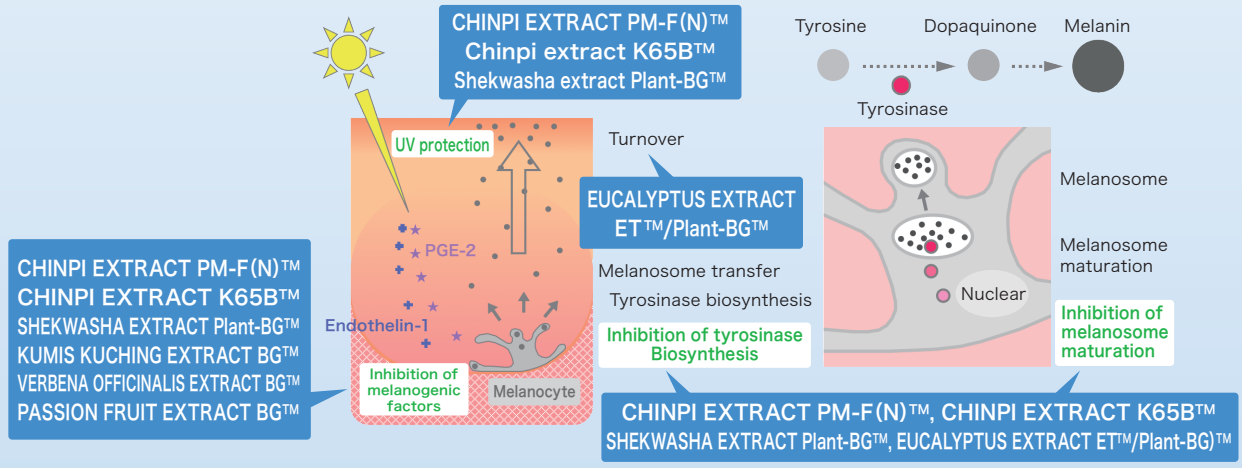
The key to the moisturizing effect is to maintain a good balance of moisture, NMF (natural moisturizing factor), and oil inside the skin. In terms of moisture, the CyPA® series promotes the expression of aquaporin 3, a water pathway, to replenish moisture to the skin. In addition, CyPA® series and APRICOT JUICE PH™ prevent moisture evaporation by strengthening the skin barrier function through the promotion of transglutaminase expression.

In NMFs, the activation of arginase in AKEBIA® EXTRACT BG and BAKUMONDOU EXTRACT Plant-BG™ has a production-promoting effect. Oil refers to intercellular lipids such as ceramide, and the CyPA® series replenishes oil to the skin by stimulating its production.



Plant extracts/Phospholipid with moisturizing effect

Various factors can cause skin discoloration, but the main factor is UV rays. Exposure to UV rays releases melanin-activating factors, causing melanin to be produced by melanocytes. Our extract has the effect of suppressing or inhibiting these factors.
Various plant extracts, such as CHINPI EXTRACT PM-F™, CHINPI EXTRACT K65B™ and SHEKWASHA EXTRACT BG™, are multi-step approaches for UV protection, inhibition of melanogenic factors, inhibition of tyrosinase biosynthesis and inhibition of melanosome maturation.
Other plant extracts can be selected according to the concept of the product.



Bioactive lipids that improve wrinkles by increasing firmness and elasticity

CyPA®-QD Plant-BG

INCI : Lysolecithin, Glycerin, Butylene Glycol

CyPA®-QD Plant-BG is a cyclic phosphatidic acid that corresponds to lysolecithin, a phospholipid with intramolecular ester bonds forming a ring structure. Known for its numerous physiological activities, CyPA® has been extensively studied for its applications in skincare. Derived from soybean phospholipids, CyPA® is incorporated into cosmetics to deliver a range of benefits. By promoting the expression of hyaluronic acid synthase in epidermal cells and enhancing transglutaminase expression, it is expected to moisturize the epidermis and strengthen the skin barrier function. Additionally, it supports pore tightening and improves skin elasticity by stimulating hyaluronic acid production in dermal cells and reinforcing actin fibers.

Anti-wrinkle test

Test method : A cream with CyPA®- QD1.25% was applied to the wrinkles around the eyes twice a day for 12 weeks and observed visually.

Whitening extract containing PMFs made from Hirami lemons, a specialty of Okinawa

SEEKWASA EXTRACT Plant-BG™

INCI : Citrus Depressa Peel Extract, Water, Butylene Glycol

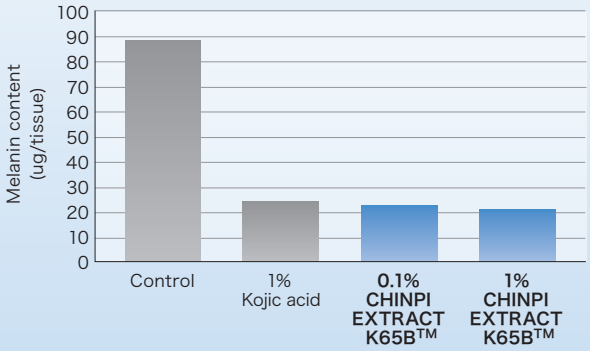
SEEKWASA EXTRACT Plant-BG™ is derived from the peel residue of Seekwarter (*Citrus depressa* Hayata) juice. It is formulated to deliver skin-brightening benefits through polymethoxyflavones (PMFs), while also inhibiting matrix-degrading enzymes and suppressing inflammatory factors triggered by ultraviolet rays. This unique botanical extract is ideal for enhancing skincare formulations with targeted efficacy.

Whitening extract derived from Tachibana of the tangerine family

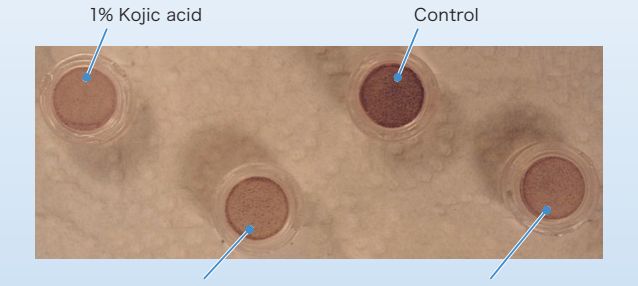
CHINPI EXTRACT K65B™ INCI : Citrus Aurantium Tachibana Peel Extract, Water, Butylene Glycol

CHINPI EXTRACT K65B™ is derived from the peel of *Citrus tachibana*, a member of the tangerine family. This extract effectively inhibits melanin production in cultured human melanoma cells (HM3KO), offering potential skin-brightening benefits. Additionally, it protects cells from ultraviolet rays, making it an ideal ingredient for advanced skincare formulations.

Using a 3D model of normal human skin (MelanoDerm™) Melanin assay test



Photograph of 3D model observed from above (14 days after administration)



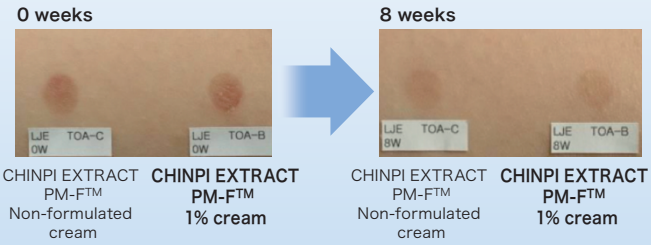
Whitening extract derived from orange with high content of whitening ingredient PMF

CHINPI EXTRACT PM-F (N) ™

INCI : Citrus Aurantium Dulcis (Orange) Peel Extract, Water, Butylene Glycol

CHINPI EXTRACT PM-F (N)™ is derived from the peel residue of orange *(Citrus aurantium dulcis)* juice. This extract demonstrates a stronger melanin production inhibitory effect at lower concentrations compared to other brightening agents. It works by maintaining an acidic environment within melanosomes, thereby reducing tyrosinase proteins. Additionally, it suppresses ultraviolet-induced COX-2 expression and reduces the production of PGE2, which triggers inflammation.

Human continuous use whitening test [Time-lapse photographs]



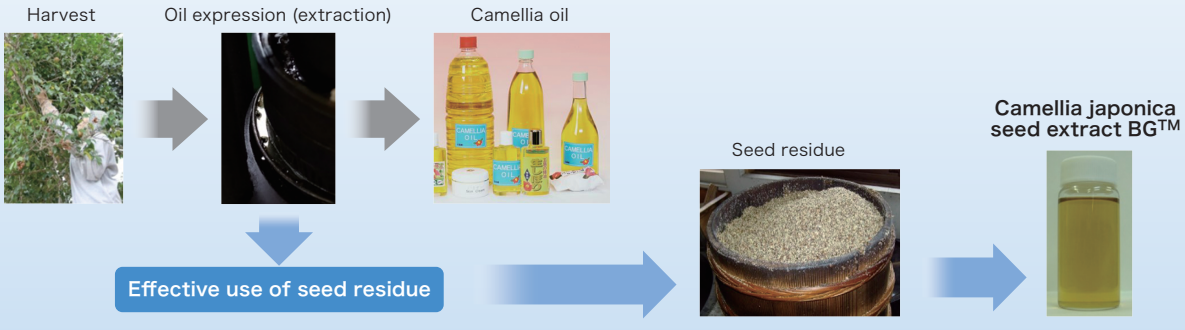
Test method : A cream with Chinpi extract was applied twice a day for 8 weeks on a forearm which was exposure to UV.

Beautiful skin extract made from Camellia japonica seeds from the Goto Islands, Nagasaki

CAMELLIA SEED EXTRACT Plant-BG™ INCI : Camellia Japonica Seed Extract, Water, Butylene Glycol

CAMELLIA SEED EXTRACT Plant-BG™ is an extract made from the oil residue of *Camellia japonica* seeds. It is expected to have skin beautifying effects due to its estrogen-like action and anti-aging effects due to its SOD-like anti-oxidant activity.

Manufacturing Scheme



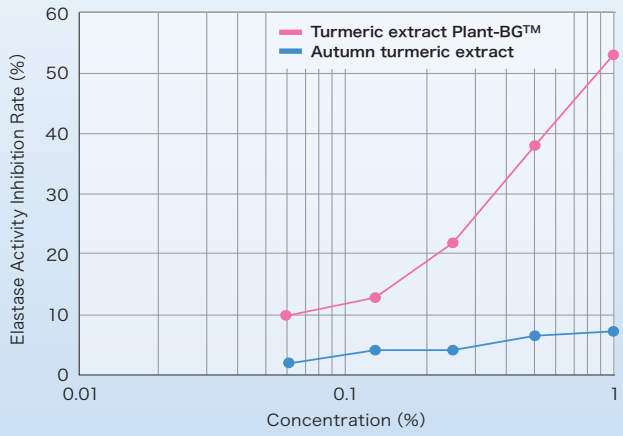
Multifunctional extract from Okinawan turmeric

TURMERIC EXTRACT Plant-BG™

INCI : Curcuma Longa (Turmeric) Rhizome Extract or Curcuma Longa (Turmeric) Root Extract, Butylene Glycol, Water

TURMERIC EXTRACT Plant-BG™ is derived from the rhizome of *Curcuma longa*, commonly known as turmeric. This turmeric variety contains approximately six times more curcumin and 2.5 times more essential oil compared to standard autumn turmeric. It is renowned for its antioxidant properties, estrogen-like effects, and skin-beautifying benefits by inhibiting MMP-2 activity. Additionally, it exhibits anti-wrinkle effects by suppressing elastase activity, making it an ideal ingredient for advanced skincare formulations.

Inhibition of elastase activity



Test : Elastase activity inhibition was measured by adding various extracts and elastase to an elastase substrate (N-Suc-Ala-Ala-Ala-p-nitroanilide).

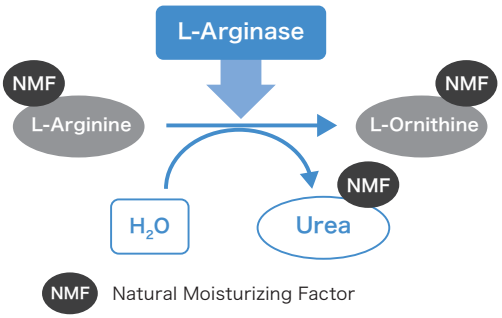
Ingredient that promotes the production of urea, a natural moisturizing factor

AKEBIA® EXTRACT BG

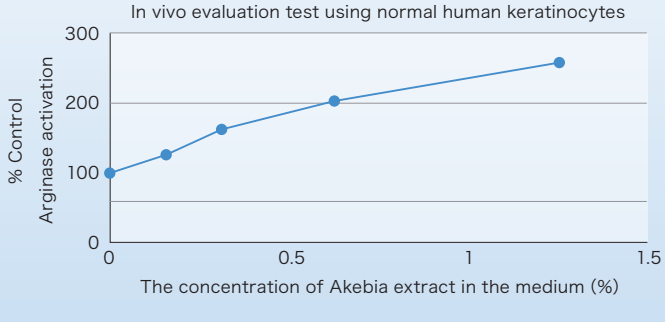
INCI : Akebia Trifoliata Stem Extract, Water, Butylene Glycol

AKEBIA® EXTRACT BG is extracted from the stems of Japanese *Akebia quinata* Decaisne or *Akebia trifoliata* Koidzumi (*Lardizabalaceae*) vines. It is expected to moisturize the skin from the outside and enhance the production of urea, a natural moisturizing factor, by epidermal cells, thereby making the skin fresh and youthful.

The mechanism of urea production by the enzyme arginase in the epidermis.



Arginase activation of epidermal cells



Test : Cultured normal human keratinocytes were treated with AKEBIA® EXTRACT BG at various concentrations and incubated for four days. After incubation, intracellular arginase activity was measured.

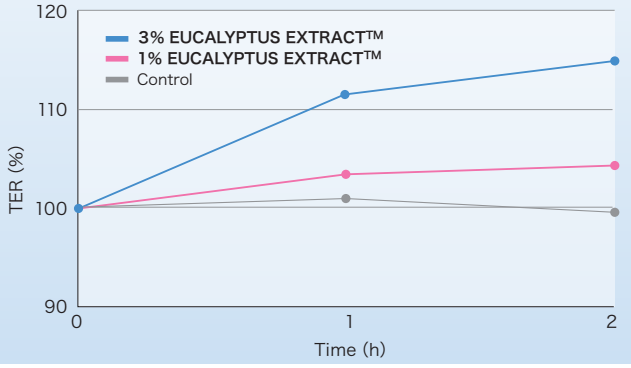
Eucalyptus leaf extract derived from baby eucalyptus leaves grown in Oita

EUCALYPTUS EXTRACT Plant-BG™

INCI : Eucalyptus Globulus Leaf Extract, Water, Butylene Glycol

EUCALYPTUS EXTRACT Plant-BG™ is an extract from the leaves of eucalyptus (*Eucalyptus globulus* Labill.) within 3 years of growth. Eucalyptus extract has the greatest TJ (Tight Junction) formation-promoting activity of all 150 plant extracts. Eucalyptus extract enhances the skin barrier function by promoting TJ formation. It is also expected to have whitening, antioxidant, hair growth, anti-inflammatory, glycation inhibition, and antibacterial effects.

TJ formation-promoting action (promotion of barrier capacity)



Test : Using a human 3D cultured skin model (LabCyte EPI-MODEL12 6D), measurements were performed based on transepithelial electrical resistance (TER).

Emulsion that blends well with the skin, gives elasticity to the skin, and has excellent moisturizing properties

Moist milky lotion

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	Balance
	RG CO P.™	Glycerin	Moisturizer	3.00
	PEG#1540	PEG-32		2.00
	–	Pentylene glycol		2.00
	–	Carbomer aq (1.5%)	Thickener	16.0
B	–	Phenoxyethanol	Preservative	q. s.
	–	Arginine	PH adjuster	
C	–	Water	Base material	1.00
	RG CO P.™	Glycerin	Moisturizer	2.00
	UNIOX® HC-40	PEG-40 hydrogenated castor oil	Emulsifier	0.40
	SOLUBULE® GS-01 +Plus! NOF	PPG-13 decyltetradeceth-24		0.60
	–	Butylene Glycol	Moisturizer	0.50
D	PARLEAM® 6 +Plus! NOF	Hydrogenated polyisobutene	Emollient	2.00
	–	Ethylhexyl Palmitate		3.40
E	LIPIDURE -NR® +Plus! NOF	Polyquaternium-61, glycerin, BG	Skin barrier effect	2.00
	ACROBUTE® 60MB-63 +Plus! NOF	PPG-28-Buteth-35	Moisturizing oil	1.00
total amount				100.00

[Typical properties] pH : 5.5

• Preparation Method •

1. Weight ingredients for phase A and mix uniformly at R.T..
2. Gradually add the phase B into phase A , Add Phase C and mix uniformly.
3. Weight ingredients for phase D, then add phase E and mix uniformly at 60±5°C. add the phase E into phase D.
4. Stir Phase D+E at 60°C for 30 minutes, then cool. Check the formation state of O / D gel emulsion.
5. Add the phase D+E into phase A-C、Stir for 30minutes. (emulsification)
6. Add phase F and mix uniformly at R.T..

Whitening serum with Niacinamide for enhanced penetration

Oil control whitening serum

Phase	Product name	INCI	Compounding Purpose	wt%
A	WILBRIDE® BS-03 +Plus! NOF	PPG-7 Buteth-10	Water-based moisturizing oil penetration enhancer	3.00
	–	Niacinamide	whitening agent	5.00
	–	Water	-	balance
	–	Hydroxyethylcellulose	thickener	0.10
	RG CO P.™	Glycerin	moisturizer	4.00
B	–	propylene glycol	moisturizer	4.00
	–	Butylene Glycol		4.00
	–	Alcohol	solvent	3.00
	–	Xanthan Gum	thickener	0.15
C	LIPIDURE®-PMB +Plus! NOF	polyquaternium-51, Water	skin protection	0.50
	–	pH adjuster	pH adjuster	q. s.
	–	preservative	preservative	q. s.
total amount				100.00

[Typical properties] pH : 5.5

• Preparation Method •

1. Stir Phase A at room temperature until uniform.
2. Add Phase B and stir at room temperature until uniform.
3. Add Phase C and stir at room temperature until uniform.

Low-stickiness nano-emulsion with a luxurious feel and high squalane content

High squalane serum

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Squalane	oil	3.00
	WILBRIDE® S-753D +Plus! NOF	PEG/PPG/ Polybutyleneglycol-8/5/3 Glycerin, Tocopherol	BCME Inducer	3.00
	RG CO P.™	Glycerin		5.00
	–	Oleyl Alcohol	Solvent	0.40
	SOLUBULE® GS-01 +Plus! NOF	PPG-13-Decyltetradeceth-24	surfactant	2.50
	UNILUBE® 20MT-2000B	PPG-20-Decyltetradeceth-10		1.00
	–	Water	-	3.00
B	–	Water	-	Balance
C	–	pH adjuster	pH adjuster	q.s.
	–	preservative	preservative	q.s.
total amount				100.00

[Typical properties] pH : 5.5

• Preparation Method •

1 Weigh ingredients for phase A and mix uniformly at R.T..
2 Add phase A into phase B at R.T. and mix uniformly at R.T..
3 Add phase C and mix uni formly at R.T..

Multifunctional serum that is non-sticky despite its oiliness

Non-sticky multifunctional oil serum

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Tocopheryl Acetate	Blood flow promoter	0.05
	–	Phytosteryl/Octyldodecyl Lauroyl Glutamate	Skin repair	0.05
	SOLUBULE® GS-01 +Plus! NOF	PPG-13-Decyltetradeceth-24	Solubilizer	0.50
	LIPIDURE®-NR +Plus! NOF	Polyquaternium-61, Glycerin, Butylene Glycol	Skin protection Encapsulation	2.00
	–	Water	–	0.30
	RG CO P.™	Glycerin	Moisturizer	0.40
B	–	Water	–	Balance
	RG CO P.™	Glycerin	Moisturizer	15.00
	–	Propylene Glycol		3.00
	–	Butylene Glycol		3.00
	PEG#400	PEG-8		2.00
	MACBIOBRIDE® MG-10E +Plus! NOF	Methyl Gluceth-10	Texture improver	5.00
	WILBRIDE® S-753D +Plus! NOF	PEG/PPG/ Polybutyleneglycol-8/5/3 Glycerin, Tocopherol	Moisturizing Oil Penetration accelerator	5.00
	–	Trehalose	Heat Absorber	0.50
	–	Dipotassium Glycyrrhizate	Anti-inflammatory	0.05
	–	pH adjuster	pH adjuster	q.s.
		ethylhexylglycerin	preservative	0.10
total amount				100.00

[Typical properties] pH : 5.5

• Preparation Method •

1 Stir uniformly each phase A and B at R.T..
2 Add phase A into phase B, then mix uniformly at R.T..

A cream stabilized with retinol using Lipidure®

Anti-aging cream

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Glyceryl Stearate	emulsifier	1.00
	UNIOX® HC-60	PEG-60 Hydrogenated Castor Oil		2.00
	–	Sorbitan Stearate		1.00
	–	Cetearyl Alcohol	co-surfactant	3.00
	–	Phytosteryl Hydroxystearate	oil-agent	0.50
	–	Neopentyl Glycol Diethylhexanoate		3.00
	PANACET® 800B	Triethylhexanoin		4.00
	–	Isostearic Acid		1.00
	–	Neopentyl Glycol Dicaprate		10.00
	–	Dimethicone		0.50
	–	Preservative, Antioxidant	–	0.20
B	–	Water	–	46.90
	–	Butylene Glycol	moisturizer	6.00
	RG CO P.™	Glycerin		3.00
	MACBIOBRIDE® MG-10E +Plus! NOF	Methyl Gluceth-10	Moisturizing, texture adjuster	1.00
	–	Xanthan Gum	thickener	0.10
	–	Carbomer		0.04
	–	Preservative, Chelating Agent	preservative	0.20
C	–	Sodium Hydroxide, Water	neutralizer	1.50
D	LIPIDURE®-NR +Plus! NOF	Polyquaternium-61, Butylene Glycol, Glycerin	skin protect encapsulant	4.00
	–	Retinol, Caprylic/Capric Triglyceride, Sodium Ascorbate, PEG-40 Hydrogenated Castor Oil	antioxidant	1.00
E	–	Water	–	Balance
total amount				100.00

• Preparation Method •

1 Stir Phase A and Phase B at 80˚C until uniform.

2 Add Phase A to Phase B gradually while emulsifying with a homomixer (7000rpm, 1min, 80˚C).

3 Add Phase C and stir while cooling until it reaches below 60˚C.

4 Mix Phase D at 50˚C, then add to Phase E at 50˚C and stir until uniform.

5 Add Phase D+E to Phase A+B+C, and stir until uniform.

It provides a non-sticky, lightweight texture, leaving the skin plump and supple

Multi-use aroma cream

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	Balance
	RG CO P.™	Glycerin	moisturizer	2.00
B	–	Propylene Glycol	moisturizer	5.00
	PARLEAM® 4 +Plus! NOF	Hydrogenated Polyisobutene	oil	6.00
	–	Ethylhexyl Palmitate		6.00
	–	Dimethicone (100mPa·s)		6.00
	–	Behenyl Alcohol	Emulsion Stabilizer	2.80
	SOLUBULE® GS-01 +Plus! NOF	PPG-13-Decyltetradeceth-24	emulsifier	0.60
	NONION™ S-40	PEG-75 Stearate		0.80
	–	Glyceryl Stearate		1.60
	–	Tocopherol	antioxidant	0.05
C	LIPIDURE®-PMB +Plus! NOF	Polyquaternium-51, Water	skin protection	1.00
	ACROBUTE® 60MB-63 +Plus! NOF	PPG-28 Buteth-35	Moisturizer fragrance control	2.00
	–	pH adjuster	pH adjuster	q.s.
		ethylhexylglycerin	moisturizer	0.10
total amount				100.00

[Typical properties] pH : 5.5

• Preparation Method •

1 Measure phase-A ingredients and stir at 80˚C until dissolved.

2 Measure phase-B ingredients and stir at 80˚C until dissolved.

3 Gradually add phase-A into the phase-B and emulsify using a homomixer at 5,000 rpm for 10 minutes at 80˚C .

4 After cool down to 25±5 ˚C using paddle mixer, add the phase-C ingredient and stir until evenly mixed.

Lightweight, non non-sticky texture with water resistance

Silicone-free high water content W/O cream 97% Natural origin index

Phase	Product name	INCI	Compounding Purpose	wt%
A	BIOLEAM®-L +Plus! NOF	C9-12 Alkane, C13-15 Alkane, C14-22 Alcohols	oil	12.00
	GLYMOIST®MO +Plus! NOF	Glyceryl Oleate, Glycerin	W/O emulsifier	3.50
	—	phenoxyethanol	preservative	0.30
B	—	water	—	77.45
	RG CO P.™	glycerin	moisturizer	5.00
	LIPIDURE®-PMB +Plus! NOF	Polyquaternium-51, water	skin protection	1.00
	—	Magnesium Sulfate	stabilizer	0.75
total amount				100.00

• Preparation Method •

1 Stir Phase A and Phase B at room temperature until uniform.

2 Gradually add Phase B to Phase A while stirring with a homogenizer (5000 rpm, 5 minutes).

Milk loation for face mask

Emulsion for face mask

Phase	Product name	INCI	Compounding Purpose	wt%
A	UNIOX® ST-30IS	Sorbeth-30 Tetraisostearate	emulsifier	0.75
	UNILUBE® 20MT-2000B	PPG-20 Decyltetradeceth-10		0.15
	SOLUBULE® GS-01 +Plus! NOF	PPG-13 Decyltetradeceth-24		3
	—	Stearyl Alcohol	stabilizer	0.05
	PARLEAM® 6 +Plus! NOF	Hydrogenated Polyisobutene	stabilizer	5
	PANACET® 800B	Triethylhexanoin		4
	—	Tocopheryl Acetate	blood flow stimulant	0.05
B	—	Water	—	Balance
	PEG#1540	PEG-32	moisturizer	1.5
	UNIGLY® G-2	Diglycerin		0.3
	RG CO P.™	Glycerin		5
	—	Tranexamic Acid	whitening agent	2
C	—	Pentylene Glycol	moisturizer	1.5
	—	Xanthan Gum	thickener	0.1
D	—	Water	—	7.88
	—	Carbomer	thickener	0.12
E	—	Arginine	pH adjuster	0.87
	—	Phenoxyethanol	preservative	0.3
	CERACUTE® -L +Plus! NOF	Glycerylamidoethyl Methacrylate/Stearyl Methacrylate Copolymer, Glycerin, ButylenGlicol	Anti-wrinkle effect	1
	ACROBUTE® MB-52 +Plus! NOF	PPG-52 butyl ether	feel improver	1
	MACBIOBRIDE® MG-20P +Plus! NOF	PPG-20 methyl glucose ether	Enhancement of active ingredient penetration	1
total amount				100.00

[Typical properties] pH : 5.5

• Preparation Method •

1 Stir Phase A and Phase B at 80℃ until uniform.

2 After stirring Phase C at room temperature until uniform, add to Phase B and stir until uniform.

3 Maintain 80℃ and gradually add Phase A to Phase B while stirring with a homo mixer.

4 Stir at 80℃ , 5000 rpm for 5 minutes.

5 Add phase D, which has been pre-dispersed with a disperser, and stir until uniform.

6 Add Phase E and mix and stir until uniform.

Memo

Oil agents for makeup remover

High quality hydrocarbons that can produce various textures

PARLEAM®/POLYSYNLANE® series INCI : Hydrogenated polyisobutene

The PARLEAM® series is a colorless, odorless, and tasteless high-purity hydrocarbon that exhibits good stability. 7 different lineups are available to create a variety of textures. We recommend Pearl Ream EX and 6 for skincare. Moreover, to enhance the richness skincare formulations, high-viscosity products such as 18, 24, and 46 can be blended with low-viscosity PARLEAM®, offering a diverse range of textures to suit various product needs. +Plus! NOF Formulation is P.51, 52, (42, 44, 70)

viscosity	Low viscosity products				High Viscosity Products		
grade	3	4	LITE	-	V	HV	SV
Kinematic viscosity (37.8℃、mm^2/s)	1.4	3.1	10.6	20.1	-	-	-
Kinematic viscosity (98.9℃、mm^2/s)	-	-	2.5	3.6	300	800	4,700
Refractive index	High ◄						► Low
Special Features	Volatility Airy feeling	Good compatibility with silicone high detergency	Balanced lightness and emollient feeling	Squalane-like texture	An essential ingredient in makeup cosmetics due to its good adhesion A trace amount added (0.1-0.5%) gives richness to skin care products, Hair care products add luster.		

A newly developed oil formulation that combines excellent usability with the unique characteristics of high-viscosity PARLEAM®/POLYSYNLANE®

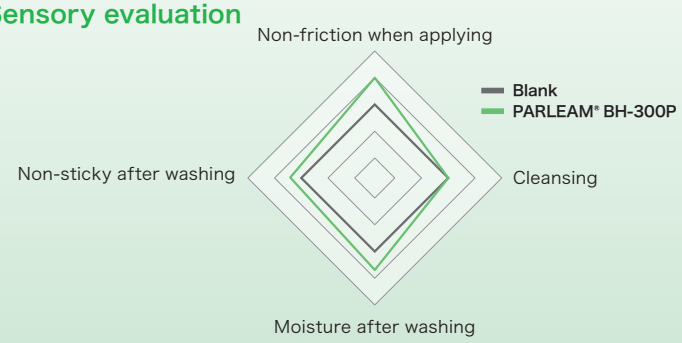
PARLEAM®/ POLYSYNLANE® BH-300P

INCI : Hydrogenated polyisobutene

PARLEAM® BH-300P is a newly developed product that combines the ease of handling found in low-viscosity PARLEAM® with the outstanding properties of high-viscosity PARLEAM®. When used in skincare formulations, it delivers excellent film-forming properties, enhances the sensation of hydration, and reduces stickiness after drying.

※ Kinematic viscosity (40.0℃, mm^2/s) 145.5, Refractive index (20℃) 1.470

Sensory evaluation



Test method : 5-point grading with PARLEAM® as the standard (3 points) Average of 5 subjects (3 males and 2 females)
Formulation : (PARLEAM® BH-300P, PARLEAM® V) 5.0 wt% glycerin 5.0 wt%, 12.6wt% oil, 2.8wt% emulsifier, remainder water

A series of naturally derived emollients with excellent feel and functionality

BIOLEAM® series

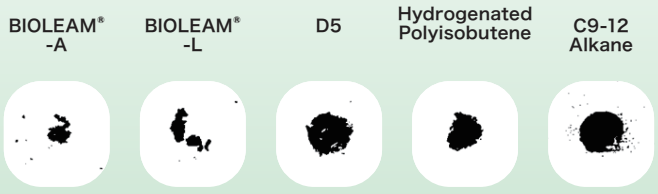
INCI : Refer to the table on the right

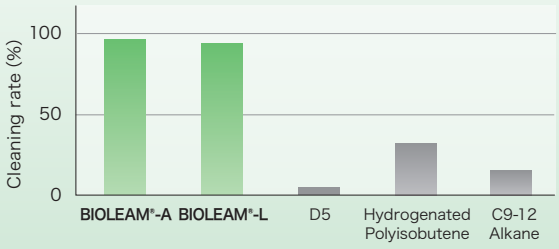
The BIOLEAM® series are high-quality, naturally derived emollients, available in five different lineups to create a variety of textures. BIOLEAM®-A and -L are 100% natural hydrocarbon oils that exhibit excellent compatibility with hydrocarbon oil, polar oil, silicone oil, and UV absorbers, making them highly effective cleansing agents for makeup remover bases.

+Plus! NOF Formulation is P.52, (45)

grade	A	L	S	EL	R
INCI	C9-12 Alkane, C14-22 Alcohols	C9-12 Alkane, C13-15 Alkane, C14-22 Alcohols	Polydecene, C9-12 Alkane	C14-22 Alcohols	Polydecene
Viscosity (40.0℃、mm^2/s)	1.5	1.7	20	28	300
Cleansing power of makeup	High ◄				► Low
NOI	1	1	0.9	1	0.9
Special Features	Highly volatile oil Produces good skin affinity	Volatile oil Good skin affinity and emollient feel	Good skin affinity Emollient feel Water Resistance Inhibition of α-gel crystallization	Squalane-like texture Improved powder dispersion stability	Rich feeling Inhibition of α-gel crystallization

Evaluation of the cleansing effectiveness of different products against waterproof mascara





Test method : Waterproof mascara was applied to artificial leather and rubbed with a finger. After rinsing with tap water, the lightness difference was measured using a spectrophotometer to determine the cleansing power.

Amphiphilic material for Makeup remover

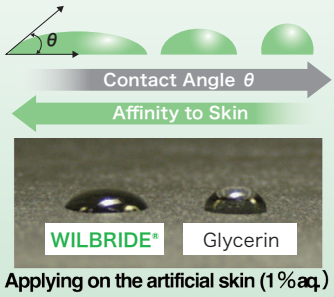
Water-soluble oil, Water-Based Moisturizing Oil

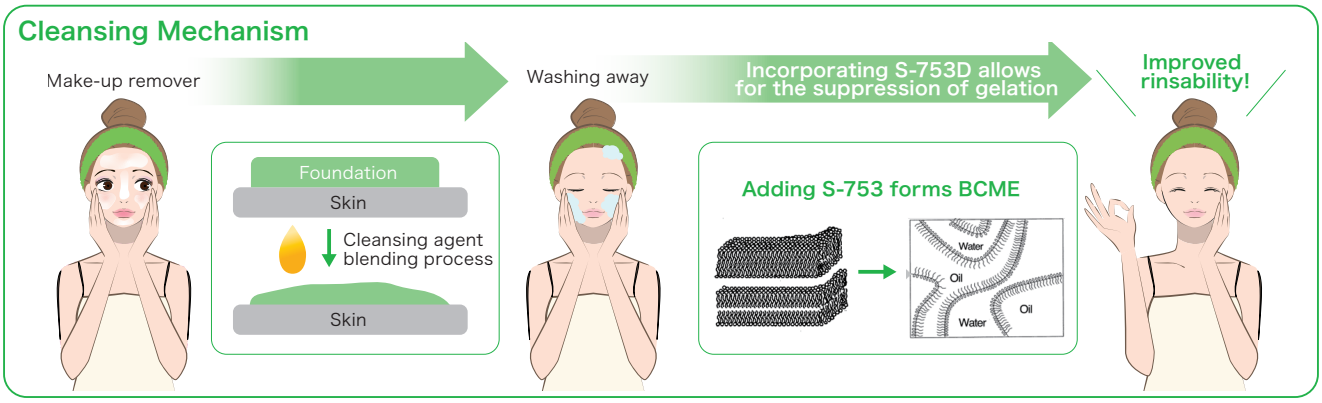
WILBRIDE® S-753D

INCI : PEG/PPG/polybutyleneglycol-8/5/3glycerin

WILBRIDE® S-753D is a new concept material, a water-based moisturizing oil, with a low contact angle and excellent affinity to skin. WILBRIDE® S-753D is also a multifunctional ingredient. As an amphiphilic material, it induces bicontinuous microemulsions (BCME) during cleansing, thereby suppressing gelation during rinsing and improving rinsability.

+Plus! NOF Formulation is P.50, (43, 76)





Nonionic surfactant for makeup remover

Surfactant for cleansing that reduces friction during application

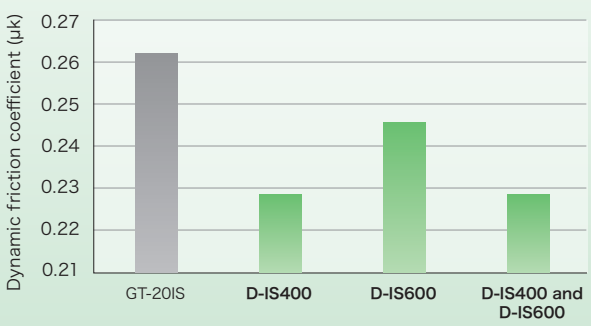
NONION™ D-IS-400/NONION™ D-IS-600

INCI : PEG-8 Diisostearate/PEG-12 Diisostearate

NONION™ D-IS series is a high-performance surfactant with high compatibility with polar and non-polar oils, resulting in strong cleansing power. Its feature is the improvement of slipperiness during application, leading to minimal skin irritation.

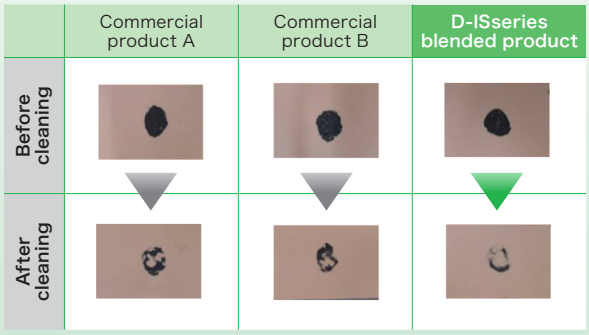
+Plus! NOF Formulation is P.50

Friction during cleansing



Test method : Apply 100μl of cleansing oil to artificial leather and measure the coefficient of dynamic friction using a static dynamic friction measuring instrument.

Detergency

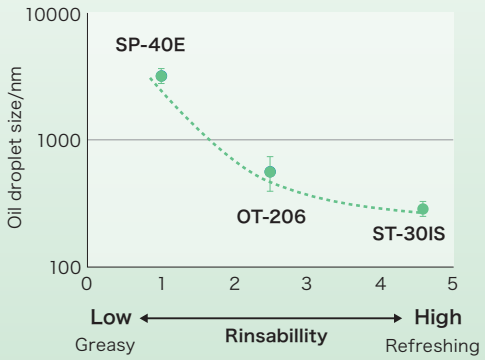


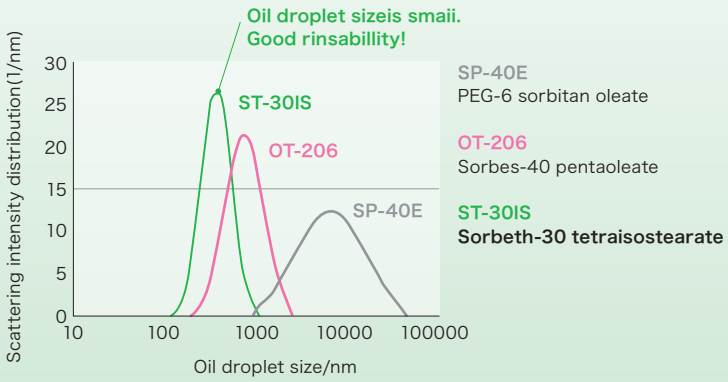
Cleansing base material with high safety and good rinsability

UNIOX® ST-30IS INCI : Sorbeth-30 Tetraisostearate

UNIOX® ST-30IS is a hypoallergenic cleansing nonion with better odor, color, and other qualities compared to Solbeth-30 Tetraoleate.It is highly compatible with oils such as hydrogenated polyisobutene and olive oil, and thus has high cleansing power. It also forms small emulsified droplets when rinsed, improving rinsability, making it the ideal nonion for oil- and liquid-type cleansing agents. +Plus! NOF Formulation is P.50

Rinsability of cleansing oil





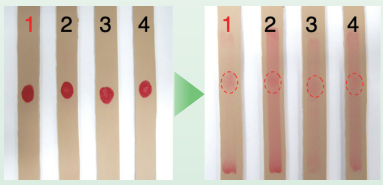
Test method : Measure each particle size after 10 times dilution.

Cleansing Agent with High detergency and Low irritation

SOLUBULE® BR-02 INCI : PPG-30BUTETH-30

SOLUBULE® BR-02 is a high detergency for water-based formulations such as cleansing water. It is characterized by its low irritation to the eyes and skin, and its non-sticky, non-bitter feel. Furthermore, despite its mildness, it is effective in removing blackheads and clearing clogged pores. +Plus! NOF Formulation is P.50, 51

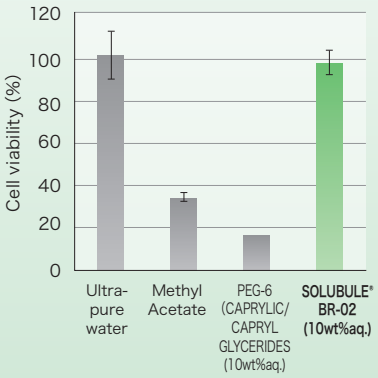
Detergency



1.SOLUBULE® BR-02
2.PPG-30BUTETH-30
3.PEG-6 CAPRYLIC/CAPRIC GLYCERIDES
4.PEG-7 GLYCERYL COCOATE

Test method :
After applying 5mg of lipstick to artificial leather in a 1cm diameter cirde, 1mL of a 5% aqueous solution was absorbed into cotton. Then, the cotton was rubbed against the artificial leather 10 times with a load of 200g.

Safety Data



Test method : OECD TG492

Pore Rating

Test method :
Cleansing water was applied to a cotton pad and pressed against the face for 3 to 5 seconds. After wiping off, the skin's condition was observed with a microscope after 7 days.

Cleansing oil that pursues high cleansing power and reduced friction

Cleansing oil

Phase	Product name	INCI	Compounding Purpose	wt%
A	PARLEAM® 4	Hydrogenated Polyisobutene	Oils	17.50
	–	Mineral Oil		5.00
	–	Ethylhexyl Palmitate		26.00
	NOFABLE® EO-85S	Ethyl Oleate		6.00
	–	Olive Fruit Oil		11.00
	NONION™ D-IS400 +Plus! NOF	Peg-8 Diisostearate	Main detergent Reduced friction	5.00
	NONION™ D-IS600 +Plus! NOF	Peg-12 Diisostearate		10.00
	UNIOX® ST-30IS +Plus! NOF	Sorbeth-30 Tetraisostearate	Main detergent Improved rinsability	8.00
	WILBRIDE® S-753D +Plus! NOF	Peg/Ppg/Polybutylene Glycol-8/5/3 Glycerin	Moisturizer Good rinsability	2.00
	ACROBUTE® MB-52 +Plus! NOF	Ppg-52 Butyl Ether	Moisturizing oil	2.00
	NONION™ LT-20	Polysorbate 20	Cloud point adjustment	3.00
	–	Preservative, Antioxidants	stability	0.50
	–	Water	Others	4.00
total amount				100.00

• Preparation Method •

1 Stir Phase A until uniform.

Fresh feeling with both cleansing power and hypoallergenic properties

Oil-free cleansing gel

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	26.50
	–	Acrylates/ C10-30 Alkyl Acrylate Crosspolymer	Thickener	0.43
B	SOLUBULE® BR-02 +Plus! NOF	Ppg-30-Buteth-30	Main detergent	7.00
	WILBRIDE® S-753D +Plus! NOF	Peg/Ppg/Polybutylene Glycol-8/5/3 Glycerin	Cleaning Aids	3.00
	UNIOX® ST-30IS +Plus! NOF	Sorbeth-30 Tetraisostearate	Detergent	2.00
	–	Bg	Moisturizer	5.00
	RG CO P.™	Glycerin		5.00
	–	Pentylene Glycol	Preservative	1.00
C	–	Potassium Hydroxide, Water (48%Aq.)	pH adjuster	0.07
total amount				100.00

[Typical properties] pH: 5.5　Viscosity (25℃): 25,000mPa･s

• Preparation Method •

1 When the A phase is prepared and dispersed, add the B phase and mix it at room temperature.

2 Add phase C and mix uniformly at room temperature.

BCME-type cleansing gel with excellent cleansing and rinsing properties

BCME type cleansing gel

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	26.50
	–	(Acrylates/alkyl acrylate (c10-30) crosspolymer	Thickener	0.43
B	PARLEAM® 6 +Plus! NOF	Hydrogenated polyisobutene	Improved cleaning power	6.00
	–	Ethylhexyl palmitate		5.00
	PARLEAM® 4 +Plus! NOF	Hydrogenated polyisobutene		4.00
	–	Peg-7 glyceryl palm oil Fatty acid, glyceres-7	BCME formation	30.00
	RG CO P.™	Glycerin	Cold stabilizer	19.00
	–	Bg	High temperature stabilizer	9.00
C	–	Potassium hydroxide (48%), water	pH adjustment	0.07
total amount				100.00

[Typical properties] pH: 5.5　Viscosity (25℃): ,000mPa･s

・Preparation Method・

1 When the A phase is prepared and dispersed, add the B phase and mix it at room temperature.

2 Add phase C and mix uniformly at room temperature.

Cleansing liquid with more cleansing power than oil and a watery feel

BCME type cleansing liquid

Phase	Product name	INCI	Compounding Purpose	wt%
A	PARLEAM® 6 +Plus! NOF	Hydrogenated Polyisobutene	Improve detergency	6.00
	–	Ethylhexyl Palmitate		5.00
	PARLEAM® 4 +Plus! NOF	Hydrogenated Polyisobutene		4.00
	–	PEG-7 Glyceryl Cocoate, Glycereth-7	BCME formation	30.00
	RG CO P.™	Glycerin	low-temperature stabilizer	27.00
	DIAPON® K-SF +Plus! NOF	Sodium Methyl Cocoyl Taurate, Water	High temperature stabilizer	1.00
	–	Water	–	27.00
total amount				100.00

・Preparation Method・

1 Stir Phase A until uniform.

Cleansing water that is both cleansing and hypoallergenic, with a moist feel

Mild cleansing water

Phase	Product name	INCI	Compounding Purpose	wt%
A	SOLUBULE® BR-02 +Plus! NOF	PPG-30-Buteth-30	main detergent	7.00
	–	Poloxamer 184	Improved rinsability	3.00
	–	Butylene Glycol	Cloud point adjustment	1.00
	NONION™ LT-221	Polysorbate 20		0.80
	–	Contact us	preservative	0.20
	–	Polyquaternium-10	Prevent the readhesion	0.10
	–	EDTA-2Na	chelating agent	0.10
	–	Water	–	remainder
total amount				100.00

・Preparation Method・

1 Stir Phase A until uniform.

Two-layer micellar water free of surfactants

Two-layer micellar water

Phase	Product name	INCI	Compounding Purpose	wt%
A	BIOLEAM®-A +Plus! NOF	C9-12 Alkane, C14-22 Alcohols	Emollient	30.00
B	–	Water	–	Balance
	–	Pentylene Glycol	Moisturizer	3.00
	RG CO P.™	Glycerin		1.00
	–	Preservative	Preservation	q.s.
	–	Coloring agent	Coloration	q.s.
	–	pH adjuster	pH adjuster	q.s.
	–	Sodium Chloride	Stabilizers	0.10
	–	Alcohols		3.00
total amount				100.00

• Preparation Method •

1 Add phase B and mix until the mixture is uniform.

2 Add phase A.

• How to Use •

Shake well before use, as it is divided into two layers.
Apply an appropriate amount to a cotton pad to use it as a wipe-off toner.

The high-moisturizing cleansing cream that changes its texture from cream to oil

High-moisturizing cleansing cream with a texture that change

Phase	Product name	INCI	Compounding Purpose	wt%
A	PARLEAM® EX	Hydrogenated Polyisobutene	Oils	30.00
	–	Ethylhexyl Palmitate		12.00
	ACROBUTE® MB-52 +Plus! NOF	PPG-52 Butyl Ether	Moisturizing oil	2.00
	PARLEAM® 3 +Plus! NOF	Hydrogenated Polyisobutene	Adjuster	10.00
	SOLUBULE® GS-01 +Plus! NOF	PPG-13-Decyltetradeceth-24	emulsifier	0.50
	UNILUBE® 20MT-2000B +Plus! NOF	PPG-20-Decyltetradeceth-10		1.00
	–	Glyceryl Stearate		2.00
	NONION™ ST-60	Polysorbate 60		2.00
	–	Cetearyl Alcohol	stabilizer	1.20
	–	Stearyl Alcohol		0.80
B	–	Sorbitol	Rinsing ability	14.90
	–	Water	–	18.50
	–	Butylene Glycol	Moisturizer	3.00
	–	Sodium Lauryl Sulfate	Stabilizer	0.10
	–	Sodium Stearoyl Glutamate		1.00
C	LIPIDURE®-PMB +Plus! NOF	Polyquaternium-51, water	Skin protection	0.50
	–	phenoxyethanol	preservative	0.50
total amount				100.00

• Preparation Method •

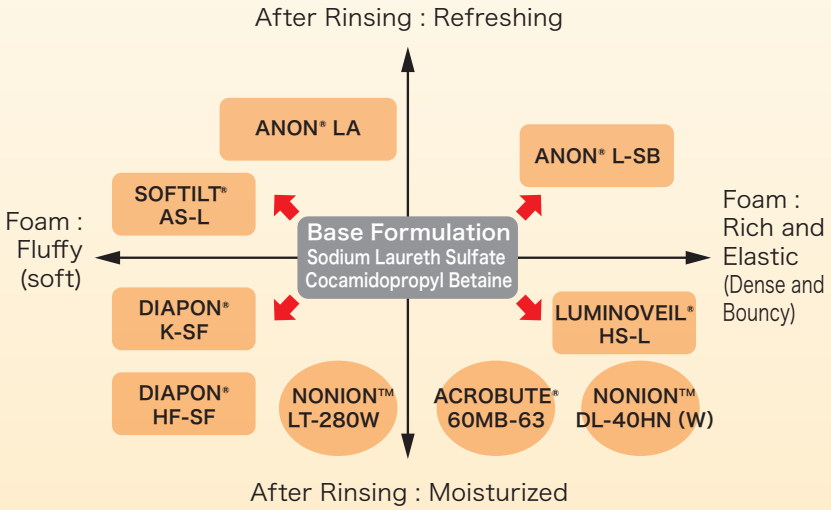
1 Mix the phase A and B separately at 80℃.

2 Add phase B into phase A and homogenize by homo-mixer (15min, 7000rpm)

3 Cool down at R.T. and add phase C.

Mapping Based on the Sensory Characteristics of Cleansing Agents

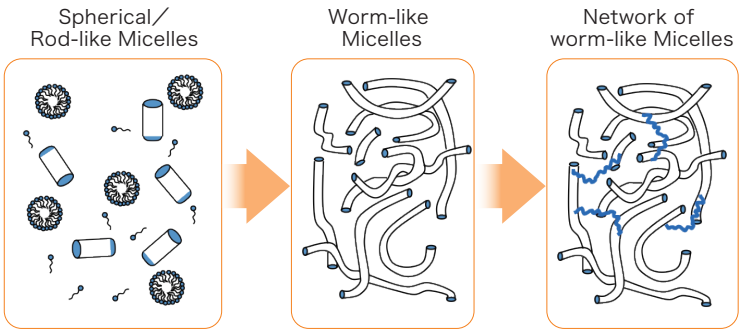
We conducted a mapping, as shown in the figure on the right, based on the foam texture and the feel after rinsing, using Sodium Laureth Sulfate (SLS) and Cocamidopropyl Betaine as the base formulation. DIAPON® K-SF, DIAPON® HF-SF, and NONION™ LT-280W create soft foam and leave a moisturized feel after rinsing. ANON® LA and ANON® L-SB are characterized by providing a refreshing feel after rinsing. Additionally, LUMINOVEIL® HS-L and NONION™ DL-40HN produce elastic foam and leave a moisturized feel after rinsing.



Thickening method for amino acid surfactants

As shown in the figure on the right, the thickening mechanism of amino acid surfactants first forms worm-like micelles in response to spherical or rod-like micelles formed by the amino acid surfactant. Further, by cross-linking the worm-like micelles, a network is formed and thickening is achieved. worm-like micelles can be thickened by using the nonionic types COMUPOAL® BL, UNISAFE® PGML, the amphoteric-type.

ANONT® GLM-R-LV, the anionic type SOFTILT® AS-L. The thickening can be achieved by using "MACBIO-BRIDE® MG-T" for cross-linking of worm-like micelles.



Thickening Mechanism =
Elongation of worm-like micelles × Cross-linking of worm-like micelles

mechanism	Types of thickeners	Product name	INCI name
A. Elongation	Nonionic type	(1) COMUPOAL® BL (2) UNISAFE® PGML	BUTYLENE GLYCOL LAURATE PROPYLENE GLYCOL LAURATE
	Amphoteric-type	(3) ANON® GLM-R-LV	SODIUM COCOAMPHOACETATE, water
	Anionic type	(4) SOFTILT® AS-L	SODIUM LAUROYL METHYLAMINOPROPIONATE, water
B. Cross-linking	Polyether type	(1) MACBIOBRIDE® MG-T	PEG-120 METHYL GLUCOSE TRIISOSTEARATE, Tocopherol, water

Detergent (taurine-based surfactant)

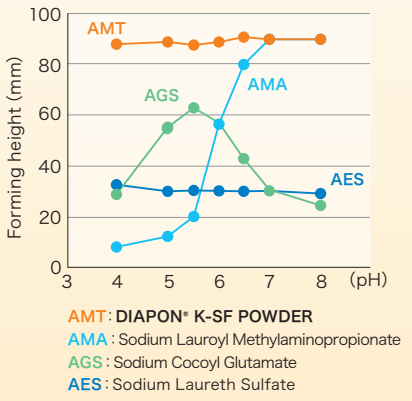
High-foaming, Low skin irritation cleaning agent

DIAPON® K-SF/DIAPON® K-SF Powder INCI：Sodium Methyl Cocoyl Taurate

DIAPON® K-SF has High foaming properties in a wide pH range. It is a mild detergent with selective cleansing properties that washes away dirt from the skin while leaving behind necessary biological lipids. The product lineup includes 30% aqueous solution and 100% powder products.

+Plus! NOF Formulation is P.61, 62, 63, 66, 67, 68, (51)

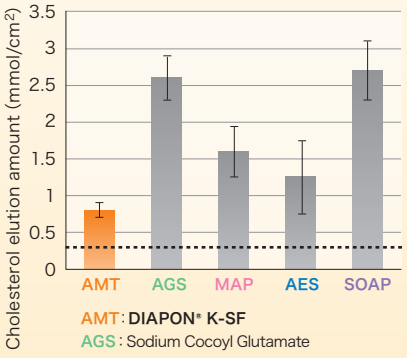
High foaming ability independent of pH



AMT: DIAPON® K-SF POWDER
AMA : Sodium Lauroyl Methylaminopropionate
AGS : Sodium Cocoyl Glutamate
AES : Sodium Laureth Sulfate

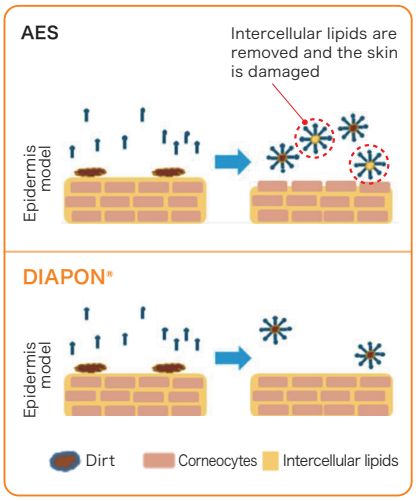
Surfactant concentration 1wt%, 40℃, Milcer method

Selective Detergency



AMT: DIAPON® K-SF
AGS : Sodium Cocoyl Glutamate
MAP : Sodium Alkylphosphate
AES : Sodium Laureth Sulfate
SOAP : Sodium Laurate

Test subject : Human chest
Treatment method : Active agent concentration 25mM, 10 minutes
Measurement method : Cholesterol is determined by HPLC after tape stripping
*The broken line is the elution amount during water washing.



High-foaming surfactant

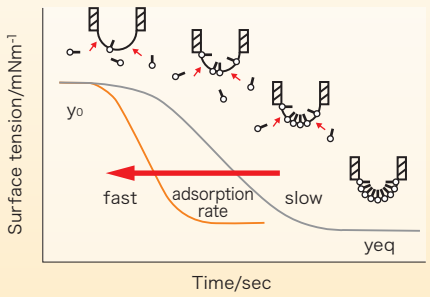
DIAPON® HF-SF

INCI：Sodium Caproyl Methyltaurate, Water

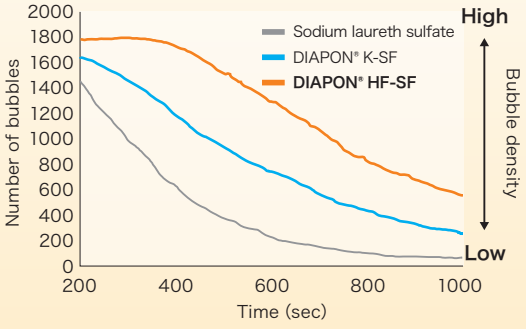
DIAPON® HF-SF is an amino acid-based surfactant. It has shorter fatty acid residues than Sodium MethylCocoyl taurate, resulting in higher dynamic surface tension and better foaming properties.

+Plus! NOF Formulation is P.60, 65

Image chart of dynamic surface tension



Improvement of foam quality

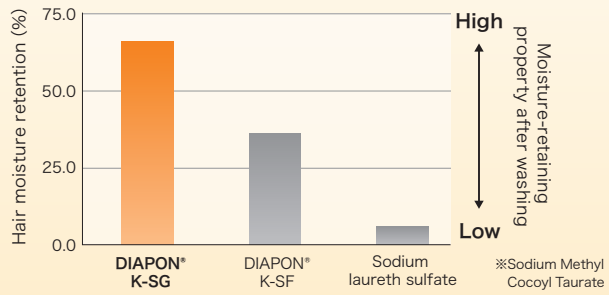


Double taurate surfactant

DIAPON® K-SG INCI : Sodium Taurine Cocoyl Methyltaurate, Water

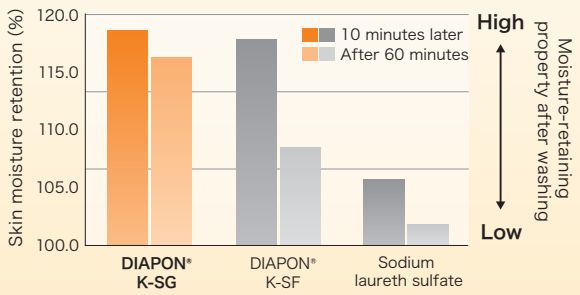
DIAPON® K-SG contains sodium cocoyl methyl taurine with an additional salt of taurine, resulting in a double taurine structure that is highly moisturizing and also provides a moist feeling to the hair and scalp. It provides excellent foaming and foam stability over a wide pH range, and also inhibits moisture evaporation after cleansing, thus moisturizing hair and skin. +Plus! NOF Formulation is P.60, 62, 64

Improved hair moisturizing effect



Measurement method : Moisture content was measured at 60°C and 105°C using a halogen moisture meter on hair samples treated with surfactant.

Improved skin moisturizing effect



Measurement method : Initial skin moisture levels were measured. A 1 wt% aqueous solution of the active agent was then applied to the skin, left for 30 minutes, rinsed off with water, and the skin's moisture level was re-measured after drying.

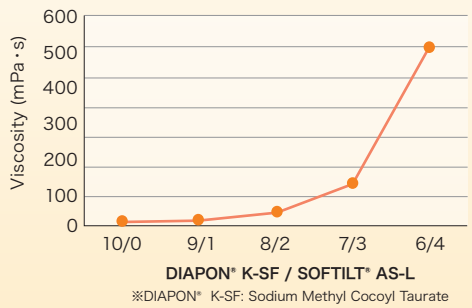
Detergent (alanine-based surfactant)

Amino acid-based surfactant bringing fresh-up feeling on rinsing

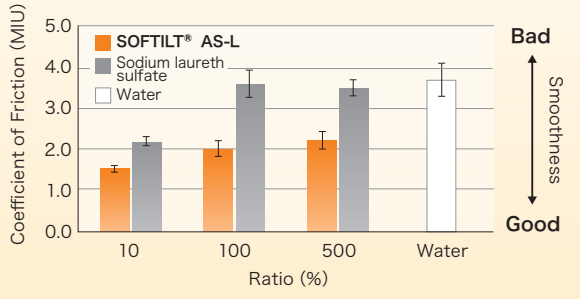
SOFTILT® AS-L INCI : Sodium Lauroyl Methylaminopropionate , Water

SOFTILT® AS-L is an amino acid surfactant with a β-alanine structure, a natural amino acid, and is characterized by a refreshing wash. It has a thickening effect in weak acidity. It has an excellent ability to form complexes (coacervates) with cationic polymers and give smooth feeling of hair.

Improving viscosity of shampoo (pH 5.5)



Reduction effect of the coefficient of friction



Formulation : Anionic surfactant (Concentration : 10wt%)
ANON® BDF-R (Concentration : 5wt%)
Polyquaternium-10 (0.5wt%)
Water+Others (Remaining)
Instrument : Friction tester

Amino acid-based surfactant leading naturally volume-up hair

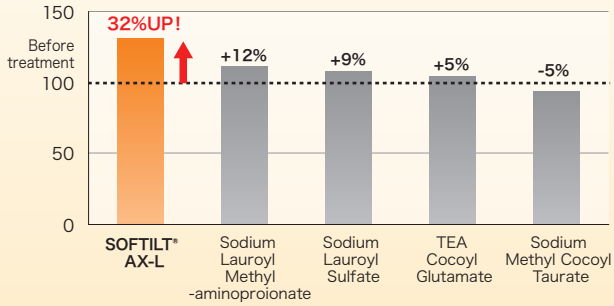
SOFTILT® AX-L

INCI : Sodium Taurine Lauroyl Methyl Beta-Alaninate, Water

"SOFTILT® AX-L", kind of the amino acid-based surfactant has Lauroyl methyl beta-alanine structure as main segment and sodium taurine as counter ion. This surfactant brings "bounce and resilience" to hair when it used as shampoo base.

+Plus! NOF Formulation is P.61

Hair elasticity



Measuring method : Hair shape recovery was compared before and after treatment with the activator using a pure bending test machine. The elasticity of the hair was defined as.

Amino acid-based surfactants that give the cleanser a soft texture

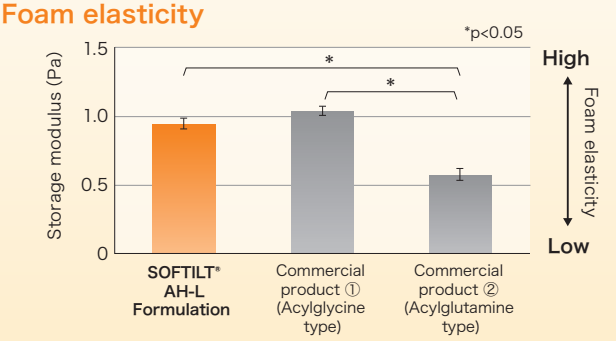
SOFTILT® AH-L

INCI : Lauroyl Methyl Beta-Alanine

SOFTILT® AH-L can be used as a cleaning base that enriches the lather quality and feel of facial cleansers. By neutralizing with any desired amount of alkali, the desired lather and feel can be controlled. Its high active ingredient content reduces the amount of water incorporated into the formulation, making it suitable for use in paste formulations such as facial cleansers.

+Plus! NOF Formulation is P.64

Foam elasticity



Method : The storage modulus was measured using a rheometer.
Formulation : Various activators 30%, glycerin 40%, ANON® LA 20%, water + others Remaining.

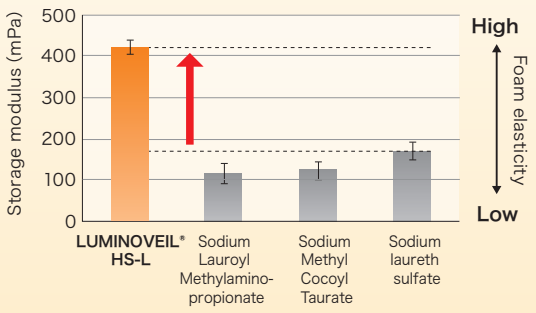
Amino acid-based surfactant that result in a new foam quality and rich lather

LUMINOVEIL® HS-L INCI : Sodium Lauroyl Hydroxyethyl Beta-Alaninate, Water

LUMINOVEIL® HS-L can be used as a cleaning base featuring "fine, highly elastic foam" and "rich foam volume. The hydroxyl groups in the structure attract neighboring surfactants, increasing the density of the foam and enhancing its fineness and elasticity. The high-density foam exhibits high stability, making it difficult to break, and rich foam can be created.

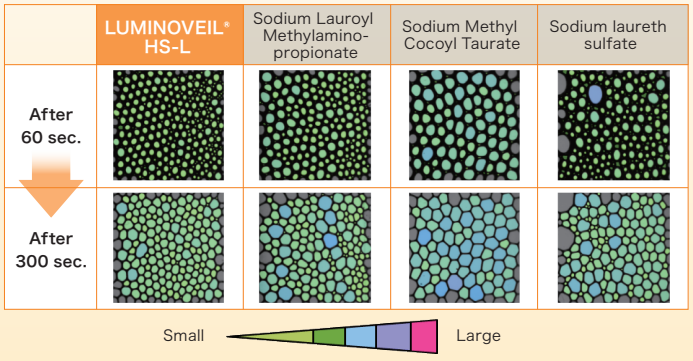
+Plus! NOF Formulation is P.60, 61, 62, 63

Foam elasticity



Method : Storage modulus was measured using a rheometer with surfactant only

Foam quality



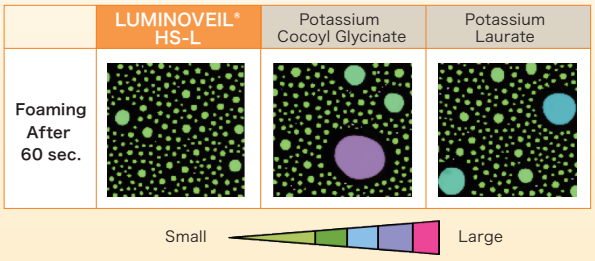
Method : Measured by bubbling method using surfactant only

For facial cleanser, amino acid surfactant that produces rich foam

LUMINOVEIL® HS-K INCI : Sodium cocoyl hydroxyethyl Beta-alaninate, water

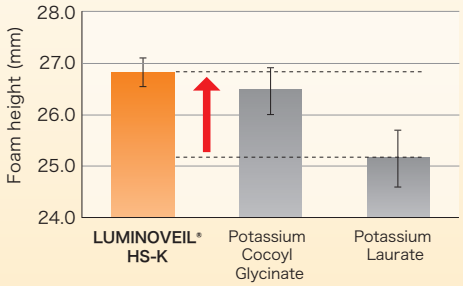
LUMINOVEIL® HS-K can be used as a base material for cleaning for face washes featuring "fine, highly elastic foam" and "fast foaming". The hydroxyl groups in the structure attract neighboring surfactants, which increases foam density and improves foam texture and elasticity. Even with the pump foamer type, it does not affect the viscosity of the solution and produces elastic foam. Because of its excellent quick foaming property, it provides an excellent foam-increasing effect when added to the formulation. +Plus! NOF Formulation is P.66, 67, 68

Fine lather in formulation with soap



Test method : Measured by bubbling method using surfactant only
Formulation : 93% Potassium Myristate, 7% various surfactants diluted in 1% aqueous solution

Foam-increasing effect



Formulation : Potassium Myristate 15%, Potassium Palmitate 5%, Potassium Stearate 10%, various surfactants 1.5%

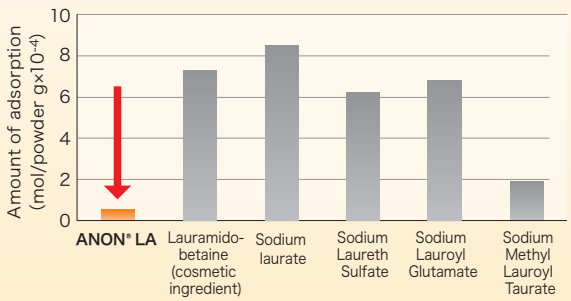
Cleaning agent Base material for cleaning (Amphoteric surfactant)

A hypoallergenic amphoteric surfactant characterized by a refreshing wash

ANON® LA INCI : Disodium Lauriminodiacetate, water

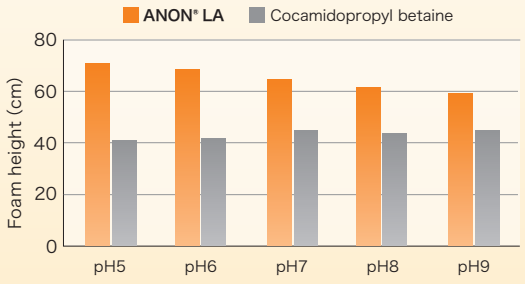
ANON® LA is a surfactant characterized by a very refreshing feeling when washing, even in the weak acidic range. As a dibasic acid type surfactant, it can be used in a wide range of pH from slightly acidic to alkaline, and shows high foaming ability in the same slightly acidic range as that of the skin. It is a mild surfactant with low irritation to the skin due to its amino acid skeleton.
+Plus! NOF Formulation is P.61, 64, 65, 66, 67

Adsorption to skin model component (Hide Powder)



Test method : Hide powder was added to the aqueous solution of each surfactant, then removed by filtration
→The amount of surfactant remaining in the filtrate was measured, and the amount of adsorption was calculated from the difference before and after treatment.

Foaming (pH-dependent)



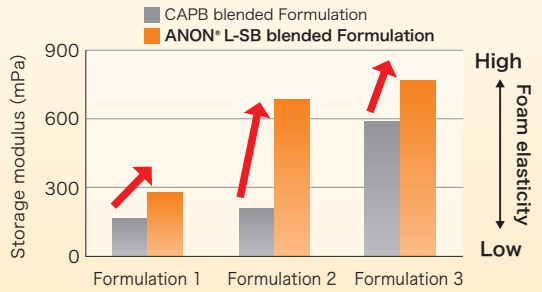
Test method : Stirred for 5 seconds and after 1 minute, measured by the milcer method (40°C)
Formulation : 1 wt% effective content, artificially hard water ($CaCO_3$: 100 ppm), Artificial sebum 0.5wt%, water

Rich foam and transparent formulation

ANON® L-SB INCI : Lauryl hydroxysultaine, water

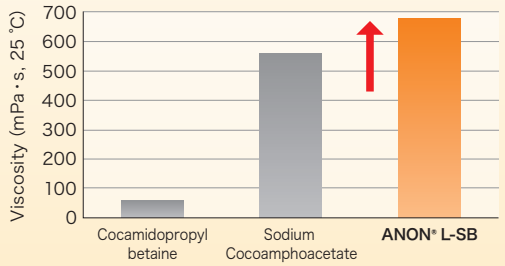
ANON® L-SB exhibits a gentle washing feeling due to its fine, highly elastic foam that reduces friction. It has a hydroxyl group in its structure, which provides excellent thickening effect in difficult-to-thicken formulation. Furthermore, it has excellent compatibility with other surfactants and improves the low-temperature stability of formulated. In terms of feel, it has good rinsing properties and gives a refreshing feeling. +Plus! NOF Formulation is P.62, 68

Foam Elasticity



Test method : 20°C, pH 6.0, measured with a rheometer.
Formulation : (1) Sodium methyl cocoyl taurane 9.0%, each amphoteric surfactant 6.0%,Lauramide DEA 2.0%, water
(2) Sodium lauroyl methylaminopropioneate 9.0%, each amphoteric surfactant 6.0%,Lauramide DEA 2.0%, water
(3) Sodium lauroyl hydroxyethyl-beta-alaninate 9.0%,each amphoteric surfactant 6.0%, Lauramide DEA 2.0%, water

Thickening effect



Test method : Measured with a Type B viscometer at 25°C
Formulation : Sodium methyl cocoyl taurane (DIAPON® K-SF) 9.0%, Each amphoteric surfactant 6.0%, Lauramide DEA 2.0%, Water + others

Cleaning agent Foam quality improver

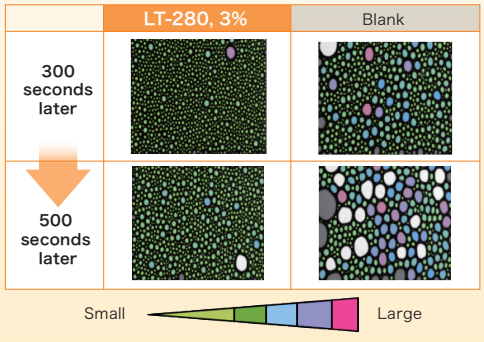
Foam quality improver that creates dense foam

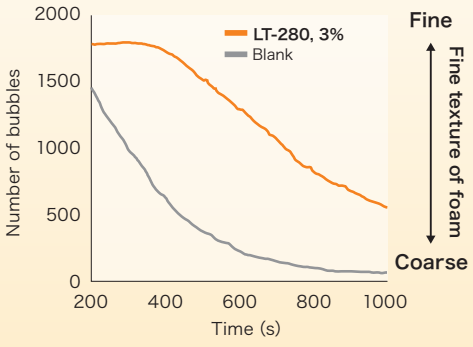
NONION™ LT-280/NONION™ K-2100W/NONION™ S-2200W

INCI : PEG-80 SORBITAN LAURATE/Laureth-100,Water,phenoxyethanol/Steareth-200, water,Pentylene glycol, ethylhexylglycerin

NONION™ LT-280 is a foam improver suitable for pump formers that thickens water in the foam film to produce dense foam with fine texture and good stability. The lineup also includes NONION™ LT-280W, a 60% water-dispersible product, and NONION™ K-2100W and NONION™ S-2200W, which have improved hydrolysis resistance. +Plus! NOF Formulation is P.64

Foam stability





Test method : Air was blown into a 10 fold diluted shampoo formula for 30 seconds to form bubbles, and the bubble size distribution was measured.
Formulation : DIAPON® HF-SF 8.0%, PQ-10 0.1%, CAPB 4.0%, LT-280 0 or 3.0%

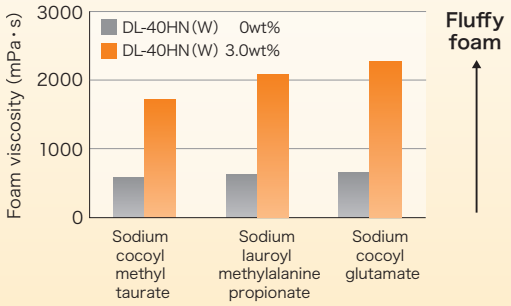
Micelle cross-linker with thickening effect

NONION™ DL-40HN (W) INCI : PEG-75 dilaurate, water

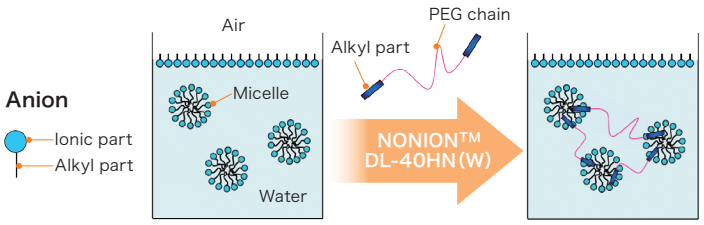
NONION™ DL-40HN(W) has a thickening effect by cross-linking micelles in the water layer, making it ideal for bottle-type shampoos. The micelle cross-linking in the foam film improves the texture and elasticity of the foam, producing a firm, dense foam. As it is liquid at room temperature, it is easy to handle and does not leave a sticky residue after rinsing.

+Plus! NOF Formulation is P.61, 63, 64, 65, 68

Elasticity of foam



Thickening mechanism



Test method : Foam viscosity was measured with a rheometer.
Formulation : Anionic surfactant 1.2%, sodium cocoamphoacetate 1.2%, glycerin 10%, water remaining

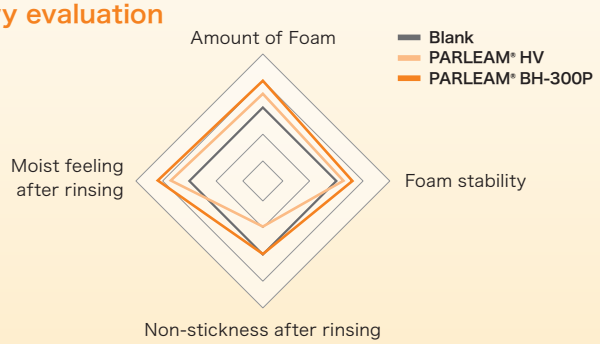
A new oil having handleability with the characteristics of high viscosity PARLEAM®/POLYSYNLANE®

PARLEAM®/POLYSYNLANE® BH-300P

INCI : Hydrogenated polyisobutene

PARLEAM® BH-300P is a new hydrogenated polyisobutene having handleability of low viscosity with the characteristics of high viscosity PARLEAM®. It improves the foaming and foam retention of cleansing agent. In addition, it greatly improves the moist feeling after rinsing.

Sensory evaluation



Test method : 5-point grading with "Blank" as the standard (3 points). Average of 5subjects (3 males and 2 females).
Formulation 1 (Blank) : Moisturizer 13.0wt% Oil 48.5wt% Residual Water + Others
Formulation 2 (PARLEAM® HV) : PARLEAM® HV 5.0wt% Moisturizer 13.0wt% Oil 48.5wt% Remaining parts Water + Others
Formulation 3 (PARLEAM® BH-300P) : PARLEAM® BH-300P 5wt% Moisturizer 13.0wt% Oil 48.5wt% Remaining parts Water+Others

Moisturizing shampoo that keeps hair moisturized during and after washing.

Moist shampoo

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	Balance
	–	Polyquaternium-10	Conditioning, thickener	1.20
B	DIAPON® K-SG +Plus! NOF	Sodium taurine cocoyl methyltaurate, Water	Improve detergency, foam quality, Moisturizer	18.60
	ANON® BDF-SF	Cocamidopropyl betaine, water	Improve detergency, foam quality	15.00
	SOFTILT® AS-L +Plus! NOF	Sodium Lauroyl Methyl-aminopropionate, water	Improve detergency, thickener	11.00
	–	Dipropylene Glycol	moisturizer	4.00
	–	Butylene Glycol		2.00
	–	Caprylyl/capryl glucoside	Improve foam volume	2.00
	–	Disodium cocoyl glutamate		1.50
	STAFOAM® DL	Lauramide DEA	Improve foam volume, thickener	0.90
	–	(Methylparaben, etc.)	preservative	q.s.
C	–	citric acid	pH adjuster	q.s.
D	NONION™ OT-80	Polysorbate 80	solubilizer	0.80
	–	fragrance	fragrance	q.s.
total amount				100.00

[Typical properties] pH (undiluted solution): 5.9 Viscosity (undiluted solution, 25 °C): 1,450 mPa・s

・Preparation Method・

1 Measure out the ingredients for Phase A and stir at 25±5 °C until uniform.

2 Heat Phase A to 80±5°C, add the ingredients of Phase B sequentially, and stir until uniform.

3 Adjust pH with phase C.

4 Cool to 25 ± 5°C and add Phase D, which was pre-dissolved at 25 ± 5°C beforehand.
After stirring, add ion exchange water as needed to adjust the concentration.

Shampoo that creates a rich foam even with high oil content and is excellent for moisturizing after washing hair

High-blending oil shampoo

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water	–	Balance
	–	Polyquaternium-10	Conditioning, thickener	0.25
B	LUMINOVEIL® HS-L +Plus! NOF	Sodium lauroyl hydroxyethyl beta-alaninate, water	Improve detergency, foam quality, foam elasticity	50.00
	DIAPON® HF-SF +Plus! NOF	Sodium caproyl methyl taurate, water	Improve foam volume	15.00
	ANON® BDF-SF	Sodium Lauroyl Methyl-aminopropionate, water	Improve detergency foam quality	11.00
	–	(Methylparaben, etc.)	preservative	q.s.
C	UNIOX® ST-40E	Sorbeth-40 tetraoleate	solubilizer	6.00
	–	Olea europaea (olive) fruit oil	Conditioning	2.00
	–	Argania spinosa kernel oil		1.00
D	–	citric acid	pH adjuster	q.s.
E	NONION™ OT-80	Polysorbate 80	solubilizer	0.80
	–	fragrance	fragrance	q.s.
total amount				100.00

[Typical properties] pH (undiluted solution): 6.1 Viscosity (undiluted solution, 25 °C): 330 mPa・s

・Preparation Method・

1 Weigh out the ingredients for Phase A and stir at 25±5 °C until uniform.

2 Heat Phase A to 80±5°C, add the ingredients of Phase B sequentially, and stir until uniform.

3 Separately, weigh out the raw materials for phase C and stir at 80±5°C to dissolve them.

4 Add all of phase C in 3 to the liquid in 2 and stir until uniform.

5 Adjust pH using phase D.

6 Cool to 25±5°C and add phase E, which was previously pre-dissolved at 25±5 °C.
After stirring, add ion exchange water as needed to adjust the concentration.

Volumizing shampoo to say goodbye to flat hair

Smooth and Volume-rich shampoo

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water	–	Balance
	–	Polyquaternium-10, Polyquaternium-7	Conditioning, thickener	0.90
B	DIAPON® K-SF +Plus! NOF	Sodium methyl cocoyl taurate, water	Improve detergency, foam quality	30.00
	ANON® BL-SF	Lauryl betaine, water		15.00
	ANON® LA +Plus! NOF	Disodium lauriminodiacetate, water		4.20
	SOFTILT® AX-L +Plus! NOF	Sodium taurine lauroyl methyl beta-alaninate, water	Improve detergency, thickener	4.80
	NONION™ DL-40HN(W) +Plus! NOF	PEG-75 dilaurate, water	Improve foam volume, thickener	2.00
	–	cocamide MEA		0.80
	–	Dipropylene Glycol	moisturizer	2.00
	–	Disodium cocoyl glutamate	Improve foam volume	0.50
	–	(Methylparaben, etc.)	preservative	q.s.
C	–	citric acid	pH adjuster	q.s.
D	NONION™ OT-80	Polysorbate 80	solubilizer	0.80
	–	fragrance	fragrance	q.s.
total amount				100.00

[Typical properties] pH (undiluted solution): 5.7 Viscosity (undiluted solution, 25 °C): 370 mPa・s

・Preparation Method・

1 Weigh out the ingredients for Phase A and stir at 25±5 °C until uniform.
2 Heat Phase A to 80±5°C, add the ingredients of Phase B sequentially, and stir until uniform.
3 Adjust pH with phase C.
4 Cool to 25±5°C and add Phase D, which was pre-dissolved at 25±5°C beforehand. After stirring, add ion exchange water as needed to adjust the concentration.

Shampoo with rich elastic foam makes hair washing fun

Rich foam non-silicon shampoo

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water	–	Balance
	–	Polyquaternium-10	Conditioning, thickener	0.50
B	ANON® BDF-R	Cocamidopropyl betaine, water	Improve detergency, foam quality	16.70
	PERSOFT® EF	Sodium laureth sulfate, water		16.40
	LUMINOVEIL® HS-L +Plus! NOF	Sodium lauroyl hydroxyethyl beta-alaninate, water	Improve detergency, foam quality, foam elasticity	3.00
	RG CO P.™	glycerin	moisturizer	2.00
	–	glycosyl trehalose		0.10
	STAFOAM® DL	Lauramide DEA	Improve foam volume, thickener	1.50
	LIPIDURE®-C +Plus! NOF	Polyquaternium-64, Phenoxyethanol, water	conditioning	0.10
	–	(Methylparaben, etc.)	preservative	q.s.
C	–	citric acid	pH adjuster	q.s.
D	NONION™ OT-80	Polysorbate 80	solubilizer	0.80
	–	fragrance	fragrance	q.s.
total amount				100.00

[Typical properties] pH (undiluted solution): 6.0 Viscosity (undiluted solution, 25 °C): 870 mPa・s

・Preparation Method・

1 Weigh out the ingredients for Phase A and stir at 25±5 °C until uniform.
2 Heat Phase A to 80±5°C, add the ingredients of Phase B sequentially, and stir until uniform.
2 Adjust pH using phase C.
4 Cool to 25±5°C and add Phase D, which was pre-dissolved at 25±5°C beforehand. After stirring, add ion exchange water as needed to adjust the concentration.

Shampoo gently cleanses with rich volume and elastic foam

Sulfate-free amino acid shampoo with rich foam

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water	–	Balance
	–	Polyquaternium-10	Conditioning, thickener	0.50
B	LUMINOVEIL® HS-L +Plus! NOF	Sodium lauroyl hydroxyethyl beta-alaninate,water	Improve detergency, foam quality, foam elasticity	20.00
	ANON® L-SB +Plus! NOF	Lauryl hydroxysultaine, water	Improve detergency, foam quality, foam elasticity, thickener	20.00
	DIAPON® K-SF +Plus! NOF	Sodium methyl cocoyl taurate, water	Improve detergency, foam quality	10.00
	STAFOAM® DL	Lauramide DEA	Improve foam volume, thickener	1.50
	MACBIOBRIDE® MG-T	PEG-120 methyl glucose triisostearate, water	thickener	0.10
	–	ethylhexylglycerin	preservative	0.10
C	–	citric acid	pH adjuster	q.s.
D	NONION™ OT-80	Polysorbate 80	solubilizer	0.80
	–	fragrance	fragrance	q.s.
total amount				100.00

[Typical properties] pH (undiluted solution): 5.7 Viscosity (undiluted solution, 25 ℃): 370 mPa・s

・Preparation Method・

1. Weigh out the ingredients for Phase A and stir at 25±5 ℃ until uniform.
2. Heat Phase A to 80±5℃, add the ingredients of Phase B sequentially, and stir until uniform.
3. Adjust pH with phase C.
4. Cool to 25±5℃ and add Phase D, which was pre-dissolved at 25±5 ℃ beforehand. After stirring, add ion exchange water as needed to adjust the concentration.

Premium transparent body soap with excellent lather and moisturizing feeling after rinsing

Oil in Moisturizing Body wash

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	62.00
	–	hydroxyethyl cellulose	thickener	0.40
B	NAA®-122	lauric acid	Improve detergency, foam quality	8.00
	NAA®-142	myristic acid		2.40
	NAA®-160	palmitic acid		0.80
C	–	Potassium hydroxide (48%), water	neutralizer	6.00
D	DIAPON® K-SG +Plus! NOF	Sodium taurine cocoyl methyltaurate, water	Improve detergency, foam quality	2.00
	SOFTILT® AS-L +Plus! NOF	Sodium lauroyl methylamino propionate, water		2.00
	ANON® GLM-R-LV	Sodium cocoamphoacetate, water		4.00
	ANON® BDF-SF	Cocamidopropyl betaine, water		4.00
E	UNIOX® ST-40E	Sorbeth-40 tetraoleate	solubilizer	3.00
	–	Macadamia integrifolia seed oil	moisturizing oil	0.50
F	ACROBUTE® 60MB-63 +Plus! NOF	PPG-28-Butes-35	Improve moisturizing efficacy after rinsing off	2.00
total amount				100.00

・Preparation Method・

1. At room temperature, add the polymers of Phase A to the water little by little and pre-disperse them to avoid lumps.
2. After confirming the dispersion, raise the temperature to 80℃, add Phase B, and stir until uniform.
3. Neutralize phase C by feeding in a little at a time at 80℃.
4. Phase D is added at 80℃ and stirred until uniform.
5. Phase E is pre-mixed at 80℃, cooled to room temperature, and stirred with Phase F.
6. Phase F is added to the mixture and stirred.

Amino acid-based surfactant-based body soap with dense foam for gentle cleansing

Transparent body soap with dense foam without rubbing

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water	-	Balance
	LUMINOVEIL® HS-L +Plus! NOF	Sodium lauroyl hydroxyethyl beta-alaninate, water	Detergents, foaming agents, Foam elasticity improver	25.70
	ANON® BDF-SF	Cocamidopropyl betaine, water	Detergents, foaming agents	12.80
	DIAPON® K-SF +Plus! NOF	Sodium methyl cocoyl Taurate		2.00
B	NAA® -122	lauric acid	Detergents, foaming agents	3.70
	NAA® -142	myristic acid		2.20
	NAA® -160	palmitic acid		0.90
	–	Stearic Acid		0.90
C	STAFOAM® DL	Lauramide DEA	thickener	2.00
	UNISAFE® PGML	Propylene Glycol Laurate		2.00
	MACBIOBRIDE® MG-T +Plus! NOF	Peg-120 methyl glucose triisostearate, water		1.00
	–	(Methylparaben, etc.)	preservative	proper quantity
D	–	Potassium Hydroxide	pH adjuster	4.00
total amount				100.00

[Typical properties] pH (undiluted solution): 8.7 、Viscosity (undiluted solution, 25 °C): 2,000 mPa・s

・Preparation Method・

1 Weigh Phase A and stir at 75±5°C until uniform.
2 Weigh Phase B separately and stir at 75±5°C until uniform.
3 Add all of Phase B to Phase A and stir until uniform.
4 Add phase C sequentially and stir until uniform.
5 Adjust pH using phase C.

Foam body soap with elastic foam that lasts while washing

Body wash with long-lasting foam (Pump foamer)

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water	–	Balance
	LUMINOVEIL® HS-L +Plus! NOF	Sodium lauroyl hydroxyethyl beta-alaninate, water	Detergents, foaming agents Foam elasticity improver	16.70
	ANON® L-SB	Lauryl Hydroxysultaine, water	Detergents, foaming agents	5.00
	NONION™ DL-40HN(W) +Plus! NOF	Peg-75 dilaurate, water	Foam quality improver, Foam elasticity improver	3.00
B	RG CO P.™	glycerin	moisturizer	5.00
	–	Butylene Glycol		2.00
	–	(Methylparaben, etc.)	preservative	proper quantity
C	–	citric acid	pH adjuster	proper quantity
total amount				100.00

[Typical properties] pH (undiluted solution): 7.0、Viscosity (undiluted solution, 25 °C): 10 mPa・s

・Preparation Method・

1 Weigh Phase A and stir at 25±5°C until uniform.
2 Add phase B sequentially and stir until uniform.
3 Adjust pH using phase C.

Mild body wash with a luxuriously soft lather, either rich or fluffy, gently envelops the skin

Mild body wash

Phase	Product name	INCI	Compounding Purpose	wt%	
				rich foam	fluffy foam
A	–	water	–	Balance	Balance
	NONION™ DL-40HN(W) +Plus! NOF	PEG-75 dilaurate, water	Foam quality improver	3.00	–
	NONION™ LT-280W +Plus! NOF	PEG-80 sorbitan laurate, water		–	6.00
	DIAPON® K-SG +Plus! NOF	Sodium cocoylmethyl taurine taurine, water	Detergent, foaming agent	8.00	8.00
	SOFTILT® AS-L +Plus! NOF	Sodium lauroyl methylamino propionate, water	Detergent, Foam quality improver	3.00	3.00
	ANON® BDF-SF	Cocamidopropyl betaine, water	detergent, foaming agent	6.00	6.00
	RG CO P.™	glycerin	Moisturizers, Stability improvement	10.00	10.00
	–	citric acid	pH adjuster	proper quantity	proper quantity
total amount					100.00

• Preparation Method •

1 Stir Phase A at room temperature until uniform.

Soap-free, amino acid-based face wash cream with a fluffy lather that refreshes and cleanses

Amino acid-based refreshing face wash cream

Phase	Product name	INCI	Compounding Purpose	wt%
A	RG CO P.™	glycerin	Moisturizer, stability improver	41.62
	SOFTILT® AH-L +Plus! NOF	Lauroyl methyl beta-alanine	detergent	28.63
	ANON® LA +Plus! NOF	Disodium lauriminodiacetate, water	Detergents, foaming agents	18.75
	ANON® LA Powder +Plus! NOF	Disodium lauriminodiacetate		1.53
	–	Cocamide MEA	foaming agent	1.43
	–	Glyceryl Stearate SE	solubilizer	1.27
	UNIOX® HC-60	PEG-60 Hydrogenated Castor Oil	feel improver	2.86
	–	Glycol Distearate	Stability improver	1.91
B	–	Potassium Hydroxide	neutralizer	0.96
	–	water	-	Balance
total amount				100.00

[Typical properties] pH (10%): 6.3

• Preparation Method •

1 Weigh Phase A and stir at 80±5°C until uniform.
2 Weigh Phase B separately and stir at 25±5°C until uniform.
3 Add Phase B to Phase A and stir at 80±5°C until uniform.
4 Cool to 30 C or less.
5 After defoaming with a vacuum, fill the container.

Facial cleansing cream with amino acid-based weakly acidic foam to gently cleanse the face

Weakly acidic face wash cream rich in amino acids

Phase	Product name	INCI	Compounding Purpose	wt%
A	RG CO P.™	glycerin	Moisturizer, stability improver	59.00
	DIAPON® HF-SF +Plus! NOF	Sodium caproylmethyl taurine, water	Fast foaming agent (foam-enhancing agent)	12.00
	NAA®-142	myristic acid	Detergents, foaming agents	5.00
	STAFORM® DL	Cocamide DEA	Stability improver	2.80
	–	Disodium EDTA	chelating agent	0.05
	–	(e.g., phenoxyethanol)	preservative	proper quantity
	–	water	–	Balance
B	DIAPON® K-SF POWDER +Plus! NOF	Sodium methylcocoyl taurine	Detergents, foaming agents	20.40
total amount				100.00

[Typical properties] pH (1%): 6.6

• Preparation Method •

1 Weigh out the ingredients for Phase A and stir at 80±5℃ until uniform.
2 Add Phase B to Phase A and stir at 80±5℃ until uniform.
3 Cool to 30℃ or less.
4 After defoaming with a vacuum, fill the container.

Facial cleansing cream that blends well with water and gently cleanses skin with plenty of lather

Facial cleansing cream with plenty of foam for gentle cleansing

Phase	Product name	INCI	Compounding Purpose	wt%
A	RG CO P.™	glycerin	Moisturizer, stability improver	26.95
	NAA® -142	myristic acid	Detergents, foaming agents	12.63
	ANON® LA +Plus! NOF	Disodium Laurimino-diacetate, water		9.12
	NAA® -122	lauric acid		4.86
	SUNAMIDE® C-3	Sodium PEG-4 Cocamide Sulfate		0.52
	–	stearic acid	Detergents, foam improvers	9.33
	NAA® -160	palmitic acid		1.91
	NONION™ DL-40HN(W) +Plus! NOF	PEG-75 dilaurate, water	Foam thickener, thickener	3.08
	–	glyceryl stearate	emulsifier	1.70
	–	sorbitan stearate	Emulsifiers, solubilizers	0.21
B	DIAPON® K-SF POWDER +Plus! NOF	Sodium methylcocoyl taurine	Detergents, foaming agents	5.00
C	–	Potassium Hydroxide	neutralizer	5.54
	–	Tetrasodium EDTA	chelating agent	0.21
	–	water (esp. cool, fresh water, e.g. drinking water)	–	Balance
D	LIPIDURE® -PMB +Plus! NOF	Polyquaternium-51, water	Skin protection, moisturizer	0.21
	–	Polyquaternium-7	Thickeners, foam improvers	0.04
total amount				100.00

[Typical properties] pH (10%): 9.6

• Preparation Method •

1 Weigh out the ingredients for Phase A and stir at 80±5℃ until uniform.
2 Add Phase B to Phase A and stir at 80±5℃ until uniform.
3 Weigh out the ingredients for phase C and stir at 40±5℃ until uniform.
4 Add all of Phase C in 3 to the liquid in 2 and stir at 80 ±5℃ until uniform.
5 Cool to 40 ℃.
6 Add the raw materials of phase D sequentially to the liquid in 5 and stir at 40±5℃ until uniform.
7 Cool to below 30℃ , defoam with a vacuum, and pack into containers.

Facial cleansing cream that produces a dense lather and does not leave the skin feeling tight after washing

Dense foam face wash cream with no feeling of tightness

Phase	Product name	INCI	Compounding Purpose	wt%
A	NAA®-142	myristic acid	Detergents, foaming agents	21.00
	ANON® LA +Plus! NOF	Disodium Lauriminodiacetate, water		2.50
	ANON® BDF-R	Cocamidopropyl betaine, water		1.25
	NAA®-160	palmitic acid	Detergents, foam improvers	6.00
	–	stearic acid		3.00
	LUMINOVEIL® HS-K +Plus! NOF	Sodium Cocoyl Hydroxyethyl Beta-Alaninate, water	Detergents, foam improvers foaming agent	5.00
	–	Polyquaternium-7	Foam quality improver, Stability improver	0.20
	RG CO P.™	glycerin	moisturizer Stability improver	20.00
	–	glycol distearate	Stability improver	3.00
	PEG#400	PEG-8	feel improver	5.00
	–	(e.g., phenoxyethanol)	preservative	proper quantity
B	–	Potassium Hydroxide	neutralizer	6.00
	–	water	–	Balance
total amount				100.00

[Typical properties] pH (10%): 9.9

• Preparation Method •

1 Weigh out the ingredients for Phase A and stir at 80±5 °C until uniform.
2 Weigh out the ingredients for Phase B and stir at 25±5 °C until uniform.
3 Add Phase B to Phase A and stir at 80±5°C until uniform.
4 Cool to 30°C or less.
5 After defoaming with a vacuum, fill the container.

Facial cleansing cream with thick, rich lather

Facial cleansing cream with thick foam

Phase	Product name	INCI	Compounding Purpose	wt%
A	RG CO P.™	glycerin	Moisturizer, stability improver	25.00
	NAA®-142	myristic acid	Detergents, foaming agents	18.00
	DIAPON® K-SF +Plus! NOF	Sodium methylcocoyl taurine, water		8.33
	NAA®-122	lauric acid		3.00
	ANON® LA +Plus! NOF	Disodium Lauriminodiacetate, water		2.50
	NAA®-160	palmitic acid	Detergents, foam improvers	6.00
	–	stearic acid		3.00
	ANON® BDF-R	Cocamidopropyl betaine, water	foaming agent	1.25
	–	Polyquaternium-7	Thickeners, foam improvers	0.20
	–	glycol distearate	Stability improver	3.00
	–	Glyceryl stearate (SE)	solubilizer	0.25
	–	Tetrasodium EDTA	chelating agent	0.05
	–	(e.g., phenoxyethanol)	preservative	proper quantity
B	–	water (esp. cool, fresh water, e.g. drinking water)	–	Balance
	–	Potassium Hydroxide	neutralizer	5.95
total amount				100.00

[Typical properties] pH (10%): 9.8

• Preparation Method •

1 Weigh out the ingredients for Phase A and stir at 80±5 °C until uniform.
2 Weigh out the ingredients for Phase B and stir at 25±5 °C until uniform.
3 Add Phase B to Phase A and stir at 80±5°C until uniform.
4 Cool to 30°C or less.
5 After defoaming with a vacuum, fill the container.

The amino acid-based surfactant's ample micro-foam
Facial cleansing cream with both mild feel and good cleansing properties

Mild facial cleansing cream with micro fluffy foam

Phase	Product name	INCI	Compounding Purpose	wt%
A	LUMINOVEIL® HS-K +Plus! NOF	Sodium Cocoyl Hydroxyethyl Beta-Alaninate, water	Detergents, foam improvers Foam elasticity improver	30.00
	ANON® BDF-R	Cocamidopropyl betaine, water	Detergents, foaming agents	10.00
	NAA® -142	myristic acid		7.90
	NAA® -122	lauric acid		4.20
	–	stearic acid	Detergents, foam improvers	6.90
	NAA® -160	palmitic acid		5.60
	RG CO P.™	glycerin	Moisturizers, Stability improver	8.00
	–	glycol distearate	Stability improver	3.00
	LIPIDURE® -C +Plus! NOF	Polyquaternium-64, Phenoxyethanol, water	Skin protectants, moisturizers	2.00
	ACROBUTE® MB-52 or ACROBUTE® MB-90	PPG-52 BUTYL ETHER or PPG-90 BUTYL ETHER	moisturizer	0.75
	–	(e.g., phenoxyethanol)	preservative	proper quantity
B	–	Potassium Hydroxide	neutralizer	5.00
	–	water (esp. cool, fresh water, e.g. drinking water)	–	Balance
total amount				100.00

[Typical properties] pH (10%): 9.5

• Preparation Method •

1. Weigh out the ingredients for Phase A and stir at 80±5 °C until uniform.
2. Weigh out the ingredients for Phase B and stir at 25±5 °C until uniform.
3. Add Phase B to Phase A and stir at 80±5°C until uniform.
4. Cool to 30°C or less.
5. After defoaming with a vacuum, fill the container.

Moist facial cleansing cream with thick elastic foam

Moist facial cleansing cream with sticky foam

Phase	Product name	INCI	Compounding Purpose	wt%
A	RG CO P.™	glycerin	Moisturizer, stability improver	25.00
	NAA®-142	myristic acid	Detergents, foaming agents	18.00
	DIAPON® K-SF +Plus! NOF	Sodium methylcocoyl taurine, water		8.33
	NAA®-122	lauric acid		3.00
	ANON® LA +Plus! NOF	Disodium Lauriminodiacetate, water		2.50
	NAA®-160	palmitic acid	Detergents, foam improvers	6.00
	–	stearic acid		3.00
	ANON® BDF-R	Cocamidopropyl betaine, water	foaming agent	1.25
	–	Polyquaternium-7	Thickeners, foam improvers	0.20
	–	glycol distearate	Stability improver	3.00
	ACROBUTE® MB-52 +Plus! NOF	PPG-52 butyl Ether	Moisturizers, feel-improving agents	0.50
	–	Glyceryl stearate (SE)	solubilizer	0.25
	–	Tetrasodium EDTA	chelating agent	0.05
	–	(e.g., phenoxyethanol)	preservative	proper quantity
B	–	water (esp. cool, fresh water, e.g. drinking water)	–	Balance
	–	Potassium Hydroxide	neutralizer	5.95
total amount				100.00

[Typical properties] pH (10%): 10.0

• Preparation Method •

1. Weigh out the ingredients for Phase A and stir at 80±5 °C until uniform.
2. Weigh out the ingredients for Phase B and stir at 25±5 °C until uniform.
3. Add Phase B to Phase A and stir at 80±5°C until uniform.
4. Cool to 30°C or less.
5. After defoaming with a vacuum, fill the container.

Foam face wash with good discharge from the former container and high elasticity foam

Amino acid-based foam face wash with good foam (Pump foamer)

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water (esp. cool, fresh water, e.g. drinking water)	–	Balance
	LUMINOVEIL® HS-K +Plus! NOF	Sodium Cocoyl Hydroxyethyl Beta-Alaninate, water	detergent Foam quality improver Foam elasticity improver	20.00
	ANON® L-SB +Plus! NOF	Lauryl hydroxysultaine, water	detergent foaming agent	6.70
	NONION™ DL-40HN(W) +Plus! NOF	PEG-75 dilaurate, water	Foam quality improver Foam elasticity improver	3.00
B	RG CO P.™	glycerin	moisturizer	5.00
	–	Propylene Glycol		3.00
	–	Polyquaternium-7	Foam quality improver Foam elasticity improver	0.50
	–	(Methylparaben, etc.)	preservative	proper quantity
C	–	citric acid	pH adjuster	proper quantity
total amount				100.00

[Typical properties] pH (undiluted solution): 7.0 Viscosity (undiluted solution, 25 °C): 13 mPa-s

• Preparation Method •

1 Weigh out the ingredients for Phase A and stir at 25±5 °C until uniform.
2 Add the ingredients of phase B sequentially and stir until uniform.
3 Adjust pH using phase C.

Neutral, transparent facial cleansing gel with plenty of lather for a moist wash

Transparent facial cleansing gel that moisturizes and cleanses

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	thickener	1.13
	–	citric acid	pH adjuster	0.06
	–	water (esp. cool, fresh water, e.g. drinking water)	–	Balance
B	DIAPON® K-SF +Plus! NOF	Sodium methyl cocoyl taurine, water	detergent foaming agent	24.00
	ANON® BDF-SF	Cocamidopropyl betaine, water	foaming agent	16.00
	–	Potassium Hydroxide	neutralizer	0.46
	–	(e.g., phenoxyethanol)	preservative	proper quantity
C	COMUPOAL® BL	Butylene Glycol Laurate	thickener	1.00
total amount				100.00

[Typical properties] pH (undiluted solution): 6.1 Viscosity (undiluted solution, 25 °C): 9,500 mPa-s

• Preparation Method •

1 Weigh out water, heat to 60±5°C, and add SC-800 little by little with stirring, Stir until uniform (Phase A).
2 Weigh out the ingredients for Phase B and stir at 25±5 °C until uniform.
3 Add Phase B to Phase A and stir at 80±5°C until uniform.
4 Add phase C to the above mixed phase and stir at 80±5°C until uniform.
5 Cool to 30°C or less.
6 After defoaming with a vacuum, fill the container.

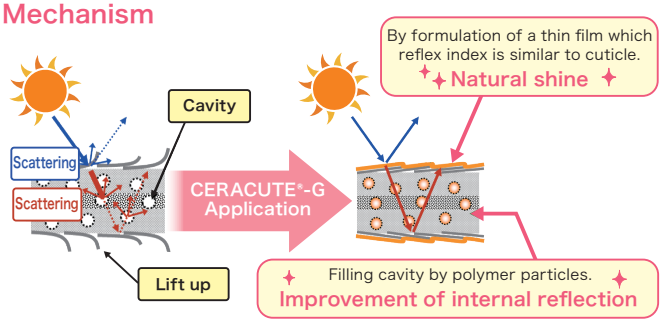
Hair care Functional ingredients

Ceramide polymers with high refractive index showing gloss-improving effects

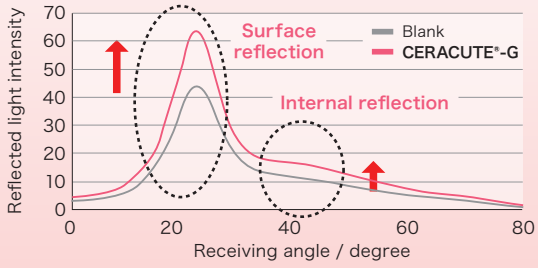
CERACUTE®-G INCI : Polyquaternium-92, BG, citric acid, water

CERACUTE®-G improves the luster of hair by simultaneously caring for the external and internal hair. For external care, a polymer film with a refractive index equivalent to that of the cuticle improves surface reflection, giving hair a natural shine. For internal care, polymer particles penetrate into the hair and fill damage holes to improve internal reflection.

Mechanism



Gloss-enhancing effect



Test method : Damaged hair bundles were immersed in 1% aqueous solution for 1 minute at room temperature, respectively,Reflected light distribution was measured after washing

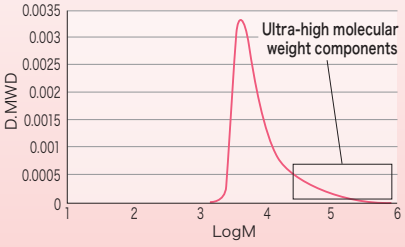
It leaves the hair feeling smooth and silky during rinsing of the treatment.

ACROBUTE® MB-52/ACROBUTE® MB-90 INCI : PPG-52 BUTYL ETHER / PPG-90 BUTYL ETHER

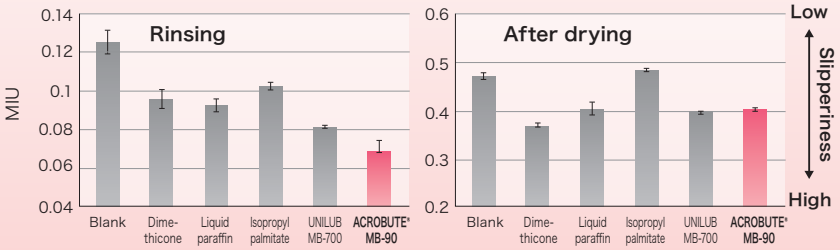
ACROBUTE®, developed with our proprietary technology, features an asymmetric molecular weight distribution containing ultra-high molecular weight components. These ultra-high molecular weight components provide excellent moisturizing effects and enhanced slipperiness when wet. When formulated into treatments, it delivers superior slipperiness during rinsing, surpassing that of silicone.

+Plus! NOF Formulation is (P.45, 50, 52, 67)

Molecular weight distribution



Slipperiness ① ②



Test Method ① : A treatment containing 5% oil was diluted 10 times, and the coefficient of kinetic friction was measured while artificial hair was immersed in the solution.
② : The immersed hair was washed with water, dried, and the coefficient of kinetic friction was measured again after drying.

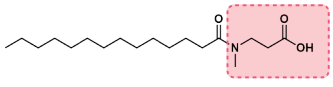
Formula : Oil: 5%, Stearyl Alcohol: 5%, Behentrimonium Chloride: 2%, Water: 87%, Balance: 1%

Oil products for using by heat to improve damaged hair

SOFTILT® AH-ME INCI : Myristoyl methyl beta-alanine, cetyl ethylhexanoate

SOFTILT® AH-ME has a β-alanine structure, a natural amino acid, which acts on damaged hair, adsorbing it to the hair surface and giving it a high degree of bounce, moisture retention, and smoothness. The effect is enhanced by heat, such as from a hair iron, and is long-lasting. +Plus! NOF Formulation is P.70

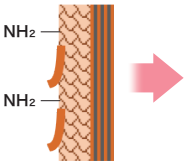
Concept of Function



Methylalanine
→ Adsorption to damaged hair

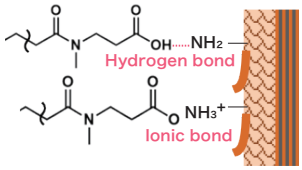
Bounce,
Moisture retention,
and Smoothness effects are added.

1. Damaged hair



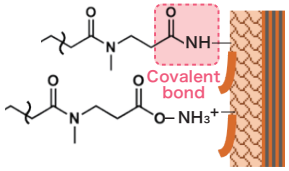
Damaged hair has amino groups exposed on the surface.

2. Adsorption to hair



Myristoyl Methyl Beta-Alanine adsorbs to amino groups on the surface of damaged hair.

3. Enhancement by heat



The adsorbed Myristoyl Methyl Beta-Alanine binds by heat.

Conditioner for using by heat to improve damaged hair

Conditioner for damaged hair

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water	–	Balance
	–	guar hydroxypropyl trimonium chloride	conditioning agent	0.50
	–	hydroxyethyl cellulose		0.10
B	–	Propylene Glycol	Moisturizer	4.00
	CATION™ VB-M FLAKE	behentrimonium chloride, Isopropyl Alcohol	Conditioning agent Emulsifier	1.20
C	SOFTILT® AH-ME +Plus! NOF	Myristoyl Methyl Beta-Alanine, Cetyl Ethylhexanoate	Heat repair agent	1.00
	–	shea oil	Oil (feel improver)	3.00
	–	cetyl ethylhexanoate		1.50
	–	Cetyl Alcohol	Emulsifier	2.00
	–	stearyl alcohol		1.00
	–	behenyl alcohol		0.20
	NONION™ S-40	PEG-75 stearate		0.10
D	LIPIDURE®-C +Plus! NOF	Polyquaternium-64, water	Hair repair agent	1.00
total amount				100.00

• Preparation Method •

1 Add the phase A to water little by little at room temperature to pre-dispersion.
2 Add the phase B sequentially to phase A and stir at 80°C until uniform.
3 Weigh phase C separately and stir at 80°C until uniform.
4 While stirring at 80°C, add phase C to phase A+B and stir until uniform.
5 Mix with a homo mixer (6,000 rpm) at 80°C for 5 minutes.
6 Add Phase D and stir until uniform.
7 Cool to room temperature with stirring.

Treatment that adds gloss to hair and protects hair

Treatment that adds gloss and protects hair

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	water (esp. cool, fresh water, e.g. drinking water)	–	Balance
	–	guar hydroxypropyl trimonium chloride	conditioning agent feel improver	0.50
	–	hydroxyethyl cellulose		0.10
B	–	Propylene Glycol	moisturizer	4.00
	CATION™ VB-M FLAKE	behentrimonium chloride, Isopropyl Alcohol	Conditioning agents, emulsifier	1.20
C	PARLEAM® BH-300P +Plus! NOF	hydrogenated polyisobutene	Oil (gloss, hair protection)	8.00
	–	shea oil	Oil (feel improver)	3.00
	–	cetyl ethylhexanoate		3.00
	–	Cetyl Alcohol	emulsifier	2.00
	–	stearyl alcohol		1.00
	–	behenyl alcohol		0.20
	NONION™ S-40	PEG-75 stearate		0.10
total amount				100.00

• Preparation Method •

1 Add the phase A to water little by little at room temperature to pre-dispersion.
2 Add the phase B sequentially to phase A and stir at 80°C until uniform.
3 Weigh phase C separately and stir at 80°C until uniform.
4 While stirring at 80°C, add phase C to phase A+B and stir until uniform.
5 Mix with a homo mixer (6,000 rpm) at 80°C for 5 minutes.
6 Cool to room temperature with stirring.

Makeup and Sun care　Oil

High quality hydrocarbons that can produce various textures

PARLEAM®/POLYSYNLENE® series　Labeled name : Hydrogenated polyisobutene

The PARLEAM® series is a high-purity hydrocarbon that is colorless, odorless, tasteless, and exhibits good stability. The series offers seven different lineups to create a variety of textures. For makeup applications, PARLEAM® 18, 24, and 46 high-viscosity PARLEAM® are suitable. The higher the number, the higher the refractive index and the better the adhesion, so they are recommended for point makeup.

viscosity	Low viscosity products				High Viscosity Products		
grade	3	4	LITE	-	V	HV	SV
Kinematic viscosity (37.8℃, mm^2/s)	1.4	3.1	10.6	20.1	-	-	-
Kinematic viscosity (98.9℃, mm^2/s)	-	-	2.5	3.6	300	800	4,700
Refractive index(20℃)	1.429	1.442	1.456	1.458	1.494	1.499	1.505
Special Features	Volatility Airy feeling	Good compatibility with silicone high detergency	Balanced lightness and emollient feeling	Squalane-like texture	An essential ingredient in makeup cosmetics due to its good adhesionA trace amount added (0.1-0.5%) gives richness to skin care products, Hair care products add luster.		

New PARLEAM® with features of high handling and high viscosity PARLEAM®/POLYSYNLANE®

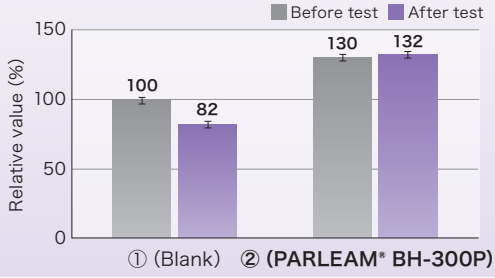
PARLEAM®/POLYSYNLANE® BH-300P

INCI : Hydrogenated polyisobutene

PARLEAM® BH-300P is a newly developed product that combines the ease of handling found in low-viscosity PARLEAM® with the outstanding properties of high-viscosity PARLEAM®. When used in skincare formulations, it delivers excellent film-forming properties, enhances the sensation of hydration, and reduces stickiness after drying.

※ Kinematic viscosity (40.0℃ , mm^2/s) 145.5,
Refractive index (20℃) 1.470

SPF and water resistance evaluation



Test Method: After applying the simple sunscreen formula evenly to a PMMA plate, the SPF was measured before the Wednesday test. The plate was then immersed in a water bath for 80 minutes, dried, and the SPF after the water bath test was measured.
Prescription 1 (Blank):
UV-protectant 16.1wt%, cyclopentasiloxane 14.6wt%, water + others (emulsifier) Remaining
Formulation 2 (PARLEAM® BH-300P):
UV protector 16.1 wt%, cyclopentasiloxane 9.6 wt%, PARLEAM® BH-300P 9.6 wt%,
Water + Other (emulsifier) Remaining

A series of naturally derived emollients with excellent feel and functionality

BIOLEAM® series

INCI : Refer to the table on the right.

The BIOLEAM® series are high-quality, naturally derived emollients, available in five different lineups to create a variety of textures. BIOLEAM®-A has excellent compatibility with UV absorbers. In addition, EL has excellent powder dispersibility, while S and R have excellent water resistance.

grade	A	L	S	EL	R
Display name	(C9-12) Alcan (C14-22) Alcohol	(C9-12) Alcan (C13-15) Alcan (C14-22) Alcohol	Polydecen (C9-12) Alcan	(C14-22) Alcohol	Polydesene
Kinematic viscosity (40.0℃、mm^2/s)	1.5	1.7	20	28	300
Refractive index (20℃)	1.422	1.426	1.455	1.454	1.474
Natural-derived index	1	1	0.9	1	0.9
Specia Features	Highly volatile oil Produces good skin affinity	Volatile oil Good skin affinity and emollient feel	Good skin affinity Emollient feel Water Resistance Inhibition of α-gel crystallization	Squalane-like texture Improved powder dispersion stability	Rich feeling Inhibition of α-gel crystallization

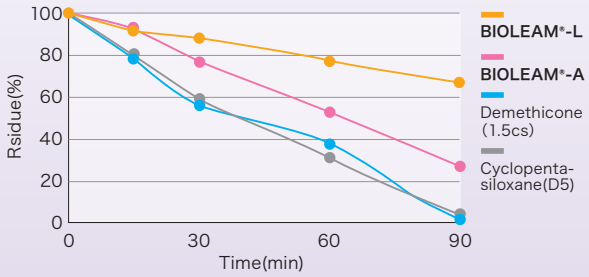
◆ BIOLEAM®-A、L

Compatibility withabsorbents

	BIOLEAM®-A	BIOLEAM®-L
Ethylhexyl Methoxycinnamate	◎	◎
Butyl Methoxydibenzoylmethane	○	△
Diethylamino Hydroxybenzoyl Hexyl Benzoate	○	○
Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	○	△

◎ : 50% solution; miscible ○ : solution; miscible △ : 5% solution; precipitated the next day

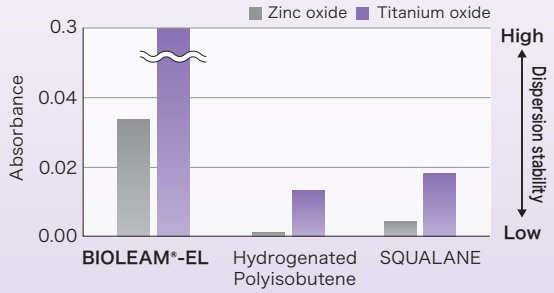
Volatile data



Test method : 0.4 g of each oil soaked in filter paper, placed in a thermostatic bath at 20°C, and the weight of the filter paper was measured at each time.

◆ BIOLEAM®-EL

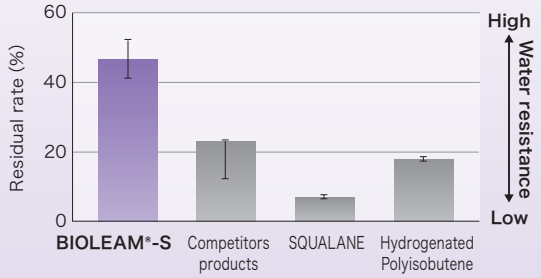
Dispersion stability



Test method : Powders were dispersed in oil and allowed to stand at 40°C for 1 week and then diluted 100 times and measured absorbance.

◆ BIOLEAM®-S

BIOLEAM®-S Water Resistance Data



Test Method : 0.04 g of the coloring emulsion was applied to artificial leather, Dry for 1 minute, and then rinsed with 1 L of water. The artificial leather before and after rinsing was measured with a spectrophotometer (CM-2500c, Konica Minolta, Inc.).

Makeup and Sun care Emulsifier

A high internal water phase W/O emulsifier that combines water resistance and a refreshing feel

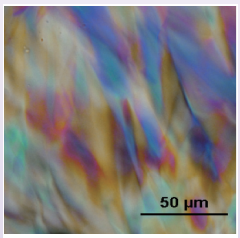
GLYMOIST® MO INCI : Glyceryl Oleate, Glycerin

GLYMOIST® MO, produced using our proprietary manufacturing method, is an emulsifier with high monoester purity. By forming reverse hexagonal liquid crystals, it enables the creation of water-in-oil (W/O) emulsions with high water resistance and temperature stability. Furthermore, it allows for the preparation of high internal water phase W/O emulsions containing over 80% water phase. It also effectively disperses UV scattering agents and other ingredients, making it suitable for use in sunscreen formulations.

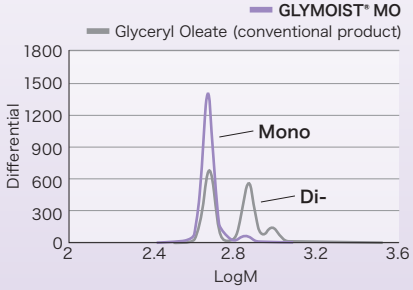
+Plus! NOF Formulation is P.76, (45)

Reverse hexagonal Liquid crystal

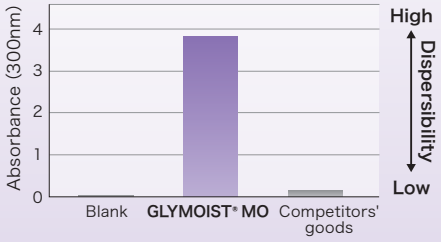
MO : Oil : Water = 7 : 1.5 : 1.5



Molecular Weight Distribution



Dispersibility



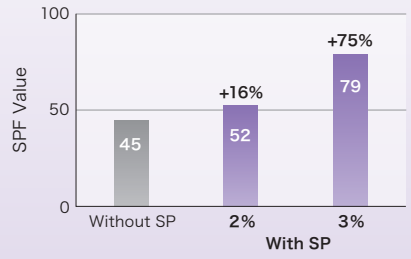
Test method : Dodecane (97.3%) was mixed with glyceryl oleate (0.2%) and stirred. Titanium dioxide (2.5%) was then added and stirred. The mixture was allowed to stand, and the absorbance was measured.

Water-resistance agent for sunscreen formulations

MACBIOBRIDE® SP　INCI : Poly(1,2-Butanediol)-55/PEG-90 Pentaerythrityl Ether

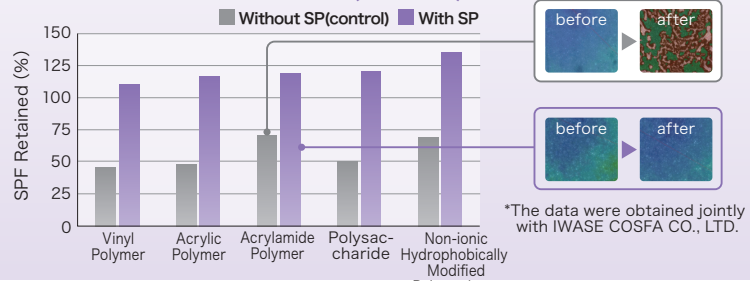
MACBIOBRIDE® SP confers water resistance to sunscreens and makeup cosmetics. It exhibits a synergistic effect with thickening and emulsifying polymers to enhance SPF values after immersion in water. +Plus! NOF Formulation is P.75

Effect of SPF Boost (in vitro)



Test method : SPF values were measured using a Labsphere UV-2000S (Labsphere Ltd.).
Formulation : O/W sunscreen cream

Effect of water-resistance (in vitro)*



*The data were obtained jointly with IWASE COSFA CO., LTD.

Test method : The plate was immersed a 30°C water bath at 100 rpm for 80 min, and the SPF values were measured using an Labsphere UV-2000S (Labsphere Ltd.). before and after the water bath. The film condition was observed by an optical microscope.

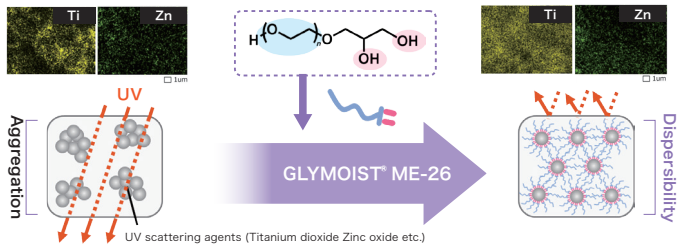
SPF booster to improve the dispersion of UV scattering agents

GLYMOIST® ME-26　INCI : GLYCERETH-26

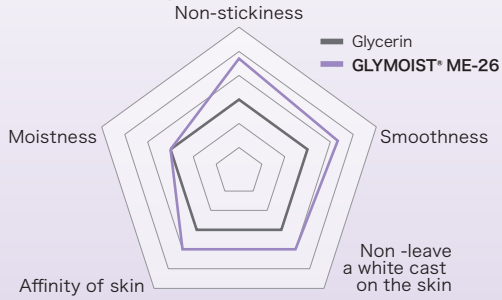
GLYMOIST® ME-26 enhances the dispersibility of UV scatterers and provides an SPF-boosting effect through its adjacent hydroxyl groups, which act as adsorption sites, and long-chain alkylene oxide groups, which act as steric repulsion sites. Additionally, it has a high moisturizing and feel-improving effect.

+Plus! NOF Formulation is P.75, 76

Effect of SPF boost



Effect of improvement texture



Test method : Each sensory property(7 levels) was evaluated by 7 persons (male:4, fimale:3). The level of glycerin was difined as 4.
Formulation : Sunscreen(W/O-type) cream containing 5.0 wt% of each ingredients.

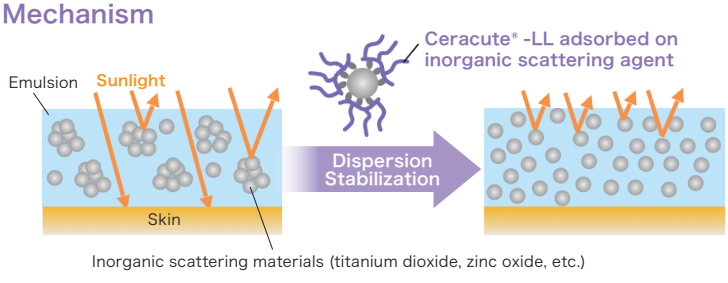
Ceramide-like structural polymer (SPF booster)

CERACUTE® LL　Indications : (Ethyl glycerylamide methacrylate/stearyl methacrylate) copolymer, glycerin, BG

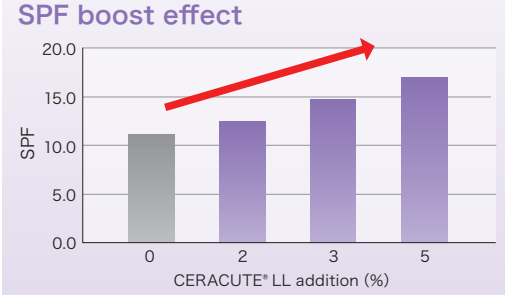
With its controlled molecular weight, CERACUTE® LL is more suitable for aqueous formulations than the conventional CERACUTE® L. As a feature, it also has an SPF boosting effect because it improves the dispersibility of inorganic UV scattering agents.

+Plus! NOF Formulation is P.76

Mechanism



SPF boost effect



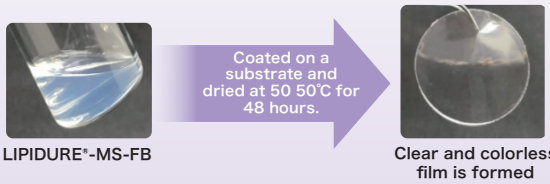
Measurement method : SPF values were calculated using an SPF analyzer. Surface treated powder was used as the scattering agent.

Non-fluorinated film-forming agent with water and oil repellent effects Lipidure-MS-FB

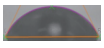
LIPIDURE®-MS-FB

Labeled name : Polyacrylate-47, Ethanol

LIPIDURE® MS-FB is a non-fluorinated raw material and exhibits higher water and oil repellency than existing fluorinated film-forming agents. It contains 2-methacryloyloxyethyl phosphorylcholine (MPC), which has excellent biocompatibility, and has a feeling of adhesion and moisturizing to the skin, without stickiness. In addition, LIPIDURE®-MS-FB in the foundation formulation improves makeup retention.

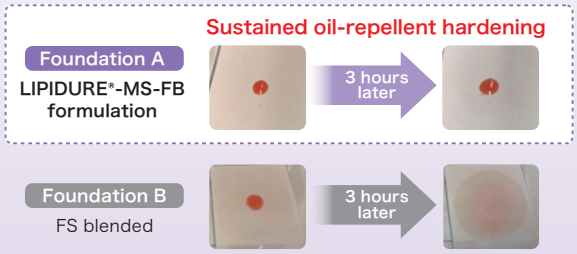


High water and oil repellency and water and oil resistance

Membrane type	Contact angle angle(°)		Membrane Solubility	
	Water	Oleic acid	Water	Isododecane
LIPIDURE® -MS-FB	 112.5	 61.5	Insoluble	Insoluble
FS (Fluorosilicate)	102.1	32.0	Insoluble	Melting
TMS (Trimethylsiloxyquinic)	101.1	30.0	Insoluble	Melting

Test method : Membranes were prepared and the contact angle to water and oil and the solubility of the membranes were investigated.

Excellent makeup retention effect



Test method : Foundation containing 1.3 wt% of LIPIDURE® -MS-FB or FS was applied Artificial sebum was dripped onto the artificial skin and the changes were observed before and after

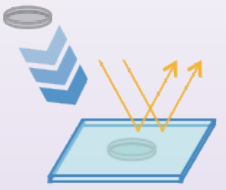
Base material for makeup with 100% natural origin index

POWDER BASE® BZ12/POWDER BASE® BM14

Indications : Zinc laurate, Boron nitride/magnesium myristate, Boron nitride

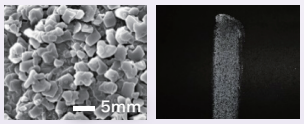
The POWDER BASE® series is a metallic soap with a mother powder as its nucleus and controlled particle growth using Nichiyu's proprietary technology. This raw material is a sustainable raw material (nature-derived index 1) and exhibits higher water repellency than mineral-based powders. By controlling the size and shape of the particles, it can impart a moist and shiny feel.

Particle shape



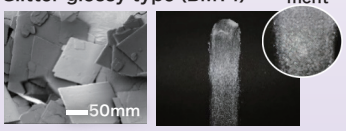
The size and shape of the particles. Control. Provides moistness and luster

Moist matte type (BZ12)



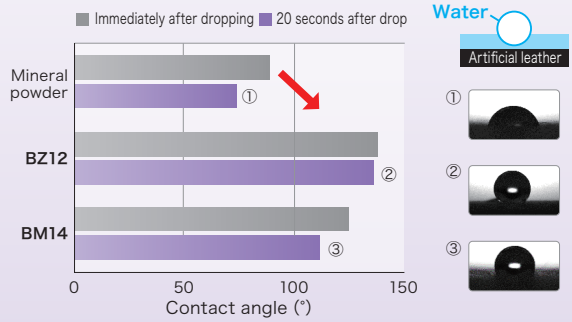
Electron micrograph　Applied on black

Glitter glossy type (BM14)　Enlarge-ment



Electron micrograph　Applied on black

Water repellency evaluation



Test method : A sample was applied on the man-made leather, purified water was dropped on the sample, and the contact angle was measured.

Achieving Both Exceptional Water Resistance and a Smooth, Comfortable Texture

Water proof sunscreen gel (O/W Formulation)

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	Balance
	–	Pentylene Glycol	Moisturizer	2.0
B	–	Butylene Glycol	Moisturizer	3.0
	–	Xanthan Gum	Thickener	0.05
C	–	Ethylhexyl Methoxycinnamate	UV absorber	7.0
	–	Diethylamino Hydroxybenzoyl Hexyl Benzoate		2.5
	–	Ethylhexyl Triazone		2.0
	–	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine		0.5
	IPM®-R	Isopropyl Myristate	Oil	3.0
	–	Isononyl Isononanoate		2.0
	–	Dimethicone		3.0
	NONION® S-40	PEG-75 Stearate	emulsifier	0.6
	–	Sorbitan Oleate		0.6
	–	Glyceryl Stearate		0.8
	NAA®-422	Behenyl Alcohol	Emulsion Stabilizer	0.6
D	–	(Acrylates/alkyl acrylate (C10-30)) crosspolymer	Thickener	0.3
	–	Water	–	9.7
E	–	Arginine	pH adjuster	q.s.
F	–	Alcohol	solvent	2.5
	MACBIOBRIDE® SP +Plus! NOF	Poly(1,2-Butanediol)-55/ PEG-90 Pentaerythrityl Ether	Water-resistance enhancer	2.5
	–	Phenoxyethanol	preservative	q.s.
total amount				100.00

• Preparation Method •

1. Add phase A and mix using at 80°C until the mixture is uniform.
2. Add the pre-mixed phase B to phase A and stir at 80°C until the mixture is uniform.
3. Add phase C to another beaker and mix at 80°C until the mixture is uniform.
4. Gradually add Phase A+B into phase C using Homogenizing mixer, and stir at 5000rpm and 5min.
5. Add the pre-mixed phase D, mix and stir until uniform, cool to room temperature.
6. Add the phase E mix and stir until uniform.
7. Add the pre-mixed phase F mix and stir until uniform.

Achieving Both High SPF Protection and a Refreshing, Lightweight Texture

Daily Use High-SPF Sunscreen Gel (O/W Formulation)

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	Balance
	–	Pentylene Glycol	Moisturizer	2.0
	GLYMOIST® ME-26 +Plus! NOF	Glycereth-26	SPF Booster	5.0
	–	Titanium Dioxide, Hydrated Silica	UV scatterer	2.5
B	–	Butylene Glycol	Moisturizer	3.0
	–	Xanthan Gum	Thickener	0.1
C	–	Diethylamino Hydroxybenzoyl Hexyl Benzoate	UV absorber	2.5
	–	Ethylhexyl Triazone		2.0
	–	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine		0.5
	–	Isopropyl Myristate	Oil	4.0
	–	Isononyl Isononanoate		7.0
	–	Dimethicone		3.0
	NONION® S-40	PEG-75 Stearate	Emulsifier	1.0
	–	Behenyl Alcohol	Emulsion Stabilizer	1.0
	–	Sorbitan Oleate	Emulsifier	1.2
	–	Glyceryl Stearate	Emulsifier	1.8
D	–	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	Thickener	0.3
	–	Water	–	9.7
E	–	Arginine	pH adjuster	q.s.
F	–	Phenoxyethanol	preservative	q.s.
total amount				100.00

• Preparation Method •

1. Add phase A and mix using at 80°C until the mixture is uniform.
2. Add phase B and disperse using dispersion mixer at 6000rpm and 10min.
3. Add the pre-mixed phase C to phase A+B and stir at 80°C until the mixture is uniform.
4. Add phase D to another beaker and mix at 80°C until the mixture is uniform.
5. Gradually add Phase A+B +C into Phase D using Homogenizing mixer, and stir at 5000rpm and 5min.
6. Add the pre-mixed phase D, mix and stir until uniform, add phase E and cool to room temperature.
7. Add the pre-mixed phase F, mix and stir until uniform.

Achieving Both Water Resistance and a Smooth, Refreshing Texture

A High-Moisture Sunscreen Cream Combining Water Resistance and a Refreshing Texture (W/O Formulation)

Phase	Product name	INCI	Compounding Purpose	wt%
A	IPM®-R	Isopropyl Myristate	Oil	2.00
	–	Dimethicone		1.00
	–	Zinc Oxide, Isostearic Acid, Polyhydroxystearic Acid, Hydrogenated Polyisobutene	UV scatterer	9.00
	–	Titanium Dioxide, Aluminum Hydroxide, Isostearic Acid, Diisostearyl Malate, Hydrogenated Polyisobutene		4.00
	–	Ethylhexyl Methoxycinnamate	UV absorber	7.50
	–	Diethylamino Hydroxybenzoyl Hexyl Benzoate		2.50
	–	Beeswax	stabilizer	1.00
	CERACUTE®-LL +Plus! NOF	GLYCERYLAMIDOETHYL METHACRYLATE/ STEARYL METHACRYLATE COPOLYMER, GLYCERIN, BG	Anti-wrinkle effect SPF Booster	1.00
	GLYMOIST® MO +Plus! NOF	Glyceryl Oleate, Glycerin	emulsifier	3.50
B	–	Butylene Glycol	moisturizer	1.00
	RG CO P.™	Glycerin		1.00
	GLYMOIST® ME-26 +Plus! NOF	Glycereth-26	Texture Enhancer SPF Booster	3.00
	LIPIDURE®-PMB +Plus! NOF	Polyquaternium-51, Water	skin protectant	1.00
	–	Magnesium Sulfate	stabilizer	0.75
	–	Ethylhexylglycerin	preservative	0.10
	–	Phenoxyethanol		0.30
	–	Water	–	Balance
total amount				100.00

・Preparation Method・

1 Add phase A and mix using with propeller stirring at 400rpm and 80℃.
2 Add phase B and mix at 80℃.until the mixture is uniform.
3 Gradually add Phase B into Phase A with propeller stirring at 400rpm.
4 Cool to room temperature.
5 Add phase C and mixtre.

Prevents makeup from falling off due to friction and dryness caused by masks

Fix mist

Phase	Product name	INCI	Compounding Purpose	wt%
A	–	Water	–	Balance
	–	Pentylene Glycol	Moisture	2.00
	WILBRIDE® S-753D +Plus! NOF	PEG/PPG/Polybutylene Glycol-8/5/3 Glycerin	Moisture	3.00
	LIPIDURE®-NR +Plus! NOF	Polyquaternium-61, Glycerin, BG	Moisture	5.00
	–	Alcohol	solvent	25.00
	–	Citric Acid	pH adjuster	q.s.
	–	Sodium Citrate		q.s.
	–	Ethylhexylglycerin	Preservation	0.20
B	SOLUBULE® GS-01 +Plus! NOF	PPG-13-Decyltetradeceth-24	solubilization	1.00
	UNIOL® PB-700	Polybutylene Glycol/PPG-9/1 Copolymer	Emollient	0.30
total amount				100.00

[Typical properties] pH (undiluted solution): 5.5

・Preparation Method・

1 Stir phase A and phase B respectively at room temperature until they become homogeneous.
2 Add phase B to phase A with stirring, and stir until homogeneous at room temperature.

NOF CORPORATION

Important information

The information contained in this catalog is based on materials, information and data available at the time of publication. However, no guarantee is made regarding the data, evaluations or hazardous properties conteined in this catalog. Furthermore, the information conteined in this catalog is intended for general handling. If special handling is needed, please take appropriate safety measures in accordance with the intended uses and application.
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Database of NOF cosmetic ingredients [Cosmetic Lounge.com]

for more information

Cosmetic Lounge Search

NOF CORPORATION https://www.nof.co.jp/english

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issued 10th May, 2025 (First edition)