

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 Aminopropanediol Esters	0.10 Solabia
13	Salicylic acid	Salicylic acid	2.00 M.C.Biotec
14	BHT	BHT	0.10 M.C.Biotec
B			
15	Water	Aqua	55.50
16	Glycerin	Glycerin	1.00 MERCK
17	STRUCTURE® Solance	Potato Starch Modified	2.00 AkzoNobel Surface Company
18	Hydrojel CGKC	Glycerin and glyceryl acrylate/ acrylic acid copolymer and propylene glycol	1.00 KCI
19	Hydroxyethylcellulose	Hydroxyethylcellulose(and) sodium acetate (and) water	0.80 Hercules-Aqualon
20	EDTA 2Na	EDTA 2Na	0.04
21	Triethanolamine	Triethanolamine	0.50
C			
22	Water	Water	6.00
23	TRANSCUTOL CG	Ethoxydiglycol	5.00 Gattefosse
24	Butane-1,3-diol	Butylene glycol	4.00 Kyowa Hakko USA
25	Glycerin, Propylene Glycol, Cucumis sativus(Cucumber) fruit extract, Arnica montana Flower extract, Anacyclus	Glycerin, Propylene Glycol, Cucumis sativus(Cucumber) fruit extract, Arnica montana Flower extract, Anacyclus	1.00

	pyrethrum root extract	pyrethrum root extract		
26	Green tea extract	Green tea extract	0.15	
27	Dipotassium glycyrrhizate	Dipotassium glycyrrhizate	0.01	
	D			
28	Diocide	Caprylyl Glycol, Phenoxyethanol, Hexylene Glycol	0.75	Centerchem Inc.
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	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	Clyceryl Stearate; PEG-100 Stearate	6.00	Evonik-Goldschmidt
2 Polysorbate 60	Polysorbate 60	0.80	
3 Arlachel™ 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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