

# HAIR CARE INGREDIENTS



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# CATIONIC SURFACTANTS

Cationics come in a wide variety of structures which are key to fine-tune both the texture and the performance of conditioners and masks. The length of their alkyl chain can go from C16, C18 up to C22. Their cationic heads go from quaternized (with a superior affinity for damaged hair) to tertiary amidoamine (a quat-free technology with a non-persistent, pH-dependent cationic charge). Their counter ions vary in both size and type, from halides (generally chloride to multi-atoms (sulfated). They're widely used in:

Hair care products such as conditioners, shampoos

• Body wash, liquid soap, etc

• Personal hygiene products like wet wipes

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
LAURTRIMONIUM CHLORIDE	JACATIS-1231	112-00-5	30%; 40%; 50%E	N/A	Strong conditioning agent Superior cationic emulsifier Good disinfecting property Makes textiles and hair soft and silky
CETRIMONIUM CHLORIDE	JACATIS-1631	112-02-7	30%; 50%I/E; 70%E	N/A	Excellent antistatic and softening properties Strong conditioning agent Superior cationic emulsifier Improves wet and dry comb abilities
STEARALKONIUM CHLORIDE	JACATIS-1827	122-19-0	30%; 50%; 80%	1.0-2.5%	Imparts softness and manageability to hair Excellent antistatic properties
STEARTRIMONIUM CHLORIDE	JACATIS-1831	112-03-8	28%; 70%E; 80I	N/A	Good antistatic capability Good softening and shiny effect Excellent bacteriostatic agent
CETYLPYRIDINIUM CHLORIDE	JACATIS-CPC	6004-24-6	98%	0.5-0.9%	Versatile preservative agent Can replace formaldehyde-donors, triclosan Good antistatic capability
CETRIMONIUM BROMIDE	JACATIS-CTAB	57-09-0	70%	1.0-2.5%	Excellent disinfectant and bactericide agent Emulsifier and dispersant for cosmetics Good antistatic capability
DIDECYLDIMONIUM CHLORIDE	JACATIS-DDAC	7173-51-5	40%; 80%	0.3-0.8%	Good water solubility Strong sterilization ability Resistant to oil and dirt hard water Effective at low concentrations
DIOCTYLDIMETHYLAMMONIUM CHLORIDE	JACATIS-ODAC	5538-94-3	80%	1.0-5.0%	For prevention and removal of static Inhibits the growth of disease-causing mechanisms
QUATERNIUM-18	JACATIS-DHT	61789-80-8	75%E/I	3.0-5.0%	Provides excellent softness and substantivity Acts as an anti-static agent and conditioner Improves combability and manageability of hair
DIHYDROGENATED TALLOWAMIDO ETHYL HYDROXYETHYLMONIUM METHOSULFATE	JACATIS-TEP	91995-81-2	90%E; 90%PG	3.0-5.0%	For prevention and removal of static Good biological-degradability Excellent compatibility and dispersion capability
PALMITAMIDOPROPYLTRIMONIUM Chloride	JACATIS-PATC	51277-96-4	30%	0.6-3%	Good conditioning properties Good softener for fabric
STEARAMIDOPROPYLTRIMONIUM CHLORIDE	JACATIS-SATC	N/A	30%	1-10%	<ul> <li>Cationic O/W emulsifier</li> <li>Dilutable in cold water</li> <li>Reduces the fading of hair dyes</li> </ul>
LAURAMIDOPROPYLTRIMONIUM CHLORIDE	JACATIS-LATC	N/A	60%	1-10%	<ul> <li>Compatible with other surfactants</li> <li>Excellent thickening properties</li> <li>Suitable for transparent products</li> </ul>
COCAMIDOPROPYL PG-DIMONIUM CHLORIDE	JACATIS-CPF	N/A	33-37%	0.2-8%	Electrolyte tolerant cationic conditioner Compatible with all surfactants types Suitable for transparent formulations Antimicrobial and preservative boosting effects

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
BEHENTRIMONIUM CHLORIDE	JACATIS-BTAC	17301-53-0	80%I; 70%DPG	1.5-2.5%	Good cleanser and conditioner Acts as a preservative / antistatic agent Excellent wet and dry comb properties
BEHENTRIMONIUM METHOSULFATE	JSCATIS-BTMS	81646-13-1; 241148-21-0	80%I; 25%C	1.5-3.0% 3.0-12.5%	Good antistatic and softening effects Vegetable based, extremely mild Offers gloss/shine enhancement Superior detangling and wet combing abilities
BENZALKONIUM CHLORIDE	JACATIS-BKC	8001-54-5; 61789-71-7	50%; 80%; 98%	0.1-2%	Antimicrobial and anti-static agent Easily soluble in water Resistant to hard water Low toxicity, convenient use, no toxin accumulation
BENZETHONIUM CHLORIDE	JACATIS-BZC	121-54-0	98%	0.1%max	Antiseptic, antimicrobial and anti-infective Low-foaming ingredient Good water solubility at low concentration
CHLORHEXIDINE DIGLUCONATE	JACATIS-CDG	18472-51-0	20%	0.25-1.5%	Broad spectrum bacteriostatic antiseptic A versatile and cost effective preservative Provides high level of antimicrobial activity Effective at low concentrations with safety profile
LAURYLAMINE DIPROPYLENEDIAMINE	JACATIS-LDD	2372-82-9	88%	0.5-1.5%	Bactericide for disinfection, sanitizing Conditioning agent and viscous control agent Active against the widest type of microorganism
DIMETHYL TERTIARY AMINE*	DMA	N/A	12~18DMA; 12&14DMAs; 16&18DMAs	N/A	Organic intermediates

#### **BIOMIMETIC PHOSPHOLIPIDS**

This new series of products are all naturally-derived with broad spectrum antimicrobial activity and good biodegradablity. They're highly substantive to hair and skin, extremely mild, alone or in association with amphoacetate surfactants. Provide cushiony lather to body washes while imparting an "easy-rinse" profile leaving the skin soft and pleasant. They're widely used in creambase toiletries, hair care products, baby care products, intimate hygiene products, moist wipes for personal hygiene, sensitive skin applications, antiperspirants and deodorants, ophthalmic preparation, etc.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
COCAMIDOPROPYL PG-DIMONIUM CHLORIDE PHOSPHATE	JABIO-PTC	83682-78-4	40-43%	0.6-12%	Repairs damaged skin and hair Excellent foamer and cleanser Suitable for non-silicone formulations Non-irritating to skin and eyes Utmost in safety
LINOLEAMIDOPROPYL PG-DIMONIUM CHLORIDE PHOSPHATE	JABIO-EFA	N/A	30-33%	1.0-10%	Non-greasy emollient Outstanding hair conditioning ability Non-toxic and non-irritating Highly effective skin softener Potential topical skin delivery of linoleic acid
MYRISTAMIDOPROPYL PG-DIMONIUM CHLORIDE PHOSPHATE	JABIO-PTM	N/A	41-43%	0.6-10%	Excellent synergism function Good hair conditioning effect Highly effective skin softener Mild cleansing and non-irritating to mucosa
STEARAMIDOPROPYL PG-DIMONIUM Chloride phosphate	JABIO-SPC	N/A	30-33%	0.6-10%	Mild cleanser and non-irritating to mucosa Highly effective skin softener Excellent emulsifying properties Eliminates the tacky/greasy feel of other ingredients
SODIUM COCAMIDOPROPYL PG-DIMONIUM CHLORIDE PHOSPHATE	JABIO-SPTC	N/A	39-42%	0.6-10%	Coexists with anions in the formula Excellent conditioning effect on clothes Improves softness

Remark: In the column of Active, C stands for cetearyl alcohol; E stands for ethanol; I stands for Isopropanol; PG stands for Propylene Glycol; DPG stands for Dipropylene glycol.

# ANIONIC SURFACTANTS

Anionics represent, by volume, the most important group of surfactants used in cleaning products. The negative charge on their hydrophilic end helps the surfactant molecules lift and suspend soils in micelles. Anionic surfactants can be produced from a range of raw fats and oils, including soybean, palm, tallow, and coconut. This has led to the development of milder anionic surfactants, which reduce skin irritation and palm oil consumption while improving ecological sustainability. They're widely used in hand sanitizer, body wash, shampor, cleanser, baby care, etc. Amino Acid Series Sulfate-free and very mild to the skin and eyes. Possess high biodegradability, low toxicity, excellent emulsifying, detergency properties and form fine lather. Also resistant to hard water.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
SODIUM LAUROYL SARCOSINATE	JAMINO-LSS	137-16-6	95%; 30%	1.5-36%	Excellent foam booster and solubilizer — Ultra mild to skin and hair
SODIUM COCOYL SARCOSINATE	JAMINO-CSS	61791-59-1	30%	1.2-19.5%	Good compatibility with antibacterial effect
SODIUM COCOYL GLYCINATE	JAMINO-CYS	90387-74-9	95%	3-40%	Improves rinsability Creamy and resilient foam Imparts a pleasant fresh feel on the skin
POTASSIUM COCOYL GLYCINATE	JAMINO-CGP	301341-58-2	30%	4.2-33%	Excellent foam booster and solubilizer Mild and hypoallergenic Excellent cleaner even in hard water Leaves skin with smooth and fresh after-feel
SODIUM LAUROYL GLUTAMATE	JAMINO-LGS	29923-31-7	30%	0.5-55%	Outstanding foamability No-irritation, no-hypersusceptibility Silky and moisture after-feeling Resistant to hard-water
SODIUM COCOYL GLUTAMATE	JAMINO-CUS	68187-32-6	30%	2.5-30%	Excellent foam boosters and solubilizers Mild, hypoallergenic, and non-comedogenic Excellent cleanser even in hard water Leaves a soft and moisturized feeling on the skin

Taurine Series Mild cleansers for developing a creamy lather during application. Provide a "clean-rinse" sensory profile upon rinsing, imparting a soft and clean after-feel. Ideal for facial washes, men shower gels and sulfate-free shampoos.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
SODIUM METHYL LAUROYL TAURATE	JAMINO-SMLT	4337-75-1	95%	0.5-5%	Foam booster with creamy and rich foam Resistant to hard water
SODIUM METHYL COCOYL TAURATE	JAMINO-SMCT	12765-39-8	95%	5-30%	Good cleaning and degreasing properties Marvelous mildness and softness

Sodium Isethionate Series Commonly known as Baby Foam due to its exceptional mildness. Comprised of a type of sulphonic acid called Isethionic Acid as well as the fatty acid – or sodium salt ester. It's a traditional substitute for sodium salts that are derived from animals, namely sheep and cattle.

				Active	Dosage	Performance
SI	ODIUM COCOYL ISETHIONATE	JANION-SCI	58969-27-0; 61789-32-0	84-86%	2-36%	Silky, soft, rich and slippery foam Excellent skin improvement performance Resistant to hard water Sulfate-free and biodegradable
s	ODIUM LAUROYL ISETHIONATE	JANION-SLI	7381-01-3	78-83%	2-50%	High-foaming property Dense and creamy lather Resistant to hard water Sulfate-free and biodegradable

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
SODIUM LAURYL SULFATE	JANION-SLS	151-21-3; 68585-47-7;	93%; 95%	2.5-87	Rich and longstanding foam Non-toxic and biodegradable Excellent decontamination ability Excellent emulsification property
SYNDET SOAP BASE (CONTAINS SCI)	JANION-SSB	N/A	50%; 60%	N/A	Mild and non-irritating Weakly acidic

# Amphoteric Surfactants

Amphoterics have been used by formulators for several purposes: mitigate the irritancy of the main anionic surfactant, generally sodium laureth sulfate (SLES); boost foam properties; help thicken the surfactant chassis in a cheap way, as their synergy with SLES leads to a highly salt-responsive state called "elongated" micelles. They're widey used in:

Cleansing products for hair and body

• Personal hygiene products like hand sanitizers

• Home care products like detergents

• Amphoacetate series also can be used in shampoo for babies



Amphoacetate Series The distinctive features are their improved mildness and ability to mollify the irritation potential of other surfactants, in particular anionics sulfates. They are known to show some level of conditioning of hair and skin by themselves, in particular in depositing insoluble soothing actives like oils, to the skin and hair. They come in two different versions consisting in mono- or di-acetates, di-acetates being notably higher in solids, implying optimum transportation and use of water, for a better sustainability profile.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance	
SODIUM LAUROAMPHOACETATE	JAMPHO-LAI	66161-62-4; 68608-66-2; 156028-14-7	30%	0.9-16.5%	Mild cleanser and emulsifier Biodegradable and naturally-derived Compatible with all surfactant class	
SODIUM COCOAMPHOACETATE	JAMPHO-CAI	68334-21-4; 68608-65-1	30%	1.65-37%	Excellent foamability and foam stability Good conditioner and counter-irritants	
DISODIUM LAUROAMPHODIACETATE	JAMPHO-LAD	14350-97-1	30%	0.27-7.5%	Compatible with all surfactant class Counter-irritants and viscosity modifiers	
DISODIUM COCOAMPHODIACETATE	JAMPHO-CAD	68650-39-5	30%	0.5-40%	Mild cleanser, good foaming performance High lathering characteristics Resistant to hard water	

Betaine Series Betaines have been the standard amphoteric surfactant for over 30 years. They come in different versions, amidopropyl functionalized or not, and can be based on alkyl chains of various lengths. Cost-efficient, they are used as thickening and foam boosting agents. Inherently milder than anionic sulfates, they can help mollify their irritation to skin and hair.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
COCAMIDOPROPYL BETAINE	ЈАМРНО-САВ	61789-40-0; 70851-07-9	35%; 45%	3-30%	Readily biodegradable Stable over a broad pH range — Good compatibility and foamability
LAURAMIDOPROPYL BETAINE	JAMPHO-LAB	4292-10-8; 86438-78-0	35%	3.9-25%	Antistatic and bactericidal Good softener, conditioner and thickener
COCAMIDOPROPYL HYDROXYSULTAINE	JAMPHO-CHSB	68139-30-0; 70851-08-0	35%; 50%	0.3-15.7%	Readily biodegradable Resistant to hard-water Foam booster and stabilizer
LAURAMIDOPROPYL HYDROXYSULTAINE	JAMPHO-LHSB	N/A	35%	3-30%	<ul> <li>Stable over a broad pH range Antistatic and bactericidal Good compatibility with all surfactant class Good conditioning and counter-irritants effects</li> </ul>
LAURYL BETAINE	JAMPHO-LB	683-10-3	30%; 35%; 40%	0.3-16%	Stable over a broad pH range Foam Enhancer and stabilizer Good conditioner and cleanser Good compatibility with other surfactants
CETYL BETAINE	ЈАМРНО-СВ	693-33-4	30%	2-10%	Antistatic and steadily biodegradable Compatible with all surfactant class Increased foam density for creamy lather Viscosity builder and foam stabilizer
LAURYL HYDROXYSULTAINE	JAMPHO-LHS	13197-76-7	35%	3-30%	Resistant to hard water Compatible with all surfactant types Excellent foamability and thickening ability Good softener and conditioner Antistatic and bactericidal
N,N-DIMETHYL-1,3-PROPANEDIAMINE*	DMAPA	109-55-7	99%	N/A	Organic intermediate

Amine Oxide Series Provide excellent viscosity building, foam boosting and foam stability properties in a wide spectrum of formulations. These grades are especially effective when formulated with alkyl sulfates or alpha olefin sulfonates.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
COCAMIDOPROPYLAMINE OXIDE	ЈАМРНО-САО	68155-09-9	30%; 35%	0.2-7%	Foam enhancer and stabilizer Anti-irritant and antistatic Mild to skin and eyes — Compatible with all surfactant types
LAURAMIDOPROPYLAMINE OXIDE	JAMPHO-LAO	61792-31-2	30%; 35%	2-15%	Compatible with all surfactant types Reduces static electricity Excellent thickening property Good conditioning agent
LAURAMINE OXIDE	JAMPHO-LO	1643-20-5; 308062-28-4	30%; 35%	0.25-8.5%	Mild cleanser and emulsifier Foam enhancer, stabilizer, wetting agent Compatible with all surfactant types High-foaming property
MYRISTAMINE OXIDE	ЈАМРНО-МО	3332-27-2	25%	0.39-15%	Acid and alkali stable Foam booster and stabilizer Mild cleanser and emulsifier Wetting agent and conditioner

### NONIONIC SURFACTANTS

Nonionics represent a major component material for applications ranging from personal care to a wide range of industrial uses. Structurally, nonionic surfactants combine uncharged hydrophilic and hydrophobic group that make them effective in wetting and spreading and as emulsifiers and foaming agents. Concurrently, they have minimal skin and eye irritation effects and exhibit a wide range of critical secondary performance properties. They're widely used in shampoos, cleansers, hand sanitizers, detergents, cosmetics, etc.

#### Alkyl Glycoside Series APGs are nonionic high-performance surfactants made from renewable raw materials. Biodegradable and plant-derived from sugars. They're usually glucose derivatives and fatty alcohols. It offers excellent detergency, high alkali stability, and superly low ecotoxicity.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
CAPRYLYL/CAPRYL GLUCOSIDE	JANONIS-APG0810	68515-73-1	50%; 60%; 70%	2.4-20%	
COCO GLUCOSIDE	JANONIS-APG0818	110615-47-9	50%	3.5-50%	Readily biodegradable Ethylene oxide-free and sulphate-free Natural foam booster and green cleanser Excellent alkaline and electrolyte resistance Non-irritating for the skin Good hydrotropic and solubilizing properties Significantly reduces drying/potential damage
DECYL GLUCOSIDE	JANONIS-APG2000	58846-77-8; 68515-73-1; 141464-42-8	50%	18.2-35.4%	
LAURYL GLUCOSIDE	JANONIS-APG1200	27836-64-2; 110615-47-9	50%	3-30%	

Alkanolamide Series Highly viscosity builders, foam boosters, and stabilizers for anionic personal wash formulations.

INCI Name	Product Code	CAS No.	Spec	Dosage	Performance
COCAMIDE DEA	JANONIS-CDEA	68603-42-9	1:1 1:1.5 1:2	N/A	Perfect thickening and foaming abilities Foam stablizer and decontaminater — Good solubilizing and emulsifying abilities Resistant to hard water Excellent wetting and antistatic properties
LAURAMIDE DEA	JANONIS-LDEA	120-40-1	/	N/A	
COCAMIDE MEA	JANONIS-CMEA	68140-00-1; 69227-24-3	with glycerol without glycerol	0.01-16%	Derived from renewable vegetable oils Excellent viscosity builder and foam booster Perfect decontamination and biodegradability Alternatives to Cocamide DEA
COCAMIDE METHYL MEA	JANONIS-CMMEA	866889-75-0	1:1H 1:1L	1-6%	
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**Dimethylamine Series** Provides excellent conditioning and combability when formulated in all kinds of conditioning applications. Ideal for moderate to intensive care and a good alternative to quaternary surfactants as it has a spectrum very close to that of CTAC. Possibility to blend with CTAC / BTAC.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance	
COCAMIDOPROPYL DIMETHYLAMINE	JANONIS-PKOC	68140-01-2	97%	0.1-1.5%	Derived from the fatty acids of vegetables	
LAURAMIDOPROPYL DIMETHYLAMINE	JANONIS-PKOL	3179-80-4; 1002119-56-3	97%	1.5-2.5%	Improves wet and dry combabilities Reduces static fly-away Won't depress the foam properties of anionics	
STEARAMIDOPROPYL DIMETHYLAMINE	JANONIS-PKOS	7651-02-7; 20182-63-2	97%	1.5-13.2%	<ul> <li>Acts as a cationic emulsifier, viscosity modifier and conditioning agent</li> </ul>	
PLANT POLYENE PHENOL POLYOXYETHYLENE ETHER	JANONIS-PPPE	N/A	97%	1-5%	Completely degradable and naturally-derived Strong detergent and emulsifying abilities Resistant to hard water Low foam performance	

#### HIGH-MOLECULAR COMPOUNDS

**Cationic Polymers** Can be strongly attracted to anionic surfaces, such as damaged keratinic substrates: human hair, once damaged through natural or artificial weathering, as well as scalp and skin, once stripped from surface lipids, are measurably anionic. They bind to damaged sites and can provide lasting benefits even by themselves, by neutralizing electrostatic charges that cause fly-away and frizziness in hair. In shampoos and body washes, they also aid in the deposition of soothing, nourishing or treating ingredients, such as oils or anti-dandruff actives, through a well-documented phenomenon called flocculation.

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
POLYQUATERNIUM-4	JAPOLY-PQ4	92183-41-0	91%	0.1-2.2%	Improves wet combability Affinitive to hair and skin Excellent curling retention Makes skin and hair moisturizing and silky
POLYQUATERNIUM-6	JAPOLY-PQ6	26062-79-3	40%/C-M	1-1.5%	Makes skin soft and lustre Good antistatic capability Improves wet and dry comb ability Enhances and stabilizes foam
POLYQUATERNIUM-7	JAPOLY-PQ7	26590-05-6	10%/C-M	1-5%	Affinitive to hair and skin Excellent curling retention Improves dry and wet combabilities Makes hair moisturizing and silky
POLYQUATERNIUM-10	JAPOLY-PQ10	53568-66-4; 81859-24-7	91%	3.5-5%	Repairs damaged hair Good conditioning agent Enhances dry and wet hair combing abilities Enables clear products and change rheology
POLYQUATERNIUM-11	JAPOLY-PQ11	53633-54-8	20%	3-9%	Stabilizes the foam Provides thermal/mechanical protection Improves wet comb and antistatic ability Water soluble and enables clear products Provides holding effect and film forming properties
POLYQUATERNIUM-22	JAPOLY-PQ22	53694-17-0	40%	1-3%	Excellent conditioning effect Improves dry and wet combability Good stiffness and humidity resistance properties
POLYQUATERNIUM-28	JAPOLY-PQ28	131954-48-8	20%	0.5-5%	Good film forming property Antistatic and antibacterial property Emulsifying agent and dispersing agent
POLYQUATERNIUM-39	JAPOLY-PQ39	25136-75-8	10%	1-6%	Improves dry and wet combability Compatible with all kinds of surfactants Good conditioning in a broad pH range Imparts hair and skin lubricous and moist feeling
POLYQUATERNIUM-51	JAPOLY-PQ51	125275-25-4	5%	1-3%	Super moisturizing Imparts the skin smooth and delicate Alleviates the irritation of surfactants Enhances skin absorption of actives
GUAR HYDROXYPROPYLTRIMONIUM CHLORIDE	JAPOLY-GUAR	65497-29-2	13S; 14S	1.2-7%	Improves dry and wet combability Naturally-derived and low-irritating Good suspending and thickening effect Good compatibility with all types of emulsifier Good anti-static and film-forming performance
DIALLYLDIMETHYLAMMONIUM CHLRIDE	JAPOLY-DADMAC	7398-69-8	60%; 65%	N/A	Monomer of polyquaterniums

#### Other products

	Other products					
	INCI Name	Product Code	CAS No.	Active	Dosage	Performance
	DIMETHICONE	JAPOLY-D210	107-52-8; 141-62-8	99%	1.0-70.0%	Good dispersibility No residue/sediment, no stimulation Antistatic performance High safety performance
	LANOLIN	JAPOLY-LA	8006-54-0	100%	2-59%	Naturally-derived from wool Good emulsifying properties Moisturizes skin and lock water
1	PEG-75 LANOLIN	JAPOLY-75LA	8039-09-6; 61790-81-6	100%	2.7-15%	Naturally-derived from wool Usable in water-rich environment Good emulsifying and solubilising properties Excellent emollient
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**Carbomer Series** Carbomers are synthetic high-molecular weight polymers of acrylic acid. They may be homopolymers of acrylic acid, or crosslinked with an allyl ether of pentaerythritol, allyl ether of sucrose, or allyl ether of propylene. In a water solution at neutral pH, it is an anionic polymer, i.e. many of the side chains of Carbomer will lose their protons and acquire a negative charge. This makes Carbomers polyelectrolytes, with the ability to absorb and retain water and swell to many times their original volume. (CAS NO.: 9003-01-4)

INCI Name	Product Code	Dosage	Performance
CARBOMER 934	JAPOLY-CBM934	0.2-1.0%	Ease of dispersion Excellent stability at high viscosity Resists temperature effect to viscosity Outstanding short flow (non-drip) property
CARBOMER 940	JAPOLY-CBM940	0.2-1.0%	Resists temperature effect to viscosity Outstanding short flow (non-drip) property High clarity performance Efficient thickening, suspending and stabilizingability
CARBOMER 980	JAPOLY-CBM980	0.2-1.0%	Resists temperature effect to viscosity Outstanding short flow (non-drip) property Good suspending, thickening and high clarity performance
CARBOMER 981	JAPOLY-CBM981	0.1-1.5%	High clarity Outstanding long flow property Resist temperature effect to viscosity
CARBOMER U-20	JAPOLY-CBU20	0.2-1.5%	Excellent electrolyte tolerance Compatibility with all kinds of surfactants Efficient thickening, suspending, stabilizing and high clarity ability Low dispersion viscosity, rapid wetting and swelling time
CARBOMER 956	JAPOLY-CBM956	0.2-1.0%	Efficient co-binder at low usage levels Improves long-term stability of peroxide gel systems Suspending agent for non soluble actives or excipients Compatible with commonly used formulation ingredients
CARBOMER 951	JAPOLY-CBM951	0.2-1.0%	Compatible with ethanol Improves long term stability Efficient thickeners at low usage levels Suspending agent for non soluble actives or excipients



#### Anti-dandruff & Anti-Hair Loss Agents

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
CLIMBAZOLE	JACARE-CLB	38083-17-9	99%	0.3-0.5%	Good stability to metal ion Effectually control the dandruff-forming Stable to light, heat, acidic or slightly alkali environment Easily dissolved in alcohols and nonionic surfactants
PIROCTONE OLAMINE	JACARE-OCT	68890-66-4	99%	0.1-0.8%	Anti-dandruff agent Bacteriostatic and fungicidal Specially working against Pityrosporum ovale
ZINC PYRITHIONE	JACARE-ZPT	13463-41-7	50%; 98%	0.5-2%	Treats fungal or bacterial infections of the skin and hair Treats and prevents itching, flaking, and scaling of the scalp caused by dandruff or seborrhea
PYRROLIDINYL DIAMINOPYRIMIDINE OXIDE	JACARE-PDO	55921-65-8	99%	0.5-5.0%	Recovers weak follicle cells Increases the volume of hair Works directly on hair root for a healthy scalp and hair
DIAMINOPYRIMIDINE OXIDE	JACARE-DPO	74638-76-9	98%	0.5-1.5%	Suppresses hair loss Rejuvenates the hair roots for hair growth Increases the volume of hair
BIOTIN	JACARE-DBT	58-85-5	97.5-102%	3-4.4%	Anti-wrinkle effect Prevents early hair loss Improves the natural resistance of skin Improves the flexibility and structure of nails

#### Preservatives & Antioxidants

INCI Name	Product Code	CAS No.	Active	Dosage	Performance
METHYLISOTHIAZOLINONE	JAKILL-MIT	2682-20-4	10%; 20%; 50%; 70%	0.05-0.1%	Good compatibility Broad-spectrum antibacterial activity Biodegradable, low toxic, no residue
METHYLCHLOROISOTHIAZOLINONE/ METHYLISOTHIAZOLINONE	JAKILL-KATHON	26172-55-4, 2682-20-4	1.5%	0.05-0.1%	Inhibits bacteria and fungi Water-based preservative Good compatibility with various surfactants
DMDM HYDANTOIN	JAKILL-DMDMH	6440-58-0	55%	0.1-0.6%	Good compatibility Inhibits bacteria and fungi Broad-spectrum antibacterial activity



## NURTURING BEAUTY AND HEALTH

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