



PLANT ALTERNATIVES

TO UNDESIRABLE INGREDIENTS



With this range, found plant alternative ingredients to replace unwanted INCI in your product formulation.

We developed functional ingredients in powder from natural and plant-based origin to offer new opportunities to formulate technical galenics such as : gels, emulsions, lotions...

PLANT ALTERNATIVES TO UNDESIRABLE INGREDIENTS

DISCOVER OUR FUNCTIONAL INGREDIENTS THROUGH OUR PLANT ALTERNATIVE RANGE







ALTER-THICKBARLEY THICKENING AGENT 101



ALTER-GELIJAC HIGH VISCOSITIES GELLING AGENT 1104



1105

1102



ALTER-SUSPENSILIA

ALTER-GELITIUM

TRANSPARENT GELLING AGENT



ALTER-TALCANIOC HYDROPHOBIC POWDER 1103







ALTER-EMULFABA

REF : J100

EMULSIFIER WITHOUT SURFACTANT

IDEAL TO FORMULATE EMULSIONS WITH A TYPICAL VELVETY FEELING.

A PLANT ALTERNATIVE TO SURFACTANT USED AS AN EMULSIFIER.

Powdered emulsifler made from plant extracts and gums without chemical modifications. It is an alternative to the surfactants usually used for emulsifying. Allows to formulate white emulsions without perfume impact despite the use of plant extracts.



INCI : Acacia senegal gum & Sclerotium gum & Hydrolyzed cicer seed extract.

OK CHINA

MANUFACTURING PROCESS : Association of aquafaba powder (chickpeas' cooking juice) with acacia gum (Acacia senegal tree's resin), sclerotium gum (from the sclerotium rolfssii mushroom).

FUNCTION : Emulsifyer

INCI : Acacia senegal gum & Sclerotium gum & Hydrolyzed cicer seed extract.

APPARENCE : Off-white powder





PROPERTIES:

Allows to make stable emulsions

• Formation of a nice fluid emulsion. To obtain a thickener emulsion, it can be combined with our ALTER-THICKBARLEY, ALTER-GELIJAC or ALTER-GELITIUM.

USES:

Skincare et bodycare suchs as moisturizing milks, cleansing milks, anti-aging creams ...

SENSORY: A typical touch characterized by a cool, soft and silky skin feeel. Don't leave a tacky after-feel and gives to the skin a velvety feeling whithout soapy effect.

FORMULATION

Recommanded 2.0%; for a thickener emulsion it can be used with thickbarley. Hot emulsification (75-80°C) in aqueous phase Disperse in water first with deflocculator turbine Add Oil phase (75°C) up to 40% at 2% of ALTER-EMULFABA Use rotor stator to mix Adjust the pH value between 4 and 8

COMPATIBILITIES

Very good emulsion's stability in a range of pH from 4 to 8. It emulsifies all oily phases, whatever their nature : synthetic, mineral of vegetable oils. It is also compatible with electrolytes.

TEXTURE & SYNERGY







FORMULATION GUIDE

MOISTURISING COCOON CREAM

Lessonia offers you an application formula to inspire you in your project with our emulsifier **ALTER-EMULFABA**. This formulation guide is about the cocoon moisturising cream.



INGREDIENT NAME	INCI	W.T %
AQUALGAE SACCHARINA*	SACCHARINA LATISSIMA EXTRACT & CITRIC ACID & SODIUM BENZOATE & POTASSIUM SORBATE	QSP 100%
OIL OF ALGAE*	VITIS VINIFERA SEED OIL & LAMNARIA DIGITATA EXTRACT & TOCOPHERYL ACETATE	20%
ALTER-EMULFABA*	ACACIA SENEGAL GUM & SCLEROTIUM GUM & HYDROLYZED CICER SEED EXTRACT	2%
PERFUME	PERFUME	0.8%
TREMEL+HA*	TREMELLA FUCIFORMIS POLYSACCHARIDE	0.10%

*Ingredients from Lessonia.

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Cream

PROTOCOL

- Add **ALTER-EMULFABA** to aqualgae under deflocculating agitation.
- Heat to 75°C under agitation to 2 000 rpm.
- Heat Oil of Algae to 75°C
- Pour Oil of Algae into the aqueous phase under rotor stator 3000 rpm during 10 min.
- Cool under deflocculating agitation (1 500 rpm) to 30°C.
- Add Tremel+HA.





LESSONIA cosmetics + ingredients

ALTER-THICKBARLEY

REF : J101

THICKENING AGENT



100% NATURAL ACCORDING TO ISO 16128 COSMOS COMPLIANT

Hordeum vulgare seed flour

IDEAL TO OBTAIN THICKEN CREAM WITH A RICH BUT NOT GREASY TEXTURE AND A POWDERED FEELING

A PLANT ALTERNATIVE TO MODIFIED STARCHES

A natural high viscosity rehological agent allowing to formulate very thick textures. 100% natural, from plant origin, without chemical modification and is therefore an alternative to modified starches and synthetic polymers. It is used at room temperature to stablize emulsions. It allows to obtain a rich but not greasy texture, a powdered feeling and to keep a perfect whiteness even when it is hot processed.

INCI:

OK CHINA

MANUFACTURING PROCESS: Native starch extracted from barley and thermally debacterialized. ALTER-THICK-BARLEY is a starch that is not chemically modified.

FUNCTION:

- Thickener: it allows to obtain thicken cream.
- A rich but not greasy texture
- **Emulsion stabilizer**: associated with an emulsifier, it allows to texturize and participate to the stability of the emulsion

INCI: Hordeum vulgare seed flour

APPEARENCE: White powder



PROPERTIES:

- Consistency agent that improves the viscosity of products without soapy effect
- When used in aqueous phase, it allows to obtain opaque unctuous gels.
- When used in emulsions, it thickens and stabilizes them

USES:

Emulsions for face and body care. It can be used to stabilize emulsions

SENSORY: Rich and melting texture leaving a protective film on the skin with a soft finish. It creates a cocooning texture with a nice comfort of use

FORMULATION

GENERAL CHARACTERISTICS:

• Recommanded dosage : around 5%

PROTOCOL:

• To be incorporated into an emulsion after the emulsion has formed to thicken and stabilize it.

• Not heat sensitive so it can be incorporated when hot.

TEXTURE & SYNERGY

Cricam

TEXTURE	COMPOSITION Stability tested for 1 month at 50°C	RÉSULTAT	PROFIL SENSORIEL
	2% ALTER-EMULFABA 10% sunflower oil 5% ALTER-THICKBARLEY 82.44% demineralized water QS Preservatives	Thick cream, creamy texture, rich but not greasy, soft and penetrating touch. It doesn't soap and doesn't fluff up.	Greasy Smoothness Smoothness





ALTER-GELIJAC

REF : J104

HIGH VISCOSITIES GELLING AGENT

IDEAL TO OBTAIN COLORLESS GELS WITH HIGH VISCOSITIES, SHOWER GEL AND SHAMPOO.

A PLANT ALTERNATIVE TO UNWANTED GELLING AGENT : XANTHAN, CARBOMER, SYNTHETICS POLYMERS...

A 100% natural and plant-based gelling agents which allows to obtain high viscosity and transluscent gels. It is a perfect alternative to synthetic polymers. ALTER-GELIJAC is obtained by extracting polysccharides from the konjac's root. It leaves a protective film on the skin and a freshness feeling. It can be used both hot and cold.

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100% NATURAL ACCORDING TO ISO 16128 COSMOS COMPLIANT

INCI : Glucomannan

OK CHINA

MANUFACTURING PROCESS: ALTER-GELIJAC is a natural fiber obtained by extracting polysaccharides from a konjac plant which is traditionally harvested in China. The powder obtained is mainly composed of glucomanan, a composition of two sugars: mannose and glucose.

FUNCTION: Gelling agent for aqueous phases allowing high viscosities.

TYPE: Gelify aqueous phases.

INCI: Glucomannan

APPEARENCE: White powder





PROPERTIES & USES

PROPERTIES:

- Gelling of aqueous phases
- Thickener for emulsions
- Emulsion stabilizer

USES:

• Ideal to formulate shower gels, shampoos, slimming gels, gel scrub, freshness gel masks.

SENSORY:

- Soft touch
- Leaves a protective film on the skin and a feeling of freshness.
- Can be used in synergy with other texturizing agents to vary textures and film-forming effects.

FORMULATION

GENERAL CHARACTERISTICS:

• **Dosage :** from 0,1 to 2 %

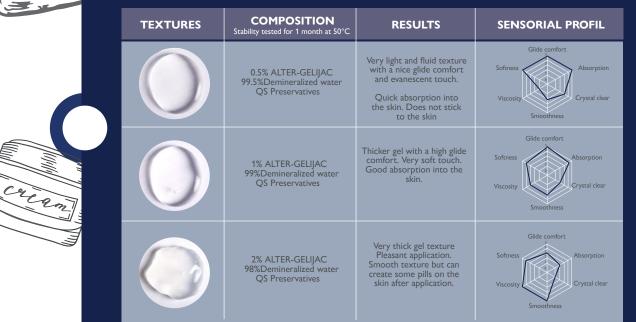
PROTOCOL:

- ALTER-GELIJAC is a nonionic gelling agent.
- It can be used cold or hot process, but texture is improved when it's heated.
- Easy dispersion without agglomeration in aqueous bases.
- Incorporate the powder into the aqueous phase under agitation, and mix for 30 minutes at 45°C. The gel is smoother when made hot.

COMPATIBILITIES :

- ALTER-GELIJAC can be formulated over a wide range of pH.
- It is also compatible with electrolytes.
- Compatible with most of surfactants, ideal with cationic surfactants.

TEXTURES







100% NATURAL ORIGIN ACCORDING TO ISO 16128 COSMOS COMPLIANT

TRANSPARENT GELLING AGENT

IDEAL TO BRING FILMOGENIC SENSORIALITY AND FORMULATE EXTREMELY TRANSPARENT GELS.

ALSO CAN BE USED AS A CO-EMULSIFIER OR A SUSPENSIVE AGENT.

A PLANT ALTERNATIVE TO UNWANTED GELLING AGENT : CARBOMER, SYNTHETICS POLYMERS...

100% natural, ALTER-GELITIUM is a gelling a zing agent for emulsions. It is a perfect alte synthetic polymers. It is a non-ionic agent and can not interact with other ingredients in the Used as a co-emulsifier, it allows to form a around the oily particles to avoid phase shift.

OK CHINA

INCI:

Sclerotium gum

MANUFACTURING PROCESS: Resulting from the fermentation of the Sclerotium mushroom (Non GMO).

FUNCTION:

- **Gelling agent:** texturizing to form very clear, transparent aqueous gels.
- Co-emulsifier: to stabilize emulsions thanks to the
 petwork formed between the oil droplets



PROPERTIES:

- Brins filmogenic sensorialityViscosity agent that brings great transparency to gels.
- Non-ionic gelling agent

USES:

SENSORY:



FORMULATION

GENERAL CHARACTERISTICS:

• **Dosage :** From 0.1% to 2%

PROTOCOL:

• Incorporate the powder into the aqueous phase under agitation, and mix for 30 minutes at 45°C.

COMPATIBILITIES:

• Can be used with most of surfactants

TEXTURES

TEXTURES	COMPOSITION Stability tested for 1 month at 50°C	RESULTS	SENSORIAL PROFIL
	0.5% ALTER-GELITIUM 99.5% Demineralized water QS Preservatives	Very fluid aqueous gel such as a light veil. High softness during application. A very good absorption into the skin. Crystal clear texture.	Glide comfort Softness Viscosity Smoothness
\bigcirc	1% ALTER-GELITIUM 99% Demineralized water QS Preservatives	Aqueous gel with a higher viscosity. High glide comfort, freshness and softness during application. Very good absorption into the skin. Crystal clear texture	Glide comfort Softness Viscosity Smoothness
	2% ALTER-GELITIUM 98% Demineralized water QS Preservatives	Aqueous gel with a high viscosity. Very high glide comfort with a smooth texture. Soft during application. Crystal clear texture.	Glide comfort Softness Viscosity Smoothness

TRANSPARENCY

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ALTER-GELITIUM VS. CARBOPOL

• ALTER-GELITIUM offers the same transparency effect that the Carbopol but with biggest benefits thanks to its plant and natural properties foryour formulations.



ALTER-GELITIUM (1%)



CARBOPOL (1%)



LESSONIA cosmetics + ingredients

ALTER-SUSPENSILIA

REF : J102

SUSPENSIVE AGENT

IDEAL FOR KEEPING EXFOLIANTS, DECORATIVE PARTICLES, PIGMENTS OR ANY OTHER PHYSICAL PARTICLES IN SUSPENSION.



100% NATURAL ACCORDING TO ISO 16128 COSMOS COMPLIANT

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INCI : Sterculia urens gum & Sclerotium gum



PROPERTIES:

Suspensive agent ideal to maintain in suspension physical particles (pigments, exfoliants, decorative particles...) in a solution while limiting the viscosity.

USES:

• Ideal to formulate skincare product suchs as exfoliating gels, lotions with decorative particles, tinted emulsions

SENSORY:

• Filmogenic feeling on the skin

FORMULATION

GENERAL CHARACTERISTICS:

• **Dosage :** from 0.5% to 2%

PROTOCOL:

• Incorporate the powder into the aqueous phase under agitation, and mix for 30 minutes at 45°C

COMPATIBILITIES:

- To be used in a pH range from 6 to 8
- Electrolytes may cause a decrease in viscosity
- Possible incompatibilities in presence of surfactants

SENSORIAL PROFIL

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Suspensive effect

Glide comfort

FORMULATION GUIDE

VOLCANIC EXFOLIANT GEL

Lessonia offers you an application formula to inspire you in your project with our geling agent **ALTER-SUSPENSILIA**. This formulation guide is about the volcanic exfoliant gel.



INGREDIENT NAME	INCI	W.T %
AQUALGAE ASCOPHYLLUM*	ASCOPHYLLUM NODOSUM EXTRACT & SODIUM BENZOATE & POTASSIUM SORBATE & CITRIC ACID	QSP 100%
PENTYLENE GLYCOL	PENTYLENE GLYCOL	5%
ALTER-SUSPENSILIA*	STERCULIA URENS GUM & SCLEROTIUM GUM	2%
VOLCANIC SAND EXFOLIATOR 500*	VOLCANIC SAND	1.38%
VOLCANIC SAND EXFOLIATOR 300*	VOLCANIC SAND	0.82%
ORAMIX CG110	CAPRYLYL/CAPRYL GLUCOSIDE AQUA	0.60%

*Ingredients from Lessonia.

PROTOCOL

- Add **ALTER-SUSPENSILIA** and pentylen glycol to aqualgae.
- Heat and mix at 1 500 rpm until to reached 45°C and keep heating for 20 min.
- Make a premix with the perfume and the oramix, and mix until a transparent mixture is obtained (possibility to heat to 40° C).
- Add this premix to the aqualgae and mix at 1 500 rpm.
- Add exfoliants.









ALTER-TALCANIOC

REF : J103

HYDROPHOBIC POWDER

IDEAL TO FORMULATE BABY POWDER, TOUCHING AGENT AND MAKEUP

A PLANT ALTERNATIVE TO TALC WITH HYDROPHOBIC ASSETS

ALTER-TALCANIOC is a plant alternative to talc with the same hydrophobicity properties. It is ideal to protect skin against moisture and will be a perfect natural and plant ingredient to formulate baby powder. Thanks to its absorbant assets and its extrem softness, ALTER-TALCANIOC will be ideal to give a soft touch to formulations. 71% NATURAL ORIGIN ACCORDING TO ISO 16 128

INCI: Cellulose acetate & tapioca starch

OK CHINA

MANUFACTURING PROCESS: Association of a manioc extract powder with cellulose acetate powder which allows to bring the protective properties thanks to the hydrophobicity of the material.

FUNCTION:

- Baby powder
- Touching agent powder
- Makeup
- Mattifying

INCI: Cellulose acetate & tapioca starch

APPEARENCE: White powder

PROPERTIES & USES

CALCERON !!

PROPERTIES:

Can absorb more than 2 times of its weight in sebum.

USES:

- Ideal for baby powders
- Make-up
- Touching agen

FORMULATION

GENERAL CHARACTERISTIC: • Dosage : Up to 100%

PROTOCOL:

- Cold process
- Use pure or mixed with other powders





Water drop on ALTER-TALCANIOC powder

