

Dermawhite[™] WF

New: Including new results with soap bars



- 1 | Skin lightening cosmetics
- 2 | The white flowers
- 3 | In vitro tests
- 4 | In vivo tests
- **5** | **Product characteristics**
- 6 | Example formulations



Whiteness at a high price



Over-promising products containing partly questionable ingredients such as α-hydroquinone, steroids and mercury compounds.



Need for **Safe and affordable** cosmetic ingredients

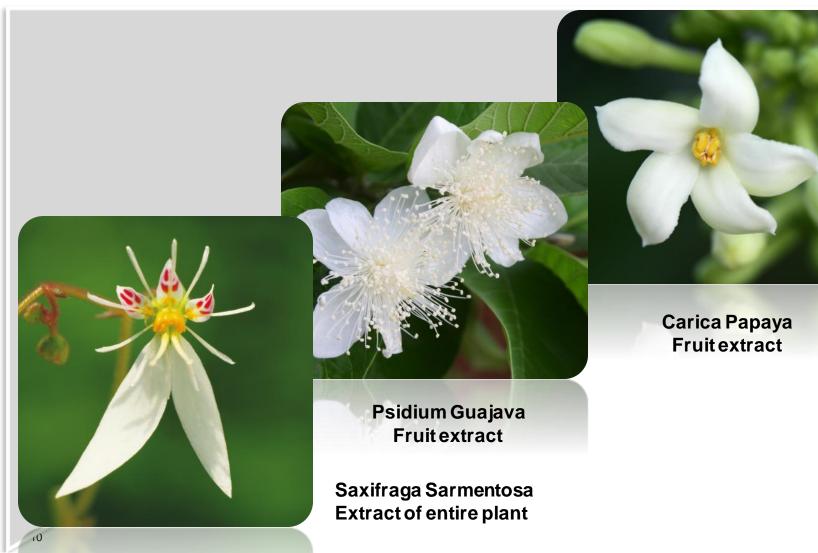


- 1 | Skin lightening cosmetics
- 2 | The white flowers
- 3 | In vitro tests
- 4 | In vivo tests
- **5** | **Product characteristics**
- 6 | Example formulations



Dermawhite[™] **WF** Three white flowers for white skin





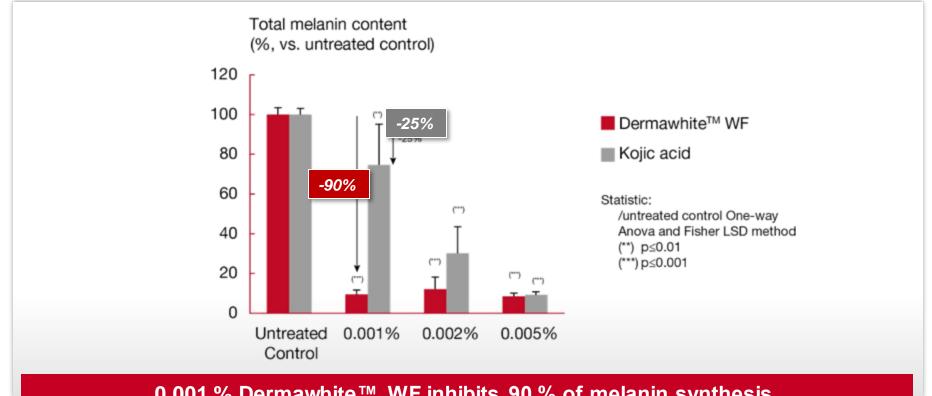


- 1 | Skin lightening cosmetics
- 2 | The white flowers
- 3 | In vitro tests
- 4 | In vivo tests
- **5** | **Product characteristics**
- 6 | Example formulations



Dermawhite[™] **WF** Melanin synthesis (*in vitro*)





0.001 % Dermawhite[™] WF inhibits 90 % of melanin synthesis. Dermawhite[™] WF is more than 3 times more effective than kojic acid.

B16 melanocytes; 72 hrs incubation; measurement of total melanin via optical density at 475 nm

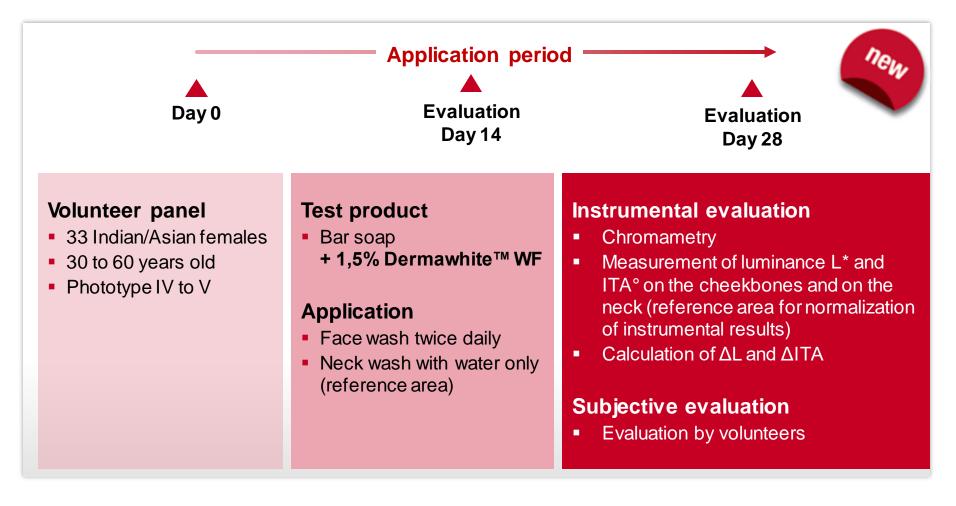


- 1 | Skin lightening cosmetics
- 2 | The white flowers
- 3 | In vitro tests
- 4 | In vivo tests
- **5** | **Product characteristics**
- 6 | Example formulations



Dermawhite[™] **WF** Clinical study with soap bar – Protocol





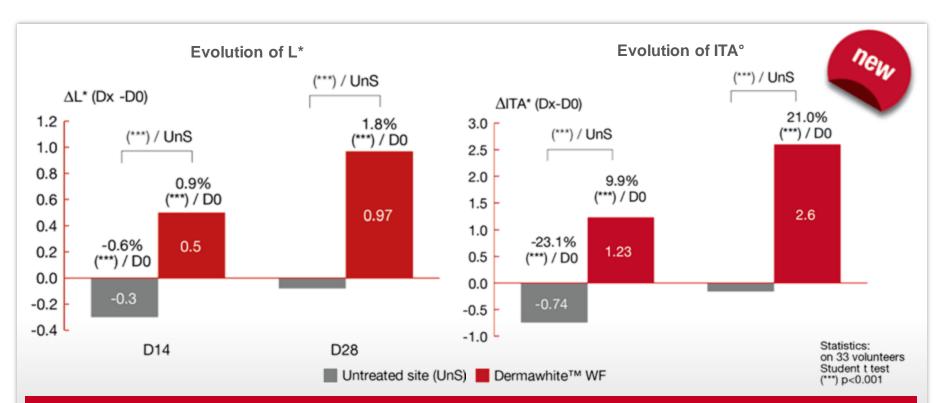
Dermawhite™ WF Clinical study with soap bar – Test formulation

Trade Name INCI Name % Soap Noodles Sodium stearate, Sodium Palmate, Sodium cocoate 93.95 Glycerine 1,50 Glycerol Edeta[™] BD Disodium EDTA 0.07 Eutanol™ G 0.5 Octyldodecanol Plantacare[™] 2000 Decyl glucoside 1,0 Sodium acrylates copolymer Salcare[™] SC 91 0,1 Colorant CI colour 12740 0.002 Colorant 0,001 CI colour 12150 Colorant CL colour 61565 0.0021 Irgacare[™] MP Triclosan 0.128 Tinogard™ TT 0.048 Pentaerythrityl Tetra-di-t-butyl Hydroxyhydrocinnamate 1,2 Fragrance Perfume Water (and) Tartaric Acid (and) Disodium EDTA (and) Sodium Sulfite (and) Sodium Dermawhite[™] WF 1.5 Metabisulfite (and) Glycerin (and) Butylene Glycol (and) Saxifraga Sarmentosa Extract (and) Carica Papaya (Papaya) Fruit Extract (and) Psidium Guajava Fruit Extract



BASE

Dermawhite[™] **WF** Clinical study with soap bar – Chromametry



After 14 days, skin became significantly lighter than the untreated area. This effect doubled after another 14 days of treatment.

33 Indian/Asian females between 30 and 60 years old, phototype IV and V, twice daily bar soap wash, chromametry.



I BASE

Dermawhite[™] **WF** Clinical study with soap bar – Volunteer evaluation

0% 50% 100% D14 The test product made my skin fairer D28 **Rating options:** D14 The test product helps to lighten my skin tone Completely D28 agree D14 Somewhat The test product made agree my skin tone even D28 Somewhat disagree D14 The test product made my skin look brighter Completely D28 disagree

The entire volunteer panel noticed a skin lightening effect after 2 weeks of treatment, becoming even more obvious after 4 weeks of treatment.

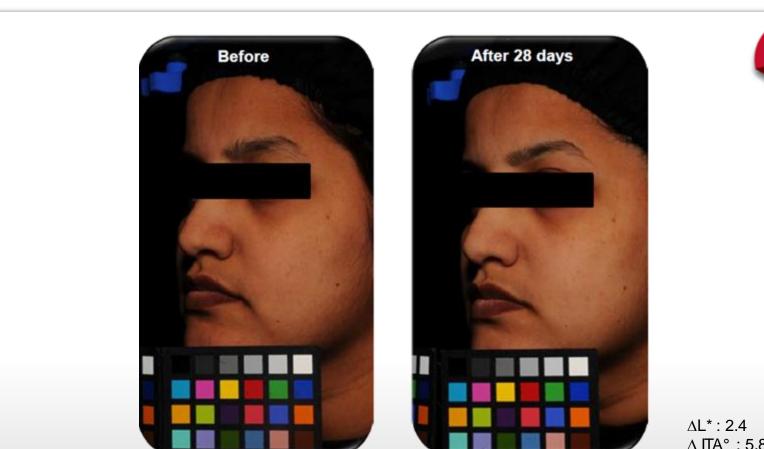
33 Indian/Asian females between 30 and 60 years old, phototype IV and V, twice daily bar soap wash, volunteers' self-assessment.



Dermawhite™ WF Clinical study with soap bar – Demonstrative image

 $\Delta \Pi A^{\circ}$: 5.8



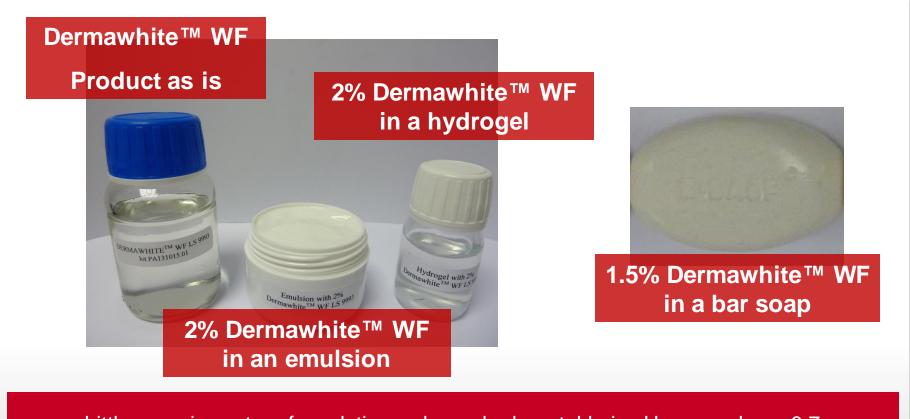


- 1 | Skin lightening cosmetics
- 2 | The white flowers
- 3 | In vitro tests
- 4 | In vivo tests
- **5** | Product characteristics
- 6 | Example formulations



Dermawhite™ WF Formulation





Little or no impact on formulation color and odor; stable in pH range above 6.7



Dermawhite™ WF Technical data



Description:	Combination of extracts of white blooming plants Saxifraga Sarmentosa, Psidium Guajava, Carica Papaya and additional additives
INCI Name (EU/US):	Water/Aqua (and) Tartaric Acid (and) Disodium EDTA (and) Sodium Sulfite (and) Sodium Metabisulfite (and) Glycerin (and) Butylene Glycol (and) Saxifraga Sarmentosa Extract (and) Carica Papaya (Papaya) Fruit Extract (and) Psidium Guajava Fruit Extract
Dose of use:	1,5 to 2 %
Aspect:	Syrupy liquid, colorless to pale yellow
Shelf life:	18 months
Preservatives:	Sodium Sulfite, Sodium Metabisulfite



- 1 | Skin lightening cosmetics
- 2 | The white flowers
- 3 | In vitro tests
- 4 | In vivo tests
- **5** | **Product characteristics**
- 6 | Example formulations



Phase	Ingredients	INCI	% by weight	Function
Α	Eumulgin® Prisma	Disodium Cetearyl Sulfosuccinate	0.30	Emulsifier (O/W)
	Lanette® O	Cetearyl Alcohol	3.00	Consistency agent
	Cetiol® C 5	Coco-Caprylate	3.00	Emollient
	Cetiol® RLF	Caprylyl Caprylate/ Caprate	2.00	Emollient
	Myritol® 331	Cocoglycerides	2.00	Emollient
	Eutanol® G	Octyldodecanol	2.00	Emollient
В	Water, demin.	Aqua	76.60	
	Glycerin	Glycerin	5.00	Humectant
	Cosmedia® SP	Sodium Polyacrylate	0.60	Rheology modifier
	Rheocare® C Plus	Carbomer	0.20	Rheology modifier
	Euxyl PE 9010 (Schülke)	Phenoxyethanol, Ethylhexylglycerin	1.00	Preservative
	Sodium Hydroxide (25% solution)	Sodium Hydroxide	q.s.	pH Adjustment
	Fragrance	Parfum	0.30	Fragrance
С	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya (Papaya) Fruit Extract, Psidium Guajava Fruit Extract	2.00	Active ingredient
D	Chione™ HD Crisp Gold S230V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment
	Chione™ HD Digital Pink S430V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment



Dermawhite[™] WF Brightening Lotion SPF 15 SC-ES-15-1409-17

Phase	Ingredients	INCI	% by weight	Function
Α	Water, demin.	Aqua	67.20	
	Euxyl PE 9010 (Schülke)	Phenoxyethanol, Ethylhexylglycerin	1.00	Preservative
	Edeta® BD	Disodium EDTA	0.05	Complexing agent
	Glycerin	Glycerin	5.00	Humectant
	Rheocare® C Plus	Carbomer	0.25	Rheology modifier
	Sodium Hydroxide (25% solution)	Sodium Hydroxide	q.s.	pH Adjustment
	Cosmedia® SP	Sodium Polyacrylate	1.00	Rheology modifier
В	Uvinul® Easy	Dibutyl Adipate, Diethylamino Hydroxybenzoyl Hexyl Benzoate, Ethylhexyl Methoxycinnamate, Laureth-7 Citrate, Polyglyceryl-2 Dipolyhydroxystearate, Ethylhexyl Triazone, Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine, Lauryl Glucoside, Triethanolamine	15.00	
	Cetiol® C 5	Coco-Caprylate	3.00	Emollient
	Cetiol® RLF	Caprylyl Caprylate/ Caprate	3.00	Emollient
С	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya (Papaya) Fruit Extract, Psidium Guajava Fruit Extract	2.00	Active ingredient
D	Fragrance	Parfum	0.50	Fragrance
	Chione™ HD Crisp Gold S230V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment
	Chione™ HD Digital Pink S430V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment

Phase	Ingredients	INCI	% by weight	Function
Α	Eumulgin® Prisma	Disodium Cetearyl Sulfosuccinate	0.20	Emulsifier (O/W)
	Emulgade® Sucro	Sucrose Polystearate, Hydrogenated Polyisobutene	1.20	Emulsifier (O/W)
	Lanette® O	Cetearyl Alcohol	3.00	Consistency agent
	Cetiol® C 5	Coco-Caprylate	3.00	Emollient
	Cetiol® RLF	Caprylyl Caprylate/ Caprate	2.00	Emollient
	Myritol® 331	Cocoglycerides	2.00	Emollient
	Eutanol® G	Octyldodecanol	2.00	Emollient
В	Water, demin.	Aqua	75.40	
	Glycerin	Glycerin	5.00	Humectant
	Cosmedia® SP	Sodium Polyacrylate	0.60	Rheology modifier
	Rheocare® C Plus	Carbomer	0.10	Rheology modifier
	Euxyl PE 9010 (Schülke)	Phenoxyethanol, Ethylhexylglycerin	1.00	Preservative
	Sodium Hydroxide (25% solution)	Sodium Hydroxide	q.s .	pH Adjustment
	Fragrance	Parfum	0.50	Fragrance
С	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya (Papaya) Fruit Extract, Psidium Guajava Fruit Extract	2.00	Active ingredient
D	Chione [™] HD Crisp Gold S230V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment
	Chione™ HD Digital Pink S430V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment

Phase	Ingredients	INCI	% by weight	Function
А	Eumulgin® Prisma	Disodium Cetearyl Sulfosuccinate	0.20	Emulsifier (O/W)
	Lameform® TGI	Polyglyceryl-3 Diisostearate	1.50	Emulsifier (W/O)
	Lanette® O	Cetearyl Alcohol	3.00	Consistency agent
	Cetiol® C 5	Coco-Caprylate	3.00	Emollient
	Cetiol® RLF	Caprylyl Caprylate/ Caprate	2.00	Emollient
	Myritol® 331	Cocoglycerides	2.00	Emollient
	Eutanol® G	Octyldodecanol	2.00	Emollient
В	Water, demin.	Aqua	75.10	
	Glycerin	Glycerin	5.00	Humectant
	Cosmedia® SP	Sodium Polyacrylate	0.60	Rheology modifier
	Rheocare® C Plus	Carbomer	0.10	Rheology modifier
	Euxyl PE 9010 (Schülke)	Phenoxyethanol, Ethylhexylglycerin	1.00	Preservative
	Sodium Hydroxide (25% solution)	Sodium Hydroxide	q.s.	pH Adjustment
	Fragrance	Parfum	0.50	Fragrance
С	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya (Papaya) Fruit Extract, Psidium Guajava Fruit Extract	2.00	Active ingredient
D	Chione™ HD Crisp Gold S230V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment
	Chione™ HD Digital Pink S430V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment

Phase	Ingredients	INCI	% by weight	Function
Α	Eumulgin® Prisma	Disodium Cetearyl Sulfosuccinate	0.20	Emulsifier (O/W)
	Cremophor® GS 32	Polyglyceryl-3 Distearate	1.50	Emulsifier (O/W)
	Lanette® O	Cetearyl Alcohol	3.00	Consistency agent
	Cetiol® C 5	Coco-Caprylate	3.00	Emollient
	Cetiol® RLF	Caprylyl Caprylate/ Caprate	2.00	Emollient
	Myritol® 331	Cocoglycerides	2.00	Emollient
	Eutanol® G	Octyldodecanol	2.00	Emollient
В	Water, demin.	Aqua	75.10	
	Glycerin	Glycerin	5.00	Humectant
	Cosmedia® SP	Sodium Polyacrylate	0.60	Rheology modifier
	Rheocare® C Plus	Carbomer	0.10	Rheology modifier
	Euxyl PE 9010 (Schülke)	Phenoxyethanol, Ethylhexylglycerin	1.00	Preservative
	Sodium Hydroxide (25% solution)	Sodium Hydroxide	q.s.	pH Adjustment
	Fragrance	Parfum	0.50	Fragrance
С	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya (Papaya) Fruit Extract, Psidium Guajava Fruit Extract	2.00	Active ingredient
D	Chione™ HD Crisp Gold S230V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment
	Chione™ HD Digital Pink S430V	Synthetic Fluorphlogopite, Titanium Dioxide	1.00	Effect pigment

Dermawhite[™] WF Lightening Lotion SC-FR-15-007-D009

Phase	Ingredients	INCI	% by weight	Function
Α	Water, demin.	Aqua	78.32	
	Glycerin	Glycerin	3.00	Humectant
	Euxyl K 320	Phenoxyethanol, Methylparaben, Ethylparaben, Propylene Glycol	1.20	Preservative
	(Schülke)			
В	Cutina® GMS-SE	Glyceryl Stearate SE	3.00	Emulsifier (O/W)
	Lanette® D	Cetearyl Alcohol	2.00	Consistency agent
	Cetiol® 868	Ethylhexyl Stearate	6.00	Emollient
	Cetiol® CC	Dicaprylyl Carbonate	3.00	Emollient
	Rheocare® XG (Europe only)	Xanthan Gum	0.10	Stabilizer
	Eumulgin® SG	Sodium Stearoyl Glutamate	0.30	Emulsifier (O/W)
С	Xiameter PMX-200 Silicone Fluid 50CS (Dow Corning)	Dimethicone	0.50	Defoamer
D	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya (Papaya) Fruit Extract, Psidium Guajava Fruit Extract	2.00	Active ingredient
	Citric Acid (50% solution)	Citric Acid	0.08	Neutralizing agent
	Fragrance	Parfum	0.50	Fragrance



Dermawhite™ WF Whitening Emulsion SC-FR-15-50701-02



Phase	Ingredients	INCI	% by weight	Function
A	Emulgade® SE-PF	Glyceryl Stearate, Ceteareth-20, Ceteareth-12, Cetearyl Alcohol, Cetyl Palmitate	7.00	Emulsion base
	Lanette® O	Cetearyl Alcohol	2.00	Consistency agent
	Isopropyl Myristate	Isopropyl Myristate	8.00	Emollient
	Cetiol® Sensoft	Propylheptyl Caprylate	2.00	Emollient
	Cetiol® CC	Dicaprylyl Carbonate	2.00	Emollient
	Xiameter PMX-200 Silicone Fluid 50CS (Dow Corning)	Dimethicone	1.00	Defoamer
	Covi-ox® T 70 C	Tocopherol	0.20	Antioxidant
В	Water, demin.	Aqua	69.55	
	Elestab™ 388	Propylene Glycol, Phenoxyethanol, Chlorphenesin, Methylparaben	2.50	Preservative
	1,3-Butanediol	Butylene Glycol	3.00	Humectant
	Edeta® BD	Disodium EDTA	0.05	Complexing agent
С	Rheocare® XG (Europe only)	Xanthan Gum	0.20	Rheology modifier
	Eumulgin® SG	Sodium Stearoyl Glutamate	0.50	Emulsifier (O/W)
D	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya	2.00	Active ingredient

(Papaya) Fruit Extract, Psidium Guajava

Fruit Extract



Dermawhite™ WF Maschera anti macchia SC-IT-16-002-2



Phase	Ingredients	INCI	% by weight	Function
Α	Water, demin.	Aqua	85.25	
	Cosmedia® SP	Sodium Polyacrylate	1.50	Rheology modifier
В	Eumulgin® SG	Sodium Stearoyl Glutamate	0.05	Emulsifier (O/W)
	Cetiol® CC	Dicaprylyl Carbonate	10.00	Emollient
	Dermawhite™ WF	Water, Tartaric Acid, Disodium EDTA, Sodium Sulfite, Sodium Metabisulfite, Glycerin, Butylene Glycol, Saxifraga Sarmentosa Extract, Carica Papaya (Papaya) Fruit Extract, Psidium Guajava Fruit Extract	2.00	Active ingredient
	Euxyl PE 9010 (Schülke)	Phenoxyethanol, Ethylhexylglycerin	0.80	Preservative
	Perfume*	Parfum	0.40	Fragrance





"Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. THERE ARE NO WARRANTIES OF ANY KIND. ALL EXPRESS AND IMPLIED WARRANTIES ARE DISCLAIMED. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required. The claims and supporting data provided in this publication have not been evaluated for compliance with any jurisdiction's regulatory requirements and the results reported may not be generally true under other conditions or in other matrices. Users must evaluate what claims and information are appropriate and comply with a jurisdiction's regulatory requirements. Recipient of this publication agrees to (i) indemnify and hold harmless each entity of the BASF organization for any and all regulatory action arising from recipient's use of any claims or information in this publication, including, but not limited to, use in advertising and finished product label claims, and (ii) not present this publication as evidence of finished product claim substantiation to any regulatory authority."

