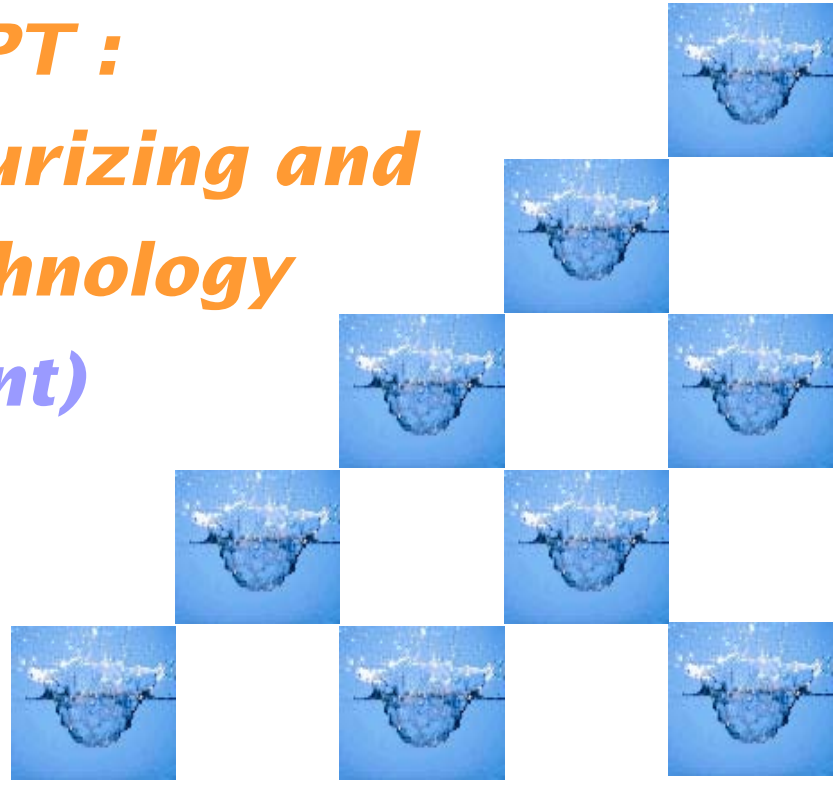
AQUAXYL ™

HYDRACONCEPT :
An innovative « moisturizing and restructuring » technology
(SEPPIC patent)



1. HYDRACONCEPT

2. AQUAXYL Structure

3. Strong points « Advantages » or « Benefits »

4. Harmonization of Skin's Hydrous Flow - HYDRACONCEPT

5. AQUAXYL – Summary

6. Tolerance

7. Formulation Guidelines

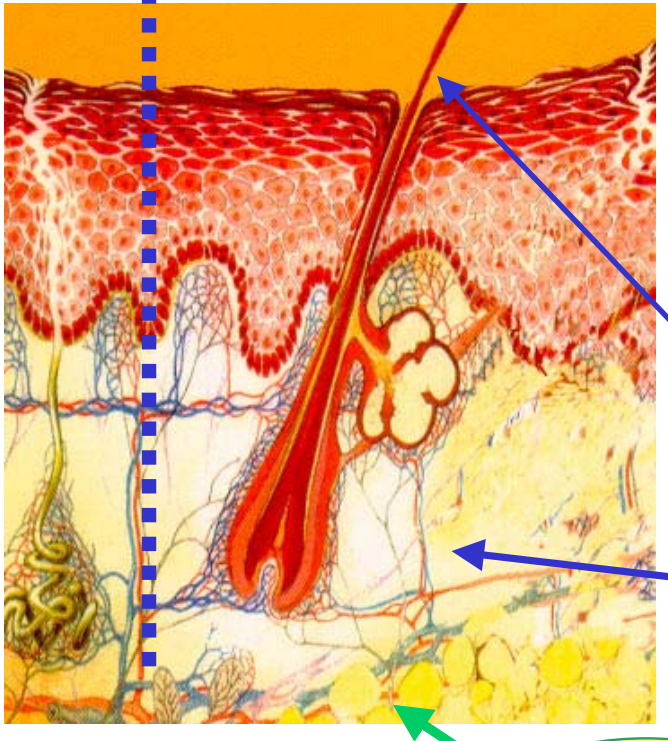
AQUAXYL
HYDRACONCEPT : Harmonization of Skin's Hydrous Flow

2.2 Trans Epidermal Water Loss (TEWL)

13% water

Hydration gradient

80% water



2. Factors Influencing water loss

2.1 Ceramides = Intercellular cement => barrier function, impermeable & resistant skin

1. Factors Influencing water reserves

1.2 Epidermal water content

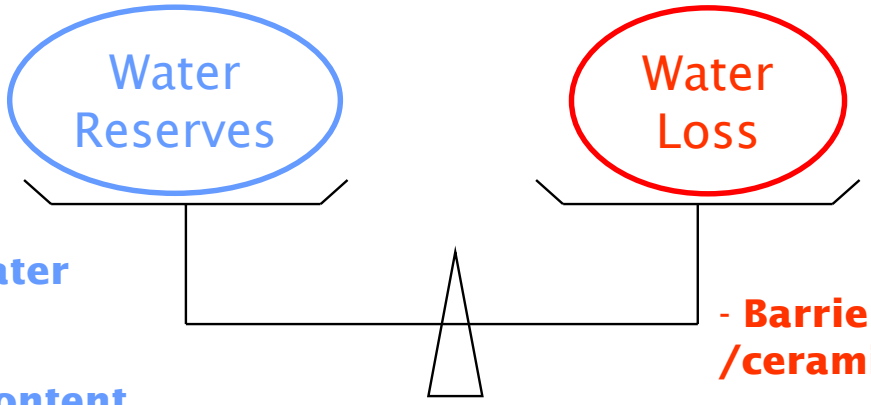
1.1 Dermal water reservoirs
(macromolecules able to trap water, GAGs)

Blood circulation

Water contribution

(food)

The hydrous flow balance is essential for an optimum hydration state



- GAGs = dermal water reservoirs

- Epidermal water content (corneometry)

- Barrier function /ceramide

- Water Loss (TEWL)

AQUAXYL
HYDRACONCEPT : Harmonization of Skin's Hydrous Flow

Dry and fragile skin

↘ Water Reserves

↗ Water loss

Hydrous flow **imbalance**

(causes : environment, irritating products, aging)

↓

Alteration of desquamation

↓

Disorganization of skin microrelief

Moisturized and resistant skin

Water Reserves Water loss

Hydrous flow **balance**

↓

Normalization of desquamation

↓

Reorganization of skin microrelief

Harmonization of skin's hydrous flow

AQUAXYL
Moisturizing and restructuring effect

↗ Water reserves :

↗ Dermal GAGs (*in vitro*)

↗ Epidermal hydrous content : cornometry (*in vivo*)

↘ Water loss :

↗ Ceramides – Barrier function (*in vitro*)

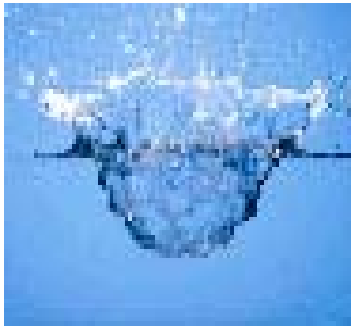
↘Trans Epidermal Water Loss – TEWL

(*in vivo*)

Hydraconcept

Thanks to a new harmonization of cutaneous hydrous flow, AQUAXYL moisturizes and restructures the skin

The skin is more resistant and better equipped to combat external aggressions



1. HYDRACONCEPT

2. AQUAXYL Structure

3. Strong points

4. Harmonization of Skin's Hydrous Flow - HYDRACONCEPT

5. AQUAXYL – summary

6. Tolerance

7. Formulation Guidelines

AQUAXYL
STUCTURE

SEPPIC « Expertise » (sugar chemistry) dedicated to the continuous improvement of hydration

Glucose and Xylitol association

(Humectant & hygroscopic molecules, able to trap free water)

Xylitylglucoside synthesis

(new structure – vegetable and natural origin)

AQUAXYL STRUCTURE

Glucose

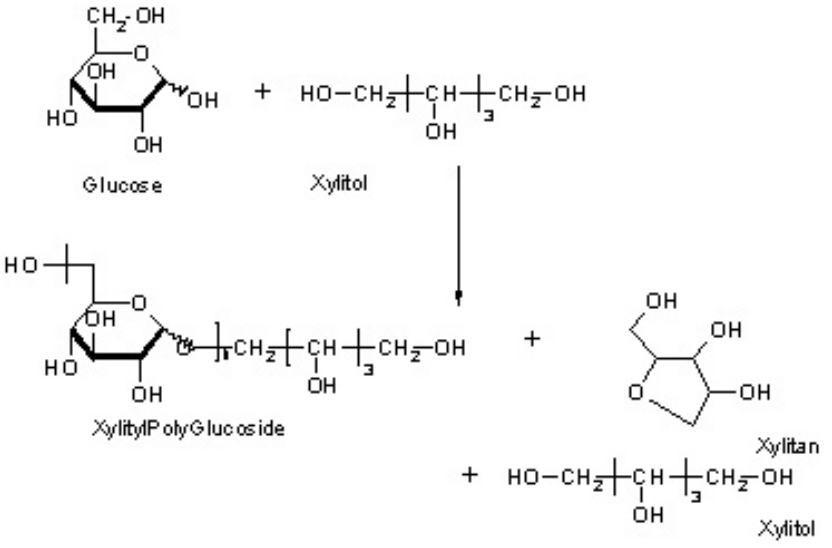
(vegetable origin, wheat)

Xylitol

(vegetable origin, wood)

Xylitylglucoside + anhydroxylitol + Xylitol

Reaction :



INCI name : Xylitylglucoside and anhydroxylitol and xylitol

Analytical caracteristics (specifications) :

Analysis	Results & Methods	Specifications Minimum - maximum
20°C appearance	S 52 180 B	LIMPIDE
5% pH	NFT 73 206	5,5 – 7,5
Color	S 52 150B	0,0 – 6,0 VCS
Water content	S 52 006 B	15 – 17%
Solid content / Hydroxyl value	S 52 080 A	1100 - 1300
Xylitol	S 52 317 A	3,0 – 20,0 %
Anhydroxylitol (xylitan)	S 52 317 A	20,0 – 35,0 %
Xylitylglucoside	S 52 317 A	40,0 – 77,0 %
Bacteriology	PH. EUR. 2.6.12 & 2.6.13	CONFORME

The analytical specifications garanteed are those mentioned on the analysis certificate supplied with each delivery.

1. HYDRACONCEPT

2. AQUAXYL Structure

3. Strong points

4. Harmonization of skin's hydrous flow - HYDRACONCEPT

5. AQUAXYL – summary

6. Tolerance

7. Formulation Guidelines

AQUAXYL
Strong points

1. **MULTIFONCTIONAL moisturizing & restructuring agent from a natural and vegetable origin** (preservative free, allergen free, GMO free) / New patented ingredient (new structure - ELINCS)

2. **HYDRACONCEPT : innovative « moisturizing & restructuring » effect achieved by the harmonization of Skin's Hydrous Flow** – Immediate and long term effect (*in vitro* & *in vivo* proven efficacy)

3 - **Visible results at skin surface : normalisation of desquamation and improvment of skin microrelief**

4. **Excellent tolerance**

5. **Easy to use in cosmetic formulation (water soluble liquid)**

- Good incorporation in any type of galenic form (skin care & hygiene products)
- Perfect stability
- Allows the realization of white, colorless and odorless formula

1. HYDRACONCEPT

2. AQUAXYL Structure

3. Strong points

4. Harmonization of Skin's Hydrous Flow - HYDRACONCEPT

5. AQUAXYL – summary

6. Tolerance

7. Formulation Guidelines

1. Optimization of water reserves !

1.1 Increase of dermal water reservoirs (**GAGs** = Glycosaminoglycans) - *In vitro*

Fibroblasts

6 days incubation with :

AQUAXYL
or **EGF ** (reference)**
or **control (without active)**

** EGF / Epidermal Growth Factor

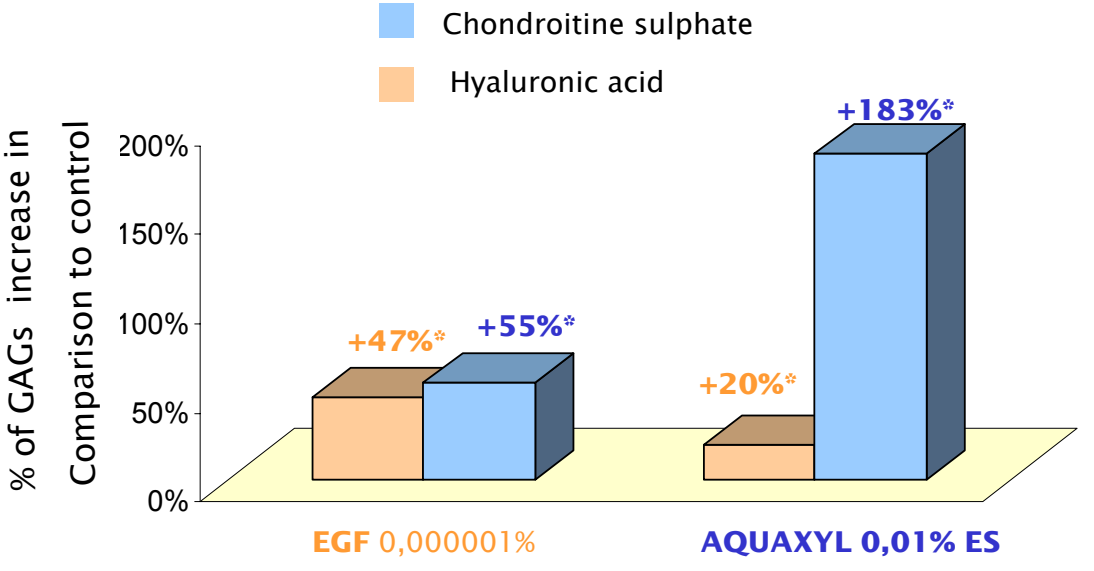
% GAGs in comparison to the control

Hyaluronic acid *(able to retain 1000 times its weight in water)*

Chondroitine sulphate
(involved in water retention and in skin biochemical property)

1. Optimization of water reserves !

1.1 Increase of dermal water reservoirs (**GAGs** = Glycosaminoglycans) – *In vitro*



* :significative results ($p<0.05$) in comparison to control

AQUAXYL increases GAGs content *(Hyaluronic acid and chondroitine sulphate)*

The trapped water is available within the skin

1. Optimization of water reserves !

1.3 Epidermis water content : corneometry (in vivo)

In vivo protocol :

- **AQUAXYL at 3%** (6925 formula) **versus placebo**
- **25 volonteers with dry skin** (<55CU)
- **1 month of treatment**
- 2 applications per day
- Application area : **on Legs**
- **Evaluation at D0 (8 hours) , D15, and D30**

6925 Formula (Montanov base) :

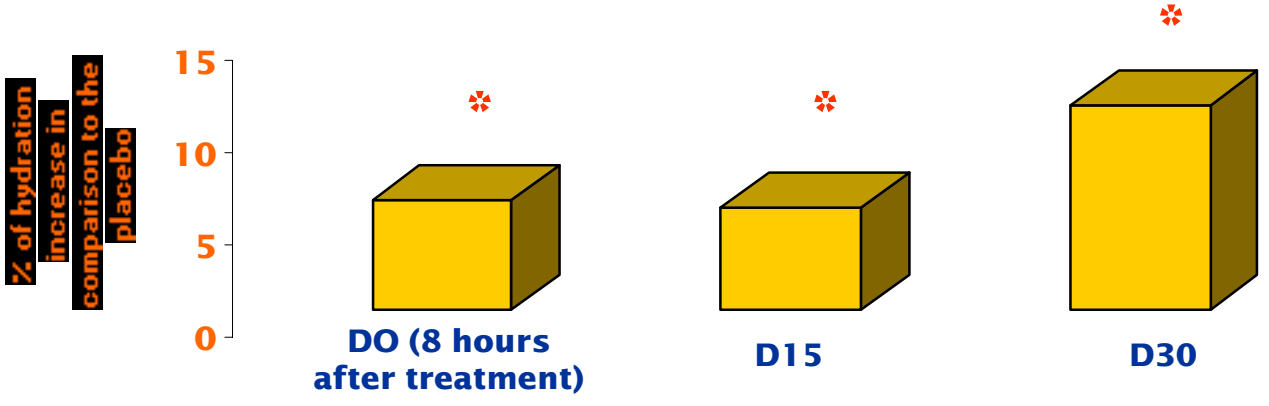
A	• **MONTANOV 68** ***(Cetearyl alcohol and Cetearyl glucoside - SEPPIC)***	1.50 %
	• **MONTANOV 202** ***(Arachidyl alcohol and behenyl alcohol and arachidylglucoside - SEPPIC)***	1.50 %
	• Cetearyl octanoate	15.00 %
B	• Aqua/Water	QSP 100%
C	• **SIMULGEL EG** ***(Sodium acrylate/acryloyldimethyltaurate copolymer and Isohexadecane and Polysorbate 80 - SEPPIC)***	1.00 %
D	• **AQUAXYL** ***(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)***	3.00 %
	• Parfum/Fragrance	0.30 %
	• **SEPICIDE HB** ***(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)***	0.30 %
	• **SEPICIDE CI** ***(Imidazolidinyl urea - SEPPIC)***	0.20 %

=> Electrical conductance measurement = hydration state of epidermis upper layers (corneometry)

1. Optimization of water reserves !

1.3 Epidermis water content : corneometry (in vivo)

(6925 Formula versus placebo)



* : significative results (p<0,05) **in comparison to placebo**

AQUAXYL significantly improves epidermis hydration vs placebo from the first day of treatment. This effect is confirmed after 15 days and one month.

=> Immediate and Long Term moisturizing effect

2. Decrease of Water Loss

2.1 Barrier function improvement : increase of ceramide synthesis (intercellular cement) on human skin « tissues » (ex vivo) – immediate effect (D1)

Topical application of actives formulated at 3% in cream gel (AQUAXYL or GLYCERIN Vs placebo)

Entire Human skin tissue

Epidermis ceramide level

(Thin Layer Chromatography)

Tested formula

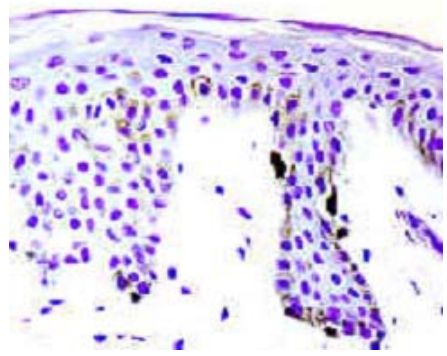
Lanol 99 (isononyl isononanoate) : 5%

Sepigel 305 (polyacrylamide, C13-14 isoparaffin, Laureth 7) : 2%

Preservative : 0,5%

Active ingredient : 3%

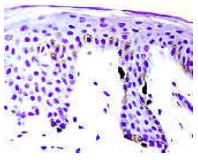
pH around 6

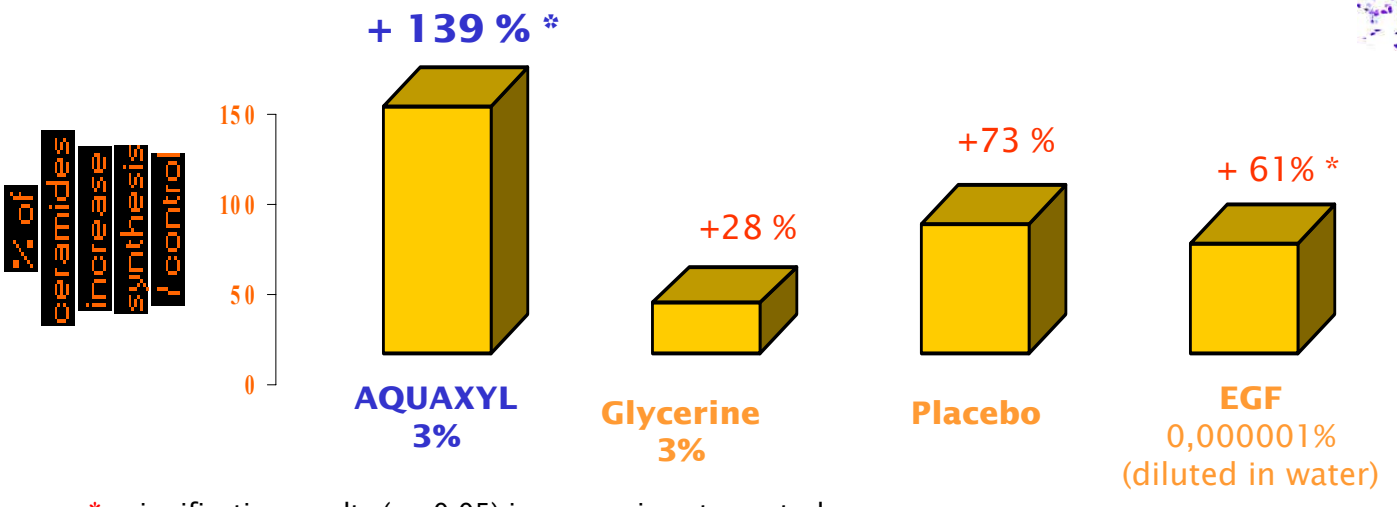


Human skin tissue

2. Decrease of Water Loss

2.1 Barrier function improvement : increase of ceramide synthesis (intercellular cement) on human skin « tissues » (ex vivo)





* : significative results (p<0,05) in comparison to control

AQUAXYL significantly stimulates ceramide synthesis (better efficacy than glycerin)

The Barrier function is improved.

2. Decrease of Water Loss

2.2 Trans Epidermal Water Loss decrease (TEWL) – in vivo

in vivo protocol :

- **AQUAXYL at 3%** (6925 formula) **Vs placebo**
- **25 volonteers with dry skin** (<55CU)
- **1 month of treatment**
- 2 applications per day
- Application area : **on Legs**
- **Evaluation at D0 (8 hours), D15 and D30**

6925 formula (Montanov base :

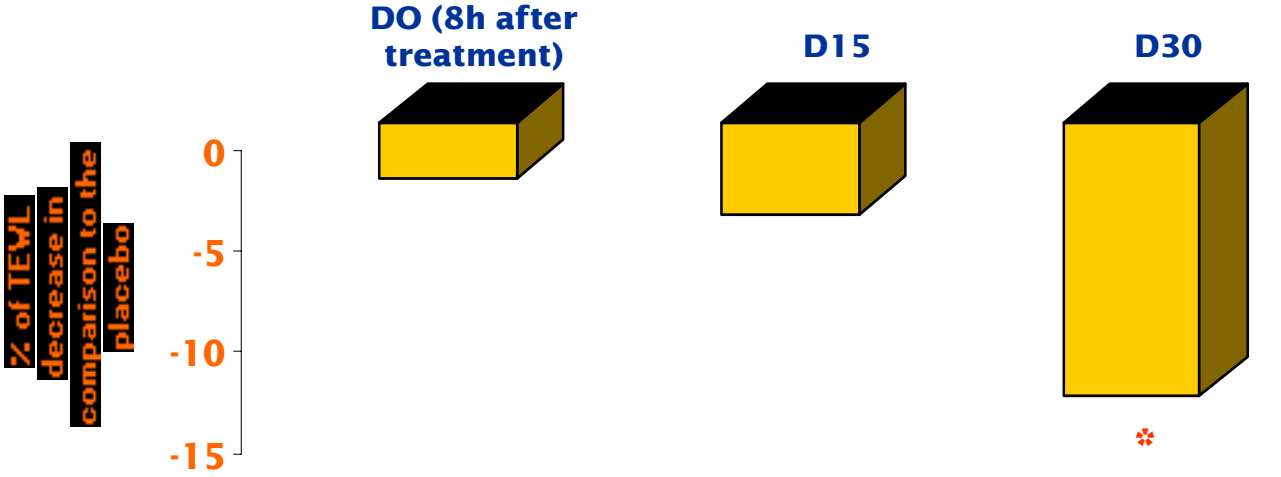
A	• **MONTANOV 68** *(Cetearyl alcohol and Cetearyl glucoside - SEPPIC)*	1.50 %
	• **MONTANOV 202** *(Arachidyl alcohol and behenyl alcohol and arachidylglucoside - SEPPIC)*	1.50 %
	• Cetearyl octanoate	15.00 %
B	• Aqua/Water	QSP 100%
C	• **SIMULGEL EG** *(Sodium acrylate/acryloyldimethyltaurate copolymer and Isohexadecane and Polysorbate 80 - SEPPIC)*	1.00 %
D	• **AQUAXYL** *(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)*	3.00 %
	• Parfum/Fragrance	0.30 %
	• **SEPICIDE HB** *(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)*	0.30 %
	• **SEPICIDE CI** *(Imidazolidinyl urea - SEPPIC)*	0.20 %

=> **Measurement of Trans Epidermal Water Loss (TEWL)** (evaporimeter)

2. Decrease of Water Loss

2.2 Trans Epidermal Water Loss decrease (TEWL) – in vivo

(6925 formula versus placebo)



* : significative results (p<0,05) **in comparison to the placebo**

AQUAXYL decreases significantly Skin Water Loss versus placebo after one month of treatment

Skin is stronger and more resistant

3. Visual improvement of skin surface

=> Desquamation normalization and skin microrelief smoothing

In vivo protocol :

- **AQUAXYL at 3%** (6925 formula) **versus placebo**
- **25 volonteers** - **dry skin** (<55CU)
- **1 month of treatment**
- 2 applications per day
- Application area : **on Legs**
- **Evaluation at D0 (at 8 hours) and D15 an D30**

6925 formula (Montanov base) :

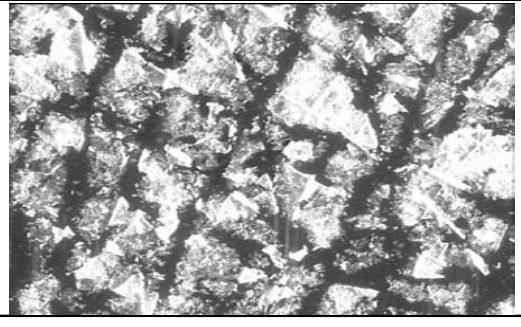
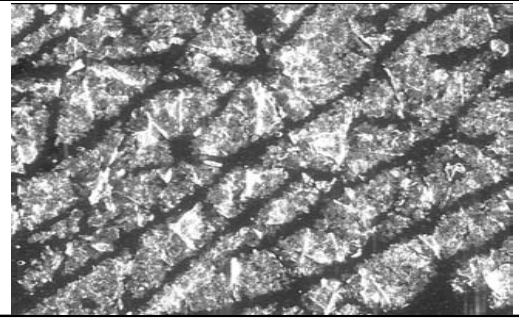
A	• **MONTANOV 68** *(Cetearyl alcohol and Cetearyl glucoside - SEPPIC)*	1.50 %
	• **MONTANOV 202** *(Arachidyl alcohol and behenyl alcohol and arachidylglucoside - SEPPIC)*	1.50 %
	• Cetearyl octanoate	15.00 %
B	• Aqua/Water	QSP 100%
C	• **SIMULGEL EG** *(Sodium acrylate/acryloyldimethyltaurate copolymer and Isohexadecane and Polysorbate 80 - SEPPIC)*	1.00 %
D	• **AQUAXYL** *(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)*	3.00 %
	• Parfum/Fragrance	0.30 %
	• **SEPICIDE HB** *(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)*	0.30 %
	• **SEPICIDE CI** *(Imidazolidinyl urea - SEPPIC)*	0.20 %

5.1. Desquamation => removal of corneocytes at D30 (D squama)

5.2. Microrelief => Direct skin prints at D30 – Evaluation of skin network

3. Visual improvement of skin surface (in vivo)

3.1 Desquamation normalization and skin microrelief smoothing

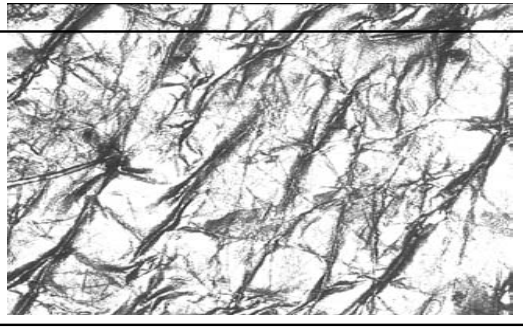
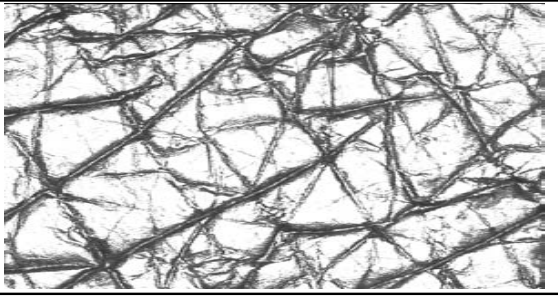
Corneocytes removal (D squames) at D30	
1 month treatment with placebo	***1 month treatment with placebo + 3% AQUAXYL (6925 formula)***
	
+ 25% improvement of desquamation with 3% AQUAXYL compared to the placebo (visual score)	

From the first month of treatment, AQUAXYL normalizes the desquamation

The skin is visibly moisturized

3. Visual improvement of skin surface (in vivo)

3.2 Skin microrelief smoothing => direct print with cyanoacrylate

Skin prints at D30	
1 month treatment with placebo	***1 month treatment with placebo + 3% AQUAXYL (6925 formula)***
	
+ 30% of skin microrelief improvement with 3% AQUAXYL in comparison to the placebo	

From the first month of treatment, AQUAXYL reorganizes the skin microrelief . The barrier function is reinforced.

The skin is smoothed, visibly restructured

1. HYDRACONCEPT

2. AQUAXYL Structure

3. Strong points

4. Harmonization of Skin's Hydrous Flow - HYDRACONCEPT

5. AQUAXYL – summary

6. Tolerance

7. Formulation Guidelines

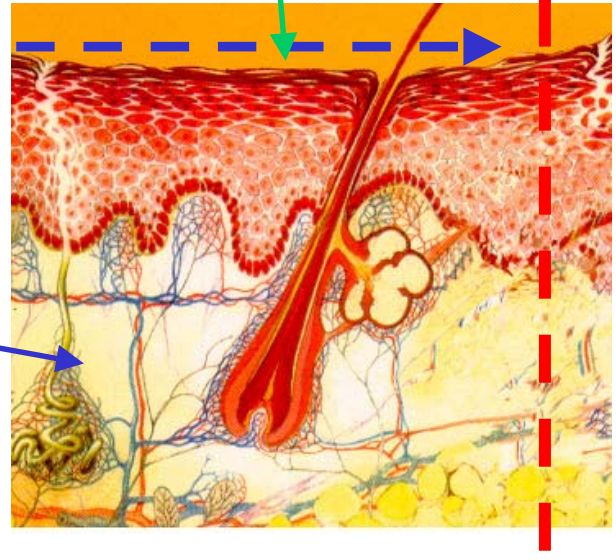
AQUAXYL
Harmonization of Skin's Hydrous Flow - HYDRACONCEPT

3. Visual improvement of skin surface (normalization of desquamation & smoothing of microrelief – in vivo)

1. Increase of WATER RESERVES

2. Decrease of WATER LOSS

1.2 increase of Epidermal Water Content (↗ of electrical conductance - *in vivo*)



2.1 Improvement of barrier function : (↗ceramide synthesis – *ex vivo*)

1.1 Increase of Dermal Water Reservoirs (↗GAGs - *in vitro*)

2.2 Decrease of Trans Epidermal Water Loss (↘TEWL- *in vivo*)

A new strategy for an ideally moisturized and restructured skin

1. HYDRACONCEPT

2. AQUAXYL Structure

3. Strong points

4. Harmonization of Skin's Hydrous Flow - HYDRACONCEPT

5. AQUAXYL – summary

6. Tolerance

7. Formulation Guidelines

Excellent tolerance of AQUAXYL :

. **Well tolerated in 48H patch test** (caucasian skins)

. **Well tolerated in use test** during one month (in vivo test – 2 applications per day)

. **Non sensitizing** (10% - Marzulli Maibach)

. **Non mutagenic** (Ames)

. **Good eyes tolerance** (Het Cam)

Suggested dosage level : 3 to 5% in cosmetics formula

1. HYDRACONCEPT

2. AQUAXYL Structure

3. Strong points

4. Harmonization of Skin's Hydrous Flow - HYDRACONCEPT

5. AQUAXYL – summary

6. Tolerance

7. Formulation Guidelines

AQUAXYL
Formulation Guidelines

Excellent stability of AQUAXYL in cosmetic formula. Ready to use, water-soluble and transparent liquid

Transparent → **White, colorless & transparent formula**

Water-soluble → **Wet wipes**

Odorless → **Low fragrance or fragrance free formula**

No color or odor changes with temperature over time. AQUAXYL can be incorporated at each state of formulation process.

Perfect compability with water, alcohol and glycols

Easy to prepare any type of formula including transparent lotions and also wet wipes

No incompatibility known in formulation

AQUAXYL
Formulation Guidelines

AQUAXYL can be easily incorporated between 3 and 5% in all kinds of formulations for MOISTURIZING and RESTRUCTURING benefits.

Moisturizing and tonifying comfort cream gel 6811A

A	• Water	QSP 100%
	• **MICROPEARL M305** ***(Methylmethacrylate crosspolymer - SEPPIC)***	01.00 %
	• **SEPITONIC M3** ***(Magnesium aspartate & Zinc gluconate & Copper gluconate – SEPPIC)***	01.00 %
	• **AQUAXYL** ***(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)***	03.00 %
B	• Isononyl isononanoate	05.00 %
	• Cyclomethicone	02.50 %
	• **SIMULGEL EG** ***(Sodium acrylate/acryloyldimethyl taurate copolymer & Isohexadecane & Polysorbate 80 -SEPPIC)***	03.00 %
C	• Fragrance	00.10 %
	• **SEPICIDE HB** ***(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)***	00.30 %
	• **SEPICIDE CI** ***(Imidazolidinyl urea - SEPPIC)***	00.20 %

Procedure

Disperse SIMULGEL EG in oils. Mix ingredients in A. Introduce B into A with a dispersing turbin. Add fragrance and preservatives in the swollen gel.

Characteristics

Appearance	White shiny gel
pH	6.2
Viscosity	55,000 mPas BROOKFIELD LV4 6rpm
Stability	Stable at RT/40°C/50°C and after freeze-thaw cycles –
5/+40°C	Stable when centrifuged 50°C 20' 3000rpm

Body wash « Moisturizing mist » 6858A

A	• Fragrance	1.00 %
	• **MONTALINE C40** ***(Cocamidopropyl betaïnamide MEA chloride – SEPPIC)***	8.00 %
	• **PROTEOL OAT** ***(Sodium lauroyl oat aminoacids – SEPPIC)***	5.00 %
	• Methylchloroisothiazolinone & Methylisothiazolinone	0.08 %
B	• Sodium lauryl sufate	9.00 %
	• **AQUAXYL** ***(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)***	3.00 %
	• Water	QS 100 %
C	• Lactic acid	QS Ph=6.5
	• Colour	QS

Procedure

Solubilize the fragrance in the surfactant blend (OAT + C40) and introduce the preservative. Disperse the lauryl sulfate into the water, when clear add AQUAXYL then A. Adjust pH and colour. Final viscosity can be easily regulated by adding MONTALINE C40 .

Characteristics

Appearance	Clear gel with a light green colour
pH	approx. 6.5
Viscosity	approx 10,000 mPa.s BROOKFIELD LV 6rpm
Stability	Stable at room temp/40°C/+4°C

« Force and Hydration » Skin care
6925

A	• **MONTANOV 68** ***(Cetearyl alcohol and Cetearyl glucoside - SEPPIC)***	1.50 %
	• **MONTANOV 202** ***(Arachidyl alcohol and behenyl alcohol and arachidylglucoside - SEPPIC)***	1.50 %
	• Cetearyl octanoate	15.00 %
B	• Aqua/Water	QSP 100%
C	• **SIMULGEL EG** ***(Sodium acrylate/acryloyldimethyltaurate copolymer and Isohexadecane and Polysorbate 80 - SEPPIC)***	1.00 %
D	• **AQUAXYL** ***(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)***	3.00 %
	• Parfum/Fragrance	0.30 %
	• **SEPICIDE HB** ***(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)***	0.30 %
	• **SEPICIDE CI** ***(Imidazolidinyl urea - SEPPIC)***	0.20 %

Procedure

Heat the fatty phase to 80°C. Add the fatty phase to teh aqueous phase and start the homogenisation. Then, after few minutes, add the SIMULGEL EG. After 7' (DUMEK, 2kg batch pilot), stop heating and homogenizing and start the cooling step under moderate stirring. Around 40°C add ingredients of the D phase .

Charactéristics

Aspect	White cream
pH	6.5
Viscosity	30,000 mPa.s BROOKFIELD RV S4 6rpm
Stability	stable at RT-40°C-50°

Nourishing hand cream for Damaged skin 6934

A	• **MONTANOV L** ***(C14-22 alcohol and C12-20 alkylglucoside - SEPPIC)***	1.00 %
	• **MONTANOV 14** ***(Myristyl alcohol/Myristyl glucoside - SEPPIC)***	1.00 %
	• LANOL P (***Glycol palmitate - SEPPIC)***	3.00 %
	• Pentaerythrityl tetraisostearate	5.00 %
	• Dimethicone	7.00 %
B	• **SIMULGEL EG** ***(Sodium acrylate/acryloyldimethyltaurate copolymer and Isohexadecane and Polysorbate 80 - SEPPIC)***	0.80 %
C	• Aqua / Water	Qsp 100%
D	• **AQUAXYL** ***(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)***	5.00 %
	• Parfum / Fragrance	0.20 %
	• C hlorphenesin	0.30 %
	• **SEPICIDE HB** ***(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)***	1.00 %

Procedure

Heat the fatty phase to 80°C. Add the fatty phase to the aqueous phase and start the homogenisation. Then, after few minutes, add the SIMULGEL EG. After 7' (DUMEK, 2kg batch pilot), stop heating and homogenizing and start the cooling step under moderate stirring. Around 40°C add ingredients of the D phase .

Charactéristics

Aspect	White cream
pH	6
Viscosité	60,000 mPa.s BROOKFIELD RV S4 6rpm
Stabilité	able at RT-40°C-50°C

Moisturizing mist
6940

A	• Parfum / Fragrance	0.05 %
	• **MONTANOX 20** ***(Polysorbate 60 – SEPPIC)***	1.00 %
	• **SEPICIDE HB** ***(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)***	0.30 %
B	• Aqua/Water	QSP 100 %
	• **SEPICIDE CI** ***(Imidazolidinyl urea - SEPPIC)***	0.20 %
C	• **SEPITONIC M3** ***(Magnesium aspartate & Zinc gluconate & Copper gluconate – SEPPIC)***	1.00 %
	• **AQUAXYL** ***(Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)***	3.00 %

Procedure

Solubilize the fragrance and SEPICIDE HB in the MONTANOX 20. Then, and introduce the B phase then the C phase.

Characteristics

Appearance	Clear and colorless liquid
pH	approx. 5.5
Viscosity	<50 mPa.s BROOKFIELD LV 6rpm
Stability	Stable at room temp/40°C/+4°C

Restructuring and moisturizing anti aging program - 6941

A	• **MONTANOV 202** ***(Arachidyl alcohol and behenyl alcohol and arachidylglucoside - SEPPIC)***	3.50 %
	• **MONTANOV 14** ***(Myristyl alcohol/Myristyl glucoside - SEPPIC)***	1.50 %
	• Isostearyl isostearate	2.00 %
	• Pentaerythrityl tetraisostearate	3.00 %
	• Phytosqualane	8.00 %
	• **BR FOREST (*Astrocaryum Murumuru Butter – SEPPIC)***	0.20 %
	• **SEPILIFT DPHP (*Dipalmitoyl Hydroxyproline – SEPPIC)***	1.00 %
B	• **SIMULGEL EG** ***(Sodium acrylate/acryloyldimethyltaurate copolymer and Isohexadecane and Polysorbate 80 - SEPPIC)***	0.20 %
C	• Aqua / Water	Qsp 100%
D	• **AQUAXYL (*Xylitylglucoside and anhydroxylitol and xylitol- SEPPIC)***	3.00 %
	• **SILASOMA MEA** ***(Polysislicone -14 / Ethylhexylmethoxycinnamate / Butylmethoxydibenzoylmethane / Water / Butylene glycol / Phenoxyethanol- SEPPIC)***	8.00 %
	• Parfum / Fragrance	0.10 %
	• Chlorphenesin	0.30 %
	• **SEPICIDE HB** ***(Phenoxyethanol/Methylparaben/Ethylparaben /Propylparaben /Butylparaben - SEPPIC)***	1.00 %

Procedure

Heat the fatty phase to 80°C. Add the fatty phase to teh aqueous phase and start the homogenisation. Then, after few minutes, add the SIMULGEL EG. After 7' (DUMEK, 2kg batch pilot), stop heating and homogenizing and start the cooling step under moderate stirring. Around 40°C add ingredients of the D phase .

Characteristics

Appearance	White cream
pH	5.5
Viscosity	23,000 mPa.s BROOKFIELD RV S4 6rpm
Stability	stable at RT-40°C-50°C

Nota

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

Except as set forth above, SEPPIC* makes no warranties, whether express, implied or statutory, as to the product which is the subject of this document . Without limiting the generality of the foregoing, SEPPIC* makes no warranty of merchantability of the product or of the fitness of the product for any particular purpose. Buyer assumes all risk and liability resulting from the use or sale of the product, whether singly or in combination with other goods. The information set forth herein is furnished free of charge and is based on technical data that SEPPIC* believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside SEPPIC*'s control, SEPPIC* makes no warranties, express or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

* SEPPIC being:

SEPPIC S.A.
75, quai d'Orsay
75321 Paris cedex 07
FRANCE
Tel. : +33 (0) 1 40 62 55 55
Fax : +33 (0) 1 40 62 52 53

GIVAUDAN LAVIROTTE S.A.
56, rue Paul Cazeneuve
BP 8344 – 69008 Lyon
FRANCE
Tel. : +33 (0) 4 78 61 55 00
Fax : +33(0) 4 72 05 60 89

And, depending on the country:

SEPPIC UK Ltd
50 Salisbury Road
PO Box 338 - Hounslow
TW4 6SH - ENGLAND
Tel. : +44 208 577 8800
Fax : +44 208 570 2106

SEPPIC Inc.
30, Two Bridges Road, suite 210
Fairfield, New Jersey 07004-1530
USA
Tel. : +1 973 882 5597
Fax : +1 973 882 5178

SEPPIC GmbH
ABC Tower Köln
Ettore - Bugatti - Str.6-14
51149 Köln-Porz
GERMANY
Tel. : +49 (0) 220 3890 3100
Fax : +49 (0) 220 3890 3199

SEPPIC ITALIA Srl
Via Quarenghi 27
20151 Milano
ITALY
Tel. : +39 02 38009110
Fax : +39 02 38009140

SEPPIC Chine
Room 510 Jin Tai Building
58 South Mao Ming Road
Shanghai 200020 CHINA
Tel. : +86 (21) 64 66 01 49
Fax : +86 (21) 64 66 11 09

SEPPIC Belgium NV
Nieuwe Weg 1
Haven 1053
B – 2070 Zwijndrecht
BELGIUM
Tel. : +32 3 250 3911
Fax : +32 3 250 3912

www.seppic.com

Subsidiary of the AIR LIQUIDE Group