

**SEPPIC**

**MONTANOV™**

A range of O/W emulsifier



in harmony with nature



## to keep in mind!

1

**Amazing emulsifying capacity!**

Used at low levels, **between 0.5 and 3%**, MONTANOV™ emulsifiers significantly reduce the interface tension and can therefore emulsify up to 60% oily phases:

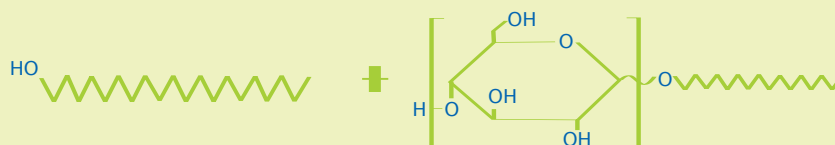
- Vegetable oils
- Mineral oils
- Esters
- Silicones



2

**Perfect harmony with the environment**

- 100% vegetable origin – sustainable resources
- Non-GM raw materials, solvent and preservative-free
- Original and patented synthesis of fatty alcohols and alkyl polyglucosides



- Excellent skin compatibility
- Excellent biodegradability
- Validated by ECOCERT

MONTANOV™,  
to meet all  
your marketing  
needs!

3

**Compatible with the majority of active ingredients ...  
... and highly stable at all pH = 3-11**

- |                      |                                 |                     |
|----------------------|---------------------------------|---------------------|
| ▪ Glycols            | ▪ Pigments                      | ▪ Oxidizing agents  |
| ▪ Glycerin           | ▪ Whitening agents              | ▪ AHA               |
| ▪ Alcohol            | ▪ Cationic agents               | ▪ NaCl              |
| ▪ Mineral filters    | ▪ Reducing agents               | ▪ Mineral salts     |
| ▪ Organic sunscreens | ▪ H <sub>2</sub> O <sub>2</sub> | ▪ AlCl <sub>3</sub> |

4

**A variety of different applications**

- MONTANOV™ emulsifiers are recommended for all types of applications:
- **Skin care, toiletries, hair care, deodorants ...** for the face, body & hair
  - For **dry, oily, mixed, sensitive** and **mature skins**
  - For all types of conventional and more specific products: **young problem skins, ethnic skins, men**, etc.
  - To create **all type of textures** (sprays, lotions, creams, butters & waxes) with a **broad range of skin feeling** (light and evanescent, melting or rich)



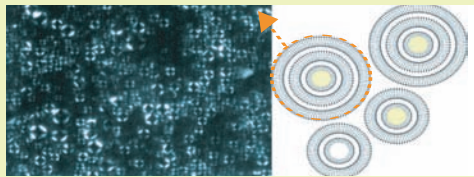
# the **best friends** for your **GREEN** formulas and concepts!

5

## More than **excipients** ...

### ■ MONTANOV™ emulsifiers are excellent **liquid crystal promoters**

- In the oily phase, they **prevent coalescence** thanks to the **formation of a rigid shell around oil droplets**.
- In the aqueous phase, the liquid crystals extend to form a **continuous network** of lamellar phases which **provide a dominant elastic character** and a **very good stability** that prevents creaming.

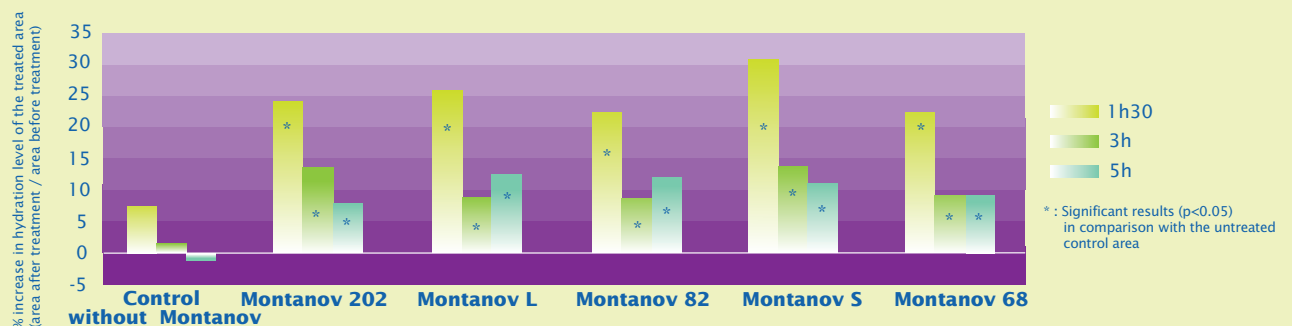


Liquid crystals in an emulsion based on MONTANOV™

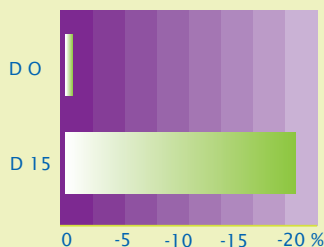
Stability of emulsions  
over time

### ■ MONTANOV™ emulsifiers can be used to formulate emulsions with an **intrinsic moisturizing effect** linked to the presence of liquid crystals:

- Thanks to the bi-layers similar to those of the skin formed by the liquid crystals, the skin's lipid barrier is reinforced and the skin is protected **against dehydration ...**



Moisturizing properties of MONTANOV™ emulsions - Validated in vivo by Corneometry



Reduction of TEWL - In vivo validation

Hydration of the skin  
over time



### ■ MONTANOV™'s emulsions are extremely soft during application and after time

Moderate thixotropy

+ rheofluidifying character of MONTANOV™ ...► Easier to spread

Presence of liquid crystals ....► Provides comfort and softness

## APPLICATIONS

### Skin care

202

82

L

68

14

S

### Green concepts

#### 7035B SPA BODY MILK

	▪MONTANOV™ 82	1.00%
	▪MONTANOV™ 202	1.00%
<b>A</b>	▪Paraffin oil	5.00%
	▪Pentaerythrityl tetraethylhexanoate	10.00%
	▪SEPICIDE™ HB	1.00%
<hr/>		
	▪Aqua/water	Qsp 100%
<b>B</b>	▪Xanthan gum	0.15%
	▪SEIPLUS™ 400	1.00%
<hr/>		
	▪GIVOBIO™ GMg	1.00%
<b>C</b>	▪GIVOBIO™ GZn	1.00%
	▪Glycerin	5.00%
<hr/>		
<b>D</b>	▪Cyclopentasiloxane	5.00%
<hr/>		
<b>E</b>	▪Fragrance	0.30%

#### 7065 ORGANIC DAY CREAM

Complies with ECOCERT® standards

	▪MONTANOV™ 202	3.00%
	▪MONTANOV™ 14	1.50%
	▪Behenyl Behenate	2.00%
	▪Butyrospermum Parkii (ORG)	1.50%
	▪Squalane	3.00%
<b>A</b>	▪Glyceryl Undecylenate	1.50%
	▪Jojoba oil (ORG)	3.00%
	▪Caprylic/Capric Triglycerides	3.00%
	▪Isopropyl isostearate	3.00%
	▪Tocopherol	0.10%
<hr/>		
	▪Aqua/water	Qsp 100%
<b>B</b>	▪Water, hordeum vulgare plant extract (ORG)	11.00%
	▪Xanthan Gum	0.60%
<hr/>		
	▪Dehydroacetic Acid and Benzyl Alcohol	0.60%
<b>C</b>	▪AQUAXYL™	3.00%
	▪Sodium Levulinate	0.50%
	▪Sodium Hydroxide	0.14%

### Men's care

202

L

14

#### 6849A NON-GREASY BUTTER CREAM

	▪MONTANOV™ 202	3.00%
	▪LANOL™ P	5.00%
	▪SIMULSOL™ 165	2.00%
<b>A</b>	▪Isodecyl neopentanoate	5.00%
	▪LANOL™ 99	9.00%
	▪Butyl methoxydibenzoyl methane	2.00%
	▪Ethylhexyl methoxycinnamate	5.00%
<hr/>		
	▪MICROPEARL™ M305	2.00%
	▪SEPIITONIC™ M3	1.00%
<b>B</b>	▪SEPICALM™ S	2.00%
	▪Disodium EDTA	0.20%
	▪Aqua/water	Qsp 100%
<hr/>		
	▪Cyclomethicone	8.00%
<b>C</b>	▪SIMULGEL™ EG	2.50%
<hr/>		
	▪Dye	qsp
	▪Fragrance	0.40%
<b>D</b>	▪Alcohol 95	4.00%
	▪SEPICIDE™ HB	0.50%

- Non-greasy and light textures that are quickly absorbed by the skin

### Sun care

82

14

S

L

#### 7085 HIGH-PROTECTION SUN SPRAY

	▪MONTANOV™ L ou 82	1.00%
	▪C12-15 Alkylbenzoate	17.00%
	▪Dimethicone	3.00%
<b>A</b>	▪Octocrylene	6.00%
	▪Ethylhexyl methoxycinnamate	6.00%
	▪Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	3.00%
<hr/>		
<b>B</b>	▪Aqua/water	Qsp 100%
<hr/>		
	▪DC345	5.00%
<b>C</b>	▪SIMULGEL™ INS100	0.50%
<hr/>		
	▪AQUAXYL	3.00%
	▪DL · Tocopherol acetate	0.50%
<b>D</b>	▪SEPICIDE™ HB	1.00%
	▪Fragrance	0.20%
<hr/>		
	▪Methylene bis-benzotriazolyl tetramethylbutylphenol	10.00%
<b>E</b>	▪Citric acid 25%	QS pH5

- To create fluid and sprayable sun care formulas with a high chemical filter and mineral sunscreen content ...
- To formulate easy-to-spread, non-sticky sun care products!

### Makeup

L

- Airy formulas ...
- To emulsify mineral pigments

202

- 2<sup>nd</sup>-skin textures ...

### Hair care

82

#### 7079 BRIGHTENING CONDITIONING BALM

<b>A</b>	▪Aqua/water	Qsp 100%
	▪Hydroxyethylcellulose	1.00%
<hr/>		
	▪Butyrospermum parkii	1.00%
	▪Cetearyl alcohol	3.00%
<b>B</b>	▪MONTANOV™ 82	2.00%
	▪Behentrimonium chloride	2.00%
	▪Polyquaternium-11	2.00%
	▪Dimethicone	1.00%
<hr/>		
<b>C</b>	▪D-panthenol	0.10%
	▪SEPICIDE™ HB	1.00%
<hr/>		
<b>D</b>	▪AQUAXYL™	2.00%
	▪Fragrance	0.10%

#### 202 · 68 COLORING PRODUCTS

- Cream consistency stable over time
- Easy mixing of dye and primer
- Good distribution on hair
- No dripping

- For a completely safe, high-performance color

### Toiletries

82

68

#### 7029 FOAMING FACE WASH

	▪Aqua/water	Qsp 100%
<b>A</b>	▪MONTANOV™ 82	3.00%
	▪PEG-120 methylglucose dioleate	1.00%
	▪Lactic acid 12%	4.10%
<hr/>		
<b>B</b>	▪Sodium lauryl ether sulfate 28%	22.00%
<hr/>		
<b>C</b>	▪Glycerin	5.00%
<hr/>		
	▪AMONYL™ 380BA	7.00%
<b>D</b>	▪Fragrance	0.30%
	▪KATHON™ CG	0.10%
<hr/>		
<b>E</b>	▪Sodium chloride	0.10%

- Refattening foam effect + soft

S

- Allows the addition of oils without affecting the foam
- To formulate opaque but not pearlescent products!

## TRICKS AND TIPS

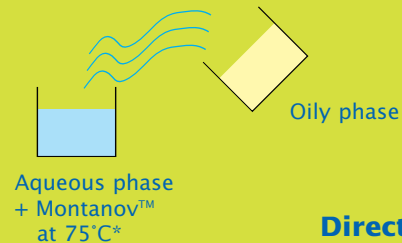
- Make the right choice ...  
The **BEST MOISTURIZING** grades  
MONTANOV™ 202  
MONTANOV™ L  
MONTANOV™ 68
- Your best friends for **ultra-white creams:**  
MONTANOV™ 202  
MONTANOV™ L
- Formulate **ultra-fluid products**  
(sprays and liquids for impregnating wipes)  
using a concentration of only 1% ...  
MONTANOV™ L  
or MONTANOV™ 82  
or MONTANOV™ S
- Improve the **richness of your GEL-CREAMS ...**  
**Add:**  
0.5 to 1 %  
MONTANOV™  
**For improved comfort and easier spreading**
- Offer a **touch of softness** to your conventional formulas  
**by adding:**  
0,5 to 1% MONTANOV™ S
- Addition of MONTANOV™ 14  
=  
**provides consistency**  
**WITHOUT changing the sensory profile**
- To formulate with **high electrolytes content ...**  
**combine:**  
1% MONTANOV™ 202 + 1% MONTANOV™ 82 or  
1% MONTANOV™ 202 + 1% SENSANOV™ WR  
to emulsify  
+  
1% SEPIPLUS™ 400 + 0.15% Xanthan gum  
to thicken
- To improve the **dispersion of mineral sunscreens**  
in sun care formulas,  
**add to MONTANOV™ 82:**  
0.5 to 1%  
SEPIFEEL™ ONE !
- For **sun care products with a high chemical and physical filter content ...**  
Don't forget the winning combination of ...  
2% MONTANOV™ 82 + 1% SENSANOV™ WR  
or MONTANOV™ S + SIMULSOL™ 165  
Easy spreading guaranteed and non-sticky texture



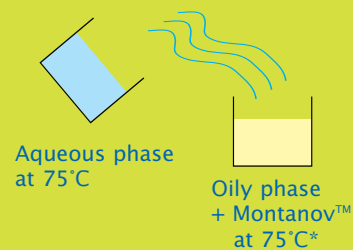
## OUR PROCESSING ADVICE

### PROCESS:

#### ■ Heating



or ...



\*heating at 75°C  
except for MONTANOV™ 202: 85°C

#### ■ Agitation



The use of a high-shear agitation system (rotor-stator type) is recommended



In the laboratory, we advise you not to start agitation until the two phases are present

#### ■ Cooling



Slow cooling under gentle agitation promotes the formation of liquid crystals

The use of a lower shear (deflocculator-type) is possible if polymers are added in sufficient quantities, at the beginning of the process or during the emulsification, so that the emulsion becomes finer



	202	82	L	68	S Co-emulsifier	
INCI Name	Arachidyl alcohol & Behenyl alcohol & Arachidyl glucoside	Cetearyl alcohol & Coco glucoside	C14-22 alcohols & C12-20 alkyl glucoside	Cetearyl alcohol & Cetearyl glucoside	Coco glucoside & Coconut alcohol	Myristyl alcohol & Myristyl glucoside
Emulsifying capacity	+++	+++	+++	+++	++	+
Liquid crystals	+++	+	+++	++	+/-	+/-
Consistency of emulsions	Thick lotion to cream	Variable consistency: spray to thick cream	Variable consistency: spray to thick cream	Fluid to thick cream		
Sensory profile	Light texture, matt finish	Rich texture	Light texture	Rich texture	Rich texture	Neutral texture
Strong points & Specific characteristics	<ul style="list-style-type: none"> <li>Whiteness of the emulsion</li> <li>Matt and silky</li> <li>Long-lasting moisturizing effect</li> </ul>	<ul style="list-style-type: none"> <li>Very good resistance to cold (-25°C)</li> <li>Good resistance to electrolytes</li> <li>SPF stable over time</li> </ul>	<ul style="list-style-type: none"> <li>Emulsion whiteness</li> <li>Versatility of use</li> </ul>	<ul style="list-style-type: none"> <li>Stabilizer not compulsory (if absence of electrolytes)</li> </ul>	<ul style="list-style-type: none"> <li>Refattener</li> <li>SPF stable over time</li> </ul>	<ul style="list-style-type: none"> <li>NEUTRAL consistency factor</li> <li>Soft, non-greasy texture</li> </ul>
Specific compatibilities	<ul style="list-style-type: none"> <li>Mineral ingredients (makeup)</li> </ul>	<ul style="list-style-type: none"> <li>Chemical filters &amp; mineral screens</li> <li>Cationic (hair care)</li> <li>Anionic (cleansers)</li> </ul>	<ul style="list-style-type: none"> <li>Mineral ingredients (makeup)</li> </ul>		<ul style="list-style-type: none"> <li>Chemical filters &amp; mineral screens</li> </ul>	
Applications	<ul style="list-style-type: none"> <li>SKIN CARE Oily skins Range for men</li> <li>HAIR</li> <li>MAKE-UP</li> </ul>	<ul style="list-style-type: none"> <li>SKIN CARE</li> <li>SUN CARE</li> <li>TOILETRIES</li> <li>HAIR</li> </ul>	<ul style="list-style-type: none"> <li>SKIN CARE Oily skins Range for men</li> <li>HAIR</li> <li>MAKE-UP</li> <li>WIPES</li> </ul>	<ul style="list-style-type: none"> <li>SKIN CARE</li> <li>TOILETRIES</li> <li>HAIR</li> </ul>	<ul style="list-style-type: none"> <li>SKIN CARE</li> <li>SUN CARE</li> <li>TOILETRIES</li> </ul>	<ul style="list-style-type: none"> <li>SKIN CARE</li> <li>SUN CARE</li> </ul>
Melting point	70-80°C	55-60°C	66-72°C	61-65°C	56-60°C	46-50°C

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**Nota**

The analytical specifications warranted are only those mentioned on the certificate of analysis supplied with each delivery of the product.

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