



PERFORMANCE CHEMICALS FOR COSMETICS, PHARMACEUTICALS, AGRICHEMICALS AND DETERGENTS

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IMPORTANT :

Before handling these products, refer to the Safety Data Sheet for recommended protective equipment, and detailed precautionary and hazards information

SANYO CHEMICAL PRODUCT OUTLINE

Performance Chemicals for Cosmetics

1. Base Materials for Shampoos (Anionic Type)

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
BEAULIGHT LCA BEAULIGHT LCA-25F BEAULIGHT LCA-25N BEAULIGHT LCA-30D	SODIUM LAURETH-4 CARBOXYLATE, WATER 月桂醇聚醚-4 羧酸钠, 水(有)	Sodium polyoxyethylene(3) lauryl ether carboxylate (Paste and liquid)	These products have moderate detergency and produce a large amount of foam even under acidic conditions. They exhibit low irritancy.
BEAULIGHT ECA	SODIUM TRIDECETH-4 CARBOXYLATE, WATER 十三烷醇聚醚-4 羧酸钠, 水(有)	Sodium polyoxyethylene(3) tridecyl ether carboxylate (Liquid)	
BEAULIGHT LCA-25NH	LAURETH-4 CARBOXYLIC ACID, WATER 月桂醇聚醚-4 羧酸, 水(有)	Polyoxyethylene(3) lauryl ether carboxylic acid (Liquid)	BEAULIGHT LCA-25NH is used as a base material for shampoos after neutralized with alkalis such as sodium hydroxide.
BEAULIGHT SHAA	SODIUM LAURYL GLYCOL CARBOXYLATE, WATER 月桂基甘醇羧酸钠, 水(有)	Sodium ((2-hydroxydodecyl)-oxy) acetate (Liquid)	BEAULIGHT SHAA has moderate detergency and does not cause excessive degreasing of hair. It produces a large amount of foam.
BEAULIGHT ESS	DISODIUM C12-14 PARETH-2 SULFOSUCCINATE, WATER C12-14 链烷醇聚醚-2 磺基琥珀酸酯二钠, 水(有)	Disodium polyoxyethylene(2) alkyl (C12-14) sulfosuccinate (Liquid)	These products have moderate detergency and produce a large amount of foam even under acidic conditions. They exhibit low irritancy.
BEAULIGHT A-5000	DISODIUM LAURAMIDO PEG-5 SULFOSUCCINATE, WATER 月桂酰胺基 PEG-5 磺基琥珀酸酯二钠, 水(有)	Disodium mono-(lauroylethanolamide polyoxyethylene) sulfosuccinate (Liquid)	
BEAULIGHT NA-25S	SODIUM LAURETH SULFATE, WATER 月桂醇聚醚硫酸酯钠, 水(有)	Sodium polyoxyethylene lauryl ether sulfate (Liquid)	BEAULIGHT NA-25S has high detergency and produces a large amount of foam. It exhibits low irritancy, and is compatible with various surfactants.
SANDET EN	SODIUM LAURETH SULFATE, WATER 月桂醇聚醚硫酸酯钠, 水(有)	Sodium polyoxyethylene(2) lauryl ether sulfate (Liquid)	These products have high detergency and produce a large amount of foam.
SANDET LTD	TEA-C12-13 ALKYL SULFATE, WATER C12-13 醇硫酸酯 TEA 盐, 水(有)	Triethanolamine alkyl(12,13) sulfate (Liquid)	

2. Base Materials for Shampoos (Amphoteric Type)

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
LEBON 2000 LEBON 2000HG LEBON HC-30W	COCAMIDOPROPYL BETAINE, WATER 椰油酰胺丙基甜菜碱, 水(有)	Cocoamidopropyl betaine (Liquid)	These products impart excellent tactile properties to hair. LEBON 2000HG contains minimal amounts of sodium chloride.
LEBON 2000L	LAURAMIDOPROPYL BETAINE, WATER 月桂酰胺丙基甜菜碱, 水(有)	Lauramidopropyl betaine (Liquid)	LEBON 2000L exhibits an excellent thickening effect when used with anionic surfactants.
LEBON MY-30W	MYRISTAMIDOPROPYL BETAINE, WATER 肉豆蔻酰胺丙基甜菜碱, 水(有)	Myristamidopropyl betaine (Liquid)	LEBON MY-30W exhibits an excellent foaming property when used with anionic surfactants.
LEBON LD-36	LAURYL BETAINE, WATER 月桂基甜菜碱, 水(有)	Lauryl betaine (Liquid)	LEBON LD-36 produces a large amount of foam and exhibits high foam stability.
LEBON 105	SODIUM COCOAMPHOACETATE, WATER 椰油酰两性基乙酸钠, 水(有)	Cocoamphoglycinate (Liquid)	LEBON 105 exhibits low irritancy to skin and eyes. It is tolerant to hard water and compatible with various surfactants.
LEBON APL	SODIUM LAURAMINOPROPIONATE, WATER 月桂氨基丙酸钠, 水(有)	Sodium β -laurylaminopropionate (Liquid)	LEBON APL produces a large amount of foam and is easily biodegradable.

■ Formulation Examples for Shampoos

Shown below are two examples of shampoo formulas recommended. However, it is recommended to develop the formulas further in order to satisfy your requirements.

1. Conditioning Shampoo

	(wt %)
SANDET EN:	40
LEBON 2000:	15
PROFAN EXTRA24:	3
CATION LQ:	4
Stearic acid:	Small quantity
Perfume, coloring agent, etc.:	Proper quantity
Water:	Balance
Total:	100

2. Shampoo with Low Irritancy

The formula shown below is particularly suited for child and baby shampoos

	(wt %)
BEAULIGHT LCA-30D:	40
LEBON 2000:	15
PROFAN EXTRA24:	3
O-[2-Hydroxy-3-(trimethylammonio) propyl] hydroxyethyl cellulose chloride:	1
Polyoxyethylene methyl glucoside dioleate:	Small quantity
Perfume, coloring agent, etc.:	Proper quantity
Water:	Balance
Total:	100

3. Foam Stabilizers and Thickeners for Shampoos

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
PROFAN EXTRA24	COCAMIDE DEA 椰油酰胺 DEA (有)	Coconut fatty acid diethanolamide (Liquid)	These products are used as foaming agents, foam stabilizers and thickeners. PROFAN EXTRA24, PROFAN 128 EXTRA and PROFAN AB-20 are generally used for the above mentioned purpose in shampoos, and PROFAN ME-20 is suitable mainly for acidic shampoos.
PROFAN AB-20	COCAMIDE MEA 椰油酰胺 MEA (有)	Coconut fatty acid monoethanolamide (Flake)	
PROFAN 128 EXTRA	COCAMIDE DEA 椰油酰胺 DEA (有)	Coconut fatty acid diethanolamide (Liquid)	
PROFAN ME-20	PEG-3 COCAMIDE PEG-3 椰油酰胺 (有)	Polyoxyethylene(2) coconut fatty acid monoethanolamide (Liquid)	
EMULMIN 862	PEG-190 DISTEARATE PEG-190 二硬脂酸酯 (有)	Polyoxyethylene(190) distearate (Granule)	EMULMIN 862 is a thickener, especially useful to thicken shampoos and hair conditioners.
FROTHMEISTER HG-375	PPG-75-PEG-300 HEXYLENE GLYCOL PPG-75-PEG-300 己二醇 (有)	Polyoxyethylene(300) polyoxypropylene(75) hexyleneglycol ether (Liquid)	These products are used as foaming auxiliaries, and foam stabilizers of shampoos and body washes.
FROTHMEISTER GC-48	PPG-24-GLYCERETH-24 PPG-24-甘油聚醚-24 (有)	Polyoxyethylene(24) polyoxypropylene(24) glyceryl ether (Liquid)	
FROTHMEISTER SP-10	PPG-10 SORBITOL PPG-10 山梨醇 (有)	Polyoxypropylene solbit (Liquid)	

4. Base Materials for Body Washes

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
BEAULIGHT LCA BEAULIGHT LCA-25F BEAULIGHT LCA-25N BEAULIGHT LCA-30D	SODIUM LAURETH-4 CARBOXYLATE, WATER 月桂醇聚醚-4 羧酸钠, 水 (有)	Sodium polyoxyethylene(3) lauryl ether carboxylate (Paste and liquid)	These products produce a large amount of foam even under acidic conditions and do not cause excessive degreasing of skin.
BEAULIGHT ECA	SODIUM TRIDECETH-4 CARBOXYLATE, WATER 十三烷醇聚醚-4 羧酸钠, 水 (有)	Sodium polyoxyethylene(3) tridecyl ether carboxylate (Liquid)	
BEAULIGHT SHAA	SODIUM LAURYL GLYCOL CARBOXYLATE, WATER 月桂基甘醇羧酸钠, 水 (有)	Sodium ((2-hydroxydodecyl)-oxy) acetate (Liquid)	BEAULIGHT SHAA produces a large amount of foam even under acidic conditions and generates refined foam.
BEAULIGHT SSS	DISODIUM LAURYL SULFOSUCCINATE, WATER 月桂醇磺基琥珀酸酯二钠, 水 (有)	Disodium monolaurylsulfosuccinate (Paste)	BEAULIGHT SSS produces a large amount of foam even under acidic conditions and exhibits low irritancy.

5. Base Materials for Hair Conditioners

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
ECONOL TM-22	BEHENTRIMONIUM CHLORIDE (and) CETEARYL ALCOHOL 山嵛基三甲基氯化铵, 鲸蜡硬脂醇(有)	Behenyltrimethylammonium chloride (Solid)	ECONOL TM-22 contains cetyl alcohol and stearyl alcohol. However, it does not contain any low-boiling-point solvents. Therefore, solvent stripping process is not required. It is relatively easily biodegradable.
ECONOL TMS-28	STEARTRIMONIUM CHLORIDE, WATER 硬脂基三甲基氯化铵, 水(有)	Stearyltrimethylammonium chloride (Liquid)	These products impart smoothness and elasticity, and an excellent detangling ability to hair.
LEBON TM-18	STEARTRIMONIUM CHLORIDE, PROPYLENE GLYCOL 硬脂基三甲基氯化铵, 丙二醇(有)	Stearyltrimethylammonium chloride (Paste)	
LEBON TM-18PA	STEARTRIMONIUM CHLORIDE, ISOPROPYL ALCOHOL, WATER 硬脂基三甲基氯化铵, 异丙醇, 水(有)		
LEBON TM-16	CETRIMONIUM CHLORIDE, WATER 西曲氯铵, 水(有)	Cetyltrimethylammonium chloride (Liquid)	
CATION DSV	DISTEARYLDIMONIUM CHLORIDE, ISOPROPYL ALCOHOL 二硬脂基二甲基氯化铵, 异丙醇(有)	Distearyldimethylammonium chloride (Solid)	CATION DSV is easily adsorbed in hair because it has high molecular weight, and imparts smoothness to hair.
CATION S	STEARALKONIUM CHLORIDE, ISOPROPYL ALCOHOL 司拉氯铵, 异丙醇(有)	Benzyltrimethylstearyl- ammonium chloride (Solid)	CATION S imparts smoothness and elasticity, and an excellent detangling ability to rinsed hair.
CATION LQ	QUATERNIUM-33, BUTYLENE GLYCOL, WATER 季铵盐-33, 丁二醇, 水(有)	N(N'-Lanolin fatty acid amide propyl)N-ethyl-N, N-dimethylammonium ethosulfate (Paste)	CATION LQ imparts long-lasting smoothness and softness to hair. It performs as a conditioning agent when used in shampoos.

■ Formula Examples for Hair Conditioner

Shown below are two examples of hair conditioner formula recommended. However, it is recommended to develop the formulas further in order to satisfy your requirements.

1. Creamy Hair Treatment

	(wt %)
CATION LQ:	4.0
Polyoxyethylene polyoxypropylene cetyl ether phosphate:	0.2
Cetostearyl alcohol:	4.5
TG-C (Glyceryl monostearate, Sanyo Chemical product):	0.5
Glycerin:	3.0
Perfume, coloring agent, etc.:	Proper quantity
Water:	Balance
Total:	100

2. Creamy Hair Conditioner

	(wt %)
ECONOL TM-22:	4.5
Cetostearyl alcohol:	3.5
Glycerin:	2.0
Perfume, coloring agent, etc.:	Proper quantity
Water:	Balance
Total:	100

6. Compounding Ingredients for Cosmetics

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
NEWPOL DDE-10	PEG-1 LAURYL GLYCOL	Dodecanediol ethoxylate (Paste)	NEWPOL DDE-10 is an alkane diol derivative having excellent antibacterial and antifungal properties for use in cosmetics. When this product is mixed with surfactants, the mixture has a thickening property.
PEG Products	See page 11	Polyethylene glycol (Liquid, paste, wax or solid)	PEG products have low toxicity and exhibit mild irritancy. They are easily soluble in water, and compatible with various substances. Because of these features, they are widely used in the cosmetic industry as anticaking agents and ingredients for creams, lotions, hair preparations, etc. See page 11.

7. Emulsifiers for Cosmetics

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
IONET S Products	See page 13	Sorbitan fatty acid ester (Liquid or solid)	IONET S products are nonionic and lipophilic surfactants. They have low toxicity and exhibit low irritancy. They are used as emulsifiers together with hydrophilic surfactants such as IONET T products and EMULMIN products, to produce creamy cosmetics and creamy ointments. IONET S-60V is used for nonfluidic cosmetics, while IONET S-80, IONET S-85 and IONET S-20 are used for fluidic cosmetics. See page 13.
IONET T Products	See page 13	Polyoxyethylene sorbitan monofatty acid ester (Liquid)	IONET T products are ethylene oxide adducts of IONET S products and are more hydrophilic. They are used as emulsifiers together with lipophilic surfactants such as IONET S products, to produce creamy cosmetics and creamy ointments. IONET T-60V is used for nonfluidic cosmetics, while IONET T-80V and IONET T-20C are used for fluidic cosmetics. IONET T-80V and IONET T-20C are used as solubilizing agents for perfumes, refined oils and fats of various kinds. See page 13.
IONET M Products	See page 13	Polyoxyethylene monofatty acid ester (Liquid or solid)	These products have excellent dispersibility and emulsifiability, and low toxicity, suitable for a wide variety of uses in cosmetic applications. Various products with different HLB values are available. See page 13.
IONET D Products	See page 13	Polyoxyethylene difatty acid ester (Liquid or solid)	
NEWPOL PE Products	See page 12	Polyoxyethylene polyoxypropylene glycol (Liquid, paste or solid)	NEWPOL PE products are nonionic surfactants. They have low toxicity and exhibit low irritancy. They produce less foam. See page 12.
TG-C	GLYCERYL STEARATE 甘油硬脂酸酯, (有)	Glyceryl monostearate (Solid)	TG-C is used also as a softener, applicable with anionic, cationic and amphoteric surfactants. It exhibits low irritancy to skin.

8. Gelling Agents for Cosmetics

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
SANFRESH ST-100MC SANFRESH ST-100SP	SODIUM POLYACRYLATE STARCH, WATER 聚丙烯酸钠接枝淀粉, 水 (有)	Starch/acrylic acid graft copolymer sodium salt (Powder)	These products are thickeners for easy to be compatible and light texture.

Performance Chemicals for Pharmaceuticals

1. Tablet Binders

Product Name	Official Compendium	Principal Component (Product Form)	Uses and Features
MACROGOL 4000	Japanese Pharmacopoeia (JP)	Polyethylene glycol 4000 (Wax)	These products enhance tablet processing efficiency. The resulting tablets exhibit excellent mechanical strength and have a good appearance.
MACROGOL 6000	Japanese Pharmacopoeia (JP)	Polyethylene glycol 6000 (Flake or Powder)	

2. Base Materials for Ointments

Product Name	Official Compendium	Principal Component (Product Form)	Uses and Features
MACROGOL 200	Japanese Pharmaceutical Excipients (JPE)	Polyethylene glycol 200 (Liquid)	These products have low toxicity, good affinity to skin, and desirable moisturizing effects. They show low irritancy to skin.
MACROGOL 400	Japanese Pharmacopoeia (JP)	Polyethylene glycol 400 (Liquid)	They are rinsed easily and are not sticky, compatible with and easily dissolved in various chemical substances.
MACROGOL 1500	Japanese Pharmacopoeia (JP)	Polyethylene glycol 1500 (Paste)	Because of these advantages, they are widely used as base materials or solubilizing agents in pharmaceutical preparations such as ointments, tablets and suppositories.
MACROGOL 4000	Japanese Pharmacopoeia (JP)	Polyethylene glycol 4000 (Flake)	
MACROGOL 6000	Japanese Pharmacopoeia (JP)	Polyethylene glycol 6000 (Flake or Powder)	
MACROGOL 20000	Japanese Pharmacopoeia (JP)	Polyethylene glycol 20000 (Flake)	

3. Coating Agents for Tablets

Product Name	Official Compendium	Principal Component (Product Form)	Uses and Features
POLYQUID PA-30	Japanese Pharmaceutical Excipients (JPE)	Copolymer of methacrylic acid and ethyl acrylate (Liquid)	POLYQUID PA-30 is an enteric-soluble coating agent (methacrylic acid copolymer dispersion). It conforms to USP/NF and EP.
POLYQUID PA-30S	Japanese Pharmaceutical Excipients (JPE)	Copolymer of methacrylic acid and ethyl acrylate (Liquid)	POLYQUID PA-30S is an enteric-soluble coating agent (methacrylic acid copolymer dispersion), suitable for coating at low temperatures. Compared to POLYQUID PA-30, its minimum film forming temperature is lower.

4. Germicides (Pharmaceutical Use)

Product Name	Official Compendium	Principal Component (Product Form)	Uses and Features
GEM	Japanese Pharmacopoeia (JP)	Benzalkonium chloride (Liquid)	GEM is a cationic surfactant type germicide, having powerful antibacterial effects on a wide variety of bacteria. It is colorless and its odor is faint.
LEBON 15		Sodium lauryldiaminoethylglycine (Liquid)	These products are effective materials for external disinfectants having a wide range of uses in medical institutions.
LEBON LAG-40		Alkyldiaminoethylglycine hydrochloride (Liquid)	They neither precipitate when brought into contact with organic substances including protein, nor reduce their germicidal activities to significant degrees.

5. Other Products for Pharmaceuticals

Product Name	Official Compendium	Principal Component (Product Form)	Uses and Features
POLYSORBATE 80	Japanese Pharmacopoeia (JP), the United States Pharmacopoeia / National Formulary (USP/NF) and the European Pharmacopoeia (EP)	Polyoxyethylene sorbitan monooleate (Liquid)	POLYSORBATE 80 is a nonionic surfactant, suitable for various pharmaceutical preparations such as a plasticizer of coating agents, and an emulsifier and an emulsion stabilizer for ointments. It does not contain any animal-derived or genetically-modified ingredients.
NEWDET PE-85	Japanese Pharmaceutical Excipients (JPE)	Polyoxyethylene polyoxypropylene glycol (Paste)	NEWDET PE-85 is a nonionic surfactant, suitable for pharmaceutical detergents. It shows high stability and has high detergency.

Performance Chemicals for Agrichemicals

1. Dispersants for Agrichemical Granule Preparations

Product Name	Principal Component (Product Form)	Uses and Features
TOXANON GR-31A	Polycarboxylic acid type anionic surfactant (Liquid)	Dispersants and binders for inorganic carriers such as clay. Finely disperse fillers and improve mechanical strength of resulting granules. TOXANON GR-31A is weak alkaline, while TOXANON GR-30 is neutral. The latter is suitable for agrichemicals that are unstable under alkaline conditions.
TOXANON GR-30	Polycarboxylic acid type anionic surfactant (Liquid)	

Performance Chemicals for Detergents

1. Base Materials for Detergents

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
NAROACTY CL Products		Polyoxyalkylene alkyl ether (Liquid, wax or flake)	These products are suitable to formulate detergents. They have high detergency and are easily biodegradable. See page 11.
SANNONIC Products	See page 11	Polyoxyalkylene alkyl ether (Liquid)	
EMULMIN Products	See page 12	Polyoxyalkylene alkyl ether (Liquid, paste or wax)	EMULMIN products are suitable to formulate detergents. They are easily biodegradable. See page 12.
SEDORAN FF Products		Proprietary nonionic surfactant (Liquid or paste)	SEDORAN FF products are suitable to formulate detergents, used in mechanical cleaning. They have high wetting properties and detergency, and produce less foam. See page 12.
NEWPOL PE Products	See page 12	Polyoxyethylene polyoxypropylene glycol (Liquid, paste or flake)	NEWPOL PE products are suitable to formulate industrial and household detergents. They are effective even in acidic, alkaline, or metallic salt solutions. They have high detergency irrespective of water hardness, and produce less foam. See page 12.
IONET M Products	See page 13	Polyoxyethylene monofatty acid ester (Liquid or solid)	These products are widely used as emulsifiers, dispersants, and leveling agents. Various products from lipophilic to hydrophilic are available. See page 13.
IONET D Products	See page 13	Polyoxyethylene difatty acid ester (Liquid or solid)	
PUREMEEL EP-300S		Polyoxyalkylene alkyl amine (Liquid)	PUREMEEL EP-300S is a laundry detergent base having high detergency for grease. This product has high solubility in water. Even when this product is mixed with water, the change in viscosity is small. The foam washes out easily with water.
SANDET EN	SODIUM LAURETH SULFATE, WATER 月桂醇聚醚硫酸酯钠, 水(有)	Sodium polyoxyethylene(2) lauryl ether sulfate (Liquid)	These products have high detergency and produce a large amount of foam. They are easily biodegradable.
SANDET END	SODIUM C12-15 PARETH SULFATE, WATER C12-15烷醇聚醚硫酸钠, 水(有)	Sodium polyoxyethylene(3) alkyl(12-15) ether sulfate (Liquid)	

2. Germicides (Industrial Use)

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
CATION G-50	BENZALKONIUM CHLORIDE, WATER 苯扎氯铵, 水(有)	Benzalkonium chloride (Liquid)	These products are cationic surfactants for industrial use, having powerful antibacterial effects on a wide variety of bacteria. They cause no primary skin irritation at the concentration normally used.
CATION DDC-50 CATION DDC-80S		Didecyldimethylammonium chloride (Liquid)	
OSMORIN DA-50		Didecyldimethylammonium adipate (Liquid)	
LEBON S	LAURYL DIETHYLENEDIAMINOGLYCINE 月桂基二亚乙二氨基甘氨酸(有)	Sodium alkyldiaminoethylglycine (Liquid)	These products have powerful antibacterial effects on a wide variety of bacteria. They neither precipitate when brought into contact with organic substances including protein, nor reduce their germicidal activities to significant degrees. Compared to the conventional cationic antibacterial agents, they have low toxicity and irritancy.
LEBON T-2		Alkyldiaminoethylglycine hydrochloride (Liquid)	
BG-1		Poly(hexamethylenebiguanidine) (Liquid)	BG-1 is an antibacterial agent for industrial use. It has low toxicity and produces less foam.

3. Additives for Detergents

Product Name	INCI Name (IECIC2015)	Principal Component (Product Form)	Uses and Features
NSA-17		Proprietary nonionic surfactant (Solid)	These products are detergency reinforcers and fluidity improvers for powdered detergents prepared by after-blending. NSA-17 has high detergency reinforcing and scum dispersing effects. NSA-400L exhibits excellent calcium-ion trapping capability, and high pH buffering and soil re-deposition inhibitive abilities.
NSA-400L		Polycarboxylic acid type anionic surfactant (Liquid)	
PROFAN ME-20	PEG-3 COCAMIDE PEG-3 椰油酰胺(有)	Polyoxyethylene(2) coconut fatty acid monoethanolamide (Liquid)	PROFAN ME-20 is used as a foam stabilizer and thickener. It has high detergency and rust preventive properties.

4. Base Materials for Household Fabric Softeners

Product Name	Principal Component (Product Form)	Uses and Features
CATION SF-10	Alkylimidazoline type quaternary ammonium compound (Liquid)	CATION SF-10 is a high concentration type cationic agent. It imparts high softness and antistatic properties.
CATION SF-75PA	Alkylimidazoline type quaternary ammonium compound (Liquid)	CATION SF-75PA is a plant-derived agent. It imparts high softness and water absorbency.

■ Formula Example for Household Fabric Softener

Shown below is an example formula for a household fabric softener. However, it is recommended to develop the formula further in order to satisfy your requirements.

	(wt %)
CATION SF-75PA:	20
Ethylene glycol:	6
NAROACTY CL-200:	2
Na ₂ SO ₄ :	0.8
Water:	Balance
Total:	100

5. Industrial Defoaming Agents

Product Name	Principal Component (Product Form)	Uses and Features
COLORIN 102	Polyoxyalkylene glycol (Liquid)	These products are economical defoaming agents for industrial use. The effect is long-lasting.
COLORIN 104	Proprietary derivative of polyoxyalkylene glycol (Liquid)	
COLORIN 202	Polyoxyalkylene glycol (Liquid)	COLORIN 202 is used as a defoaming agent, particularly suitable for producing amino acids in yeast growth. It controls foam generated in fermentation.

Appendix

1. Typical Properties of PEG Products

Product Name	INCI Name (IECIC2015)	Appearance (20 ± 5°C)	Molecular Weight	Hydroxyl Value	pH *1	Color (APHA)	Acidity	Freezing Point °C
PEG 200	PEG-4, 聚乙二醇-4(有)	Colorless liquid	200	565	6.0	10	0.1	< -35
PEG 300	PEG-6, 聚乙二醇-6(有)		300	375	5.5	10	0.1	< -8
PEG 400	PEG-8, 聚乙二醇-8(有)		400	281	5.5	10	0.1	6
PEG 600	PEG-12, 聚乙二醇-12(有)		600	187	6.0	10	0.1	21
PEG 1000	PEG-20, 聚乙二醇-20(有)	White wax	1,000	113	6.5	10 *2	0.1	37
PEG 1500	PPEG-6, PEG-32, 聚乙二醇-6, 聚乙二醇-32(有)	White paste	550	207	5.5	10 *2	0.1	40
PEG 1540	PEG-32, 聚乙二醇-32(有)	White wax	1,450	79	6.0	10 *2	0.1	45
PEG 2000	PEG-40, 聚乙二醇-40(有)		2,000	56	5.5	10 *2	0.1	51
PEG 4000N	PEG-75, 聚乙二醇-75(有)	White flake	3,100	36	6.5	10 *2	0.1	55
PEG 4000S	PEG-75, 聚乙二醇-75(有)		3,400	33	6.5	10 *2	0.1	56
PEG 4000E			3,800	29	6.5	10 *2	0.1	56
PEG 6000S	PEG-150, 聚乙二醇-150(有)		8,300	14	6.5	10 *2	0.1	59
PEG 6000P	PEG-150, 聚乙二醇-150(有)	White powder	8,600	13	7.0	10 *2	0.1	58
PEG 20000	PEG-400, 聚乙二醇-400(有)	White flake	20,000	5.6	7.0	10 *2	-	60
PEG 20000P	PEG-400, 聚乙二醇-400(有)	White powder	20,000	5.6	7.0	10 *2	-	60

*1 5 wt % aq soln *2 25 wt % aq soln

2. Typical Properties of NAROACTY CL Products

Product Name	Appearance (20 ± 5°C)	pH (1 wt % aq soln)	HLB	Cloud Point °C (2 wt % aq soln)	Freezing Point °C
NAROACTY CL-20	Colorless to pale yellow liquid	6.5	5.7	< 20	18
NAROACTY CL-40		6.5	8.9	< 20	11
NAROACTY CL-50		6.5	10.0	< 20	10
NAROACTY CL-70		6.5	11.7	< 20	-7
NAROACTY CL-85		6.5	12.6	41	2
NAROACTY CL-95		6.5	13.1	54	8
NAROACTY CL-100		6.5	13.3	64	12
NAROACTY CL-120		6.5	14.1	80	22
NAROACTY CL-140		White solid	6.5	14.7	93
NAROACTY CL-160	6.5		15.2	99	36
NAROACTY CL-200	6.5		16.0	> 100	42
NAROACTY CL-400	White flake	6.5	17.8	> 100	52

3. Typical Properties of SANNONIC Products

Product Name	INCI Name (IECIC2015)	Appearance (20 ± 5°C)	pH (1 wt % aq soln)	HLB	Cloud Point °C (2 wt % aq soln)	Pour Point °C
SANNONIC SS-50		Pale yellow liquid	6.5 *1	10.5	< 20	-27
SANNONIC SS-70	C12-14 PARETH-7 C12-14 链烷醇聚醚-7(有)		6.5 *1	12.1	33 *2	0
SANNONIC SS-90	C12-14 PARETH-9 C12-14 链烷醇聚醚-9(有)		6.5 *1	13.2	56 *2	8
SANNONIC SS-120	C12-14 PARETH-12 C12-14 链烷醇聚醚-12(有)	White liquid	6.5 *1	14.5	83 *2	17
SANNONIC SD-50		Colorless to pale yellow liquid	7.0	10.6	< 20	9
SANNONIC FN-80		Pale yellow liquid	6.5	-	34	-23
SANNONIC FN-100			6.5	-	56	-13
SANNONIC FN-140			6.5	-	81	5

*1 5 wt % aq soln

*2 1 wt % aq soln

4. Typical Properties of EMULMIN Products

Product Name	INCI Name (IECIC2015)	Appearance (20 ± 5°C)	pH (1 wt % aq soln)	HLB	Cloud Point °C (2 wt % aq soln)	
EMULMIN 40	CETOLETH-4	Pale yellow liquid	7.0	8.0	< 20	
EMULMIN 50	CETOLETH-5	Straw-colored liquid	6.5	9.0	< 20	
EMULMIN 70		Pale yellow liquid	5.0	10.8	< 20	
EMULMIN 110	CETOLETH-11, 鲸蜡油醇聚醚-11 (无)	Pale yellow liquid to paste	7.0	13.2	78 *	
EMULMIN 140	CETOLETH-14		7.0	14.2	91	
EMULMIN 180	CETOLETH-18	White to pale yellow wax	7.0	15.1	> 100	
EMULMIN 200	CETOLETH-20, 鲸蜡油醇聚醚-20 (有)		7.0	15.5	> 100	
EMULMIN 240	CETOLETH-24, 鲸蜡油醇聚醚-24 (无)		7.0	16.1	> 100	
EMULMIN FL-80		Colorless to pale yellow liquid	7.0	-	52	
EMULMIN FL-100			7.0	-	61	
EMULMIN LS-80	LAURETH-8, 月桂醇聚醚-8 (有)		7.0	12.9	71	
EMULMIN LS-90	LAURETH-9, 月桂醇聚醚-9 (有)		6.5	13.4	82	
EMULMIN NL-70	LAURETH-7, 月桂醇聚醚-7 (有)		6.5	12.4	58 *	
EMULMIN NL-100	LAURETH-10, 月桂醇聚醚-10 (有)		6.5	14.0	90 *	
EMULMIN NL-110	LAURETH-11, 月桂醇聚醚-11 (有)		Pale yellow liquid	6.5	14.4	98 *

* 1 wt % aq soln

5. Typical Properties of SEDORAN FF Products

Product Name	Appearance (20 ± 5°C)	pH (1 wt % aq soln)	Pour Point °C	Cloud Point °C (2 wt % aq soln)
SEDORAN FF-180	Pale yellow liquid	7.0	< 0	31
SEDORAN FF-200		6.0	10	44
SEDORAN FF-210		6.0	10	53

6. Typical Properties of NEWPOL PE Products

Product Name	INCI Name (IECIC2015)	Appearance (20 ± 5°C)	pH (1 wt % aq soln)	Cloud Point °C (1 wt % aq soln)	Foaming Property*1			
					0.1 wt % Aq Soln		1.0 wt % Aq Soln	
					Immediate	After 5 min	Immediate	After 5 min
NEWPOL PE-61	PEG/PPG-5/30 COPOLYMER PEG/PPG-5/30 共聚物 (无)	Colorless to pale yellow liquid	6.0	24	18	0	9	0
NEWPOL PE-62	PEG/PPG-10/30 COPOLYMER PEG/PPG-10/30 共聚物 (有)		6.0	30	21	4	25	5
NEWPOL PE-64	PEG/PPG-25/30 COPOLYMER PEG/PPG-25/30 共聚物 (有)	White paste	6.5	59	28	7	34	10
NEWPOL PE-68	PEG/PPG-160/30 COPOLYMER	White flake	7.0	113	48	12	53	14
NEWPOL PE-71	PEG/PPG-5/35 COPOLYMER	Colorless to pale yellow liquid	6.0	20	8	0	5	0
NEWPOL PE-74	PEG/PPG-30/35 COPOLYMER	White paste	6.0	56	30	7	46	8
NEWPOL PE-75	POLOXAMER215 泊洛沙姆215 (有)		6.0	69	32	13	45	29
NEWPOL PE-78	PEG/PPG-150/35 COPOLYMER	White flake	7.0	110	48	12	55	15
NEWPOL PE-108	PEG/PPG-300/55 COPOLYMER PEG/PPG-300/55 共聚物 (有)		7.0	105	48	12	53	15

*1 Foam height in mm at 20°C measured with Ross-Miles method

7. Typical Properties of IONET S Products and IONET T Products

Product Name	INCI Name (IECIC2015)	Composition	Appearance (20 ± 5°C)	pH (1 wt % aq soln)	HLB
IONET S-20	SORBITAN COCOATE 山梨坦椰油酸酯(有)	Sorbitan monolaurate	Straw-colored liquid	7.0	8.6
IONET S-60V	SORBITAN STEARATE 山梨坦硬脂酸酯(有)	Sorbitan monostearate	Pale yellow granule	8.0	4.7
IONET S-80	SORBITAN OLEATE 山梨坦油酸酯(有)	Sorbitan monooleate	Straw-colored liquid	7.0	4.3
IONET S-85	SORBITAN TRIOLEATE 山梨坦三油酸酯(有)	Sorbitan trioleate		–	1.8
IONET T-20C	PEG-20 SORBITAN COCOATE PEG-20 失水山梨醇椰油酸酯(有)	Polyoxyethylene sorbitan monolaurate	Yellow liquid	–	16.7
IONET T-60V	POLYSORBATE 60 聚山梨醇酯-60(有)	Polyoxyethylene sorbitan monostearate		–	14.9
IONET T-80V	POLYSORBATE 80 聚山梨醇酯-80(有)	Polyoxyethylene sorbitan monooleate		7.0*	15.0

* 5 wt % aq soln

8. Typical Properties of IONET M Products and IONET D Products

Product Name	INCI Name (IECIC2015)	Composition	Appearance (20 ± 5°C)	pH (1 wt % aq soln)	HLB	Cloud Point °C (2 wt % aq soln)
IONET MS-400	PEG-9 STEARATE PEG-9 硬脂酸酯(有)	Polyoxyethylene monostearate	Pale yellow solid	7.0	11.9	< 20
IONET MS-1000	PEG-23 STEARATE PEG-23 硬脂酸酯(有)			6.5	15.7	> 100
IONET MO-200	PEG-5 OLEATE PEG-5 油酸酯(无)	Polyoxyethylene monooleate	Pale straw-colored liquid	7.0	8.4	< 20
IONET MO-400	PEG-9 OLEATE PEG-9 油酸酯(无)		Straw-colored liquid	7.0	11.8	< 20
IONET MO-600	PEG-14 OLEATE PEG-14 油酸酯(无)		7.0	13.7	53	
IONET DL-200	PEG-4 DILAURATE PEG-4 二月桂酸酯(有)	Polyoxyethylene dilaurate	Pale yellow liquid	6.5	6.6	< 20
IONET DS-300	PEG-6 DISTEARATE PEG-6 二硬脂酸酯(有)	Polyoxyethylene distearate	Pale yellow solid	7.0	7.3	< 20
IONET DO-400	PEG-8 DIOLEATE PEG-8 二油酸酯(有)	Polyoxyethylene dioleate	Pale straw-colored liquid	7.0	8.4	< 20
IONET DO-600	PEG-12 DIOLEATE PEG-12 二油酸酯(有)		Brown liquid	6.0	10.4	< 20
IONET DO-1000	PEG-20 DIOLEATE PEG-20 二油酸酯(无)		Pale yellow solid	6.5	12.9	35

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3. Resin Modifiers
4. Antistatic Agents
5. Mold Releasing Agents
6. Printing Ink Binders
7. Compounding Ingredients for Paints and Printing Inks
8. Pigment Dispersants (Surfactant Type)
9. Defoaming Agents
10. Plasticizers for Polyurethane-Based Sealants

2 PERFORMANCE CHEMICALS FOR COSMETICS, PHARMACEUTICALS, AGRICHEMICALS AND DETERGENTS

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3. Foam Stabilizers and Thickeners for Shampoos
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4. Binders for Fiber-Finishing Agents
5. Binders for Fiberglass
6. Curing Agents for Epoxy Resins

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