

Kojic Dipalmitate **Whitening Formulation Examples**

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Kojic Acid Dipalmitate Skin Lightening Lotion

FL-KAD-00101

Ingredients	INCI	[wt.%]	Supplier
A			
1 Tegosoft TN2	C12-15 Alkyl Benzoate	3.00	Evonik
2 Crodamol GTCC	Caprylic/Capric Triglyceride	2.00	Croda, Inc.
3 Tego Alkanol 16	Cetyl alcohol	2.00	Evonik
4 Lanette O	Stearyl alcohol	3.00	Cognis GmbH
5 ABIL® 350	Dimethicone	1.00	Evonik Goldschmidt GmbH
6 RetiSTAR	Caprylic/Capric triglyceride (and) Sodium Ascorbate (and) Tocopherol (and) Retinol	2.0	BASF
7 Emulsifying wax	Emulsifying wax	0.50	
8 Polysorbate 60	Polysorbate 60	0.55	
9 Hexylresorcinol	Hexylresorcinol	1.00	
11 MC-KAD	Kojic dipalmitate	5.00	M.C.Biotec
12 OMEGA 3 ceramide	Linseed Oil/ Palm Oil	0.10	Solabia
13 Salicylic acid	Aminopropanediol Esters	2.00	M.C.Biotec
14 BHT	Salicylic acid	0.10	M.C.Biotec
B			
15 Water	BHT	55.50	
16 Glycerin	Aqua	1.00	MERCK
17 STRUCTURE® Solance	Glycerin	2.00	AkzoNobel Surface Company
18 Hydrojel CGKC	Potato Starch Modified	1.00	KCI
19 Hydroxyethylcellulose	Glycerin and glyceryl acrylate/ acrylic acid copolymer and propylene glycol	0.80	Hercules-Aqualon
20 EDTA 2Na	Hydroxyethylcellulose(and) sodium acetate (and) water	0.04	
21 Triethanolamine	EDTA 2Na	0.50	
C			
22 Water	Triethanolamine	6.00	
23 TRANSCUTOL CG	Water	5.00	Gattefosse
24 Butane-1,3-diol	Ethoxydiglycol	4.00	Kyowa Hakko USA
25 Glycerin, Propylene Glycol, Cucumis sativus(Cucumber) fruit extract, Arnica montana	Butylene glycol	1.00	
Flower extract, Anacyclus pyrethrum root extract	Glycerin, Propylene Glycol, Cucumis sativus(Cucumber) fruit extract, Arnica montana		
26 Green tea extract	Flower extract, Anacyclus pyrethrum root extract	0.15	
27 Dipotassium glycyrrhizate	Green tea extract	0.01	
D			
28 Diocide	Dipotassium glycyrrhizate	0.75	Centerchem Inc.
Total		100.00	

Procedure:

1. Separately heat Phase A and Phase B to 80°C
2. Add Phase B to A with stirring, followed by Phase C. Cool
3. At 40°C add Phase C with stirring, cool.

M.C. Biotec hopes that the technical information and suggestions for use contained herein will be of interest to you, but they are not to be construed as warranties or inducements to infringe any particular patent.

O/W Kojic Dipalmitate Whitening Facial Cream

FC-KAD-00101

	Ingredients	INCI	[wt.%]	Supplier
	A			
1	Tego® Care 165	Glyceryl Stearate; PEG-100 Stearate	6.00	Evonik-Goldschmidt
2	Polysorbate 60	Polysorbate 60	0.80	
3	Arlacel™ P135	PEG-30 Dipolyhydroxystearate	0.50	Uniqema
4	Sophim MC-30	Hydrogenated Polyisobutene	8.00	Trik
5	Solaveil™ CT-200	Titanium Dioxide; Triethylhexanoin; Isohexadecane; Aluminium Stearate; Alumina; Polyhydroxystearic Acid	10.00	Croda
6	MC-KAD	Kojic Dipalmitate	2.50	M.C.Biotec
7	Cetearyl Alcohol	Cetearyl Alcohol	1.45	
8	Dow Corning® 345 Fluid	Cyclopentasiloxane	5.00	Dow Corning
9	Abil® 350	Dimethicone	1.00	Evonik-Goldschmidt
	B			
6	Water	Aqua	51.35	
7	Panthenol Allantoin	Panthenol Allantoin	0.10	AKEMA srl
8	Glycerin	Glycerin	3.00	MERCK
9	KELTROL CG-SFT	Xanthan Gum	0.20	KELCO
10	Disodium EDTA	Disodium EDTA	0.05	AKZO
	C			
11	Water	Aqua	5.00	
12	VC-PMG	Magnesium Ascorbyl Phosphate	1.00	M.C.Biotec
13	ARLASOLVE DMI	Dimethyl isosorbide	2.00	Uniqema
14	Euxyl PE9010	Phenoxyethanol, Ethylhexylglycerin	0.80	Schulke & Mayr
	D			
15	Sunpmma S	Polymethyl Methacrylate	0.80	Sunjin chemical
16	Glabridin-40	Glycyrrhiza Glabra (licorice) root extract	0.20	M.C.Biotec
17	Myritol® 880	Tricaprylin	0.20	Cognis
18	Butylated hydroxytoluene	BHT	0.05	Eastman
	Total		100.00	

Procedure:

1. Add Panthenol allantoin in Phase B to water and heat to 40°C. Mixed glycerin and xanthan gum well and add to above warm water and continue to stir for 30minutes.
2. Separately heat Phase A (except Solaveil™ CT-200 and DC 345 fluid) and Phase B to 75-80°C.
3. Add Solaveil CT-200 to A when all ingredients are already melted.
4. Add Phase A to B with moderate stirring (approx. 200rpm), followed by adding DC 345 fluid. Homogenize for 1.5 minutes. Cool down to 45°C with slowly stirring.
5. At 45°C add Phase C to above "4" with stirring, followed by Phase D, cool to room temperature.

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KAD Whitening Anhydrous Cream

FC-KAD-00102

Ingredients	INCI	[wt.%]	Supplier
A			
1 MC-KAD	Kojic dipalmitate	4.00	M.C.Biotec
2 Finsolv TN	C12-15 Alkyl Benzoate	15.00	Finetex
3 C12-15 Alkyl Ethylhexanoate	C12-15 Alkyl Ethylhexanoate	7.50	Phoenix Chemical, Inc.
4 BENTONE GEL TN V	C12-15 Alkyl Benzoate, Stearalkonium Hectorite, Propylene Carbonate	12.00	ELEMENTIS Specialties
5 Isopropyl myristate	Isopropyl myristate	15.00	M.C.Biotec
dl-Alpha Tocopherol Acetate	Tocopherol Acetate	0.10	M.C.Biotec Inc.
RonaCare® Bisabolol	Bisabolol	0.20	Merck KGaA
B			
Cabosil M-5 (fumed silicas)	Fumed Silica	7.50	Cabot Corporation
Micro titanium dioxide 95+%	Titanium dioxide	2.50	Tayca Corporation
C			
Neo Heliopan BB	Benzophenone-3	2.70	Symrise
7 Neo Heliopan AV	Octyl methoxycinnamate	2.00	Symrise
8 Alcolac® Z-3	Hydroxylated Lecithin	3.00	ALC
9 Mineral Oil	Mineral Oil	7.50	Exxon Mobil Lubricants and Petroleum Specialties
D			
S D Alcohol 39C-200	SD Alcohol 39-C	15.00	Grain Processing Corporation
Fragrance	Parfume	0.50	
Total		100.00	

Procedure:

Combine Part A and heat to 70-75°C with a jacketed kettle and add a homo mill. Slowly add, with high shear agitation, Part B. Mill and cool to 45-50°C. Add, with milling, Part C. Cool with milling to 25-30°C. Add, with mixing, Part D. Packed immediately.

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