

# OUR HAIR CARE

active ingredients



LABORATOIRES  
SÉROBIOLOGIQUES

# LS active ingredient range for hair care

Today, hair has a big influence in the recognition of each person, in regard to himself and to its environment: it is a real identification criteria of each of us in our society.

To keep or to render hair optimal aesthetic characteristics is the target of all type of hair care. Today these one evolve in the rhythm of life style evolution, but also linked to the development of new hair technologies, in the field of hair dye, blow-dry, perm, relaxers...

Laboratoires Sérobiologiques, strong of a long experience in hair care, present you here their actives for hair. A wide range of products for various claims, mainly based on natural and botanical extracts. Each product is substantiated by specific efficacy tests.

Have a look on this catalogue, sure you will find the right answer to your projects!

the KNOW-HOW  
at the service of INNOVATION

For any further information about these active ingredients, please contact your local representative, or send your question on [customer-service.LS@cognis.com](mailto:customer-service.LS@cognis.com).

## Normal hair

Normal hair is naturally shiny, healthy, full of life and body. Nevertheless, it needs adapted hair care, to keep it in good condition and preserve its beauty.

### Shine

INDINYL® CA LS 8998 - Native heteropolysaccharides from *Cassia angustifolia*.

ACTICERAMIDES RC LS 9283 - Ready to use ceramides dispersion, adapted to cold processes and clear products.



### Softness

ALMONDERMIN® AF LS 8767 - Mucilages from sweet almond, linseed and marshmallow.

CASHMILAN® LS 9604 - Hydrolyzed cashmere keratin.



### Combing

IRWINOL® LS 9319 - African wild mango (*Irvingia gabonensis*) butter. Alternative to shea butter.

HIBISCIN® LP LS 9321 - Hydrolyzed protein from okra (*Hibiscus esculentus*).



### Strength / Vitality

DERMOSACCHARIDES® GY - Concentrated solution of glycogen of marine origin.



### Hydro-nutrition

LACTOLAN® LS 5879 - Bio-metabolisate obtained by delipidation and specific successive bio-transformations of milk.

MELHYDRAN® LS 4420 - Ecological derivative of floral nectar (honey).

TECHNOBION® BL LS 8407 - Pro-biotic extract, obtained by biotechnology from lactic ferments used in the food industry.



### Volume

DANSONYL® LS 9175 - African baobab leave extract, rich in mucilages and polysaccharides.



# Damaged hair

Regular use of aggressive chemical hair treatments and exposure to environment cause hair damages. Hair loses its visual and sensorial properties. It's time to protect and repair it!

## Perm / Hair relaxer

HYDRO-TRICHOSYL® LS 8846 - Synergistic association of botanical proteins, silicon and cationic derivative.  
CASHMILAN® LS 9604 - Hydrolyzed cashmere keratin.



## Hair dye

SPHINGOCERYL® VEG LS 8712 - Sunflower phytoceramides with restructuring effect.  
LACTOLAN® LS 5879 - Bio-metabolite obtained by delipidation and specific successive bio-transformations of milk.



## Urban pollution

PURICARE® LS 9658 - Naturally cationic proteins extracted from the seeds of the "Miracle Tree", *Moringa oleifera*.



## Thermal shock

CERAVITIN® LS 9534 - Botanical complex of wild mango butter and sunflower phytoceramides.



## Sun / Chlorine / Sea salt / Sand

VEGELES® PHYTOFILTRE AD LS 9370 - Bioflavonoids of bitter orange and baobab - UV protection.  
PURICARE® LS 9658 - Naturally cationic proteins extracted from the seeds of the "Miracle Tree" *Moringa oleifera*.



# Specific care

They intend to answer to specific and precise problems, namely at the scalp level. They can be used either on a regular basis, or as intensive treatments.

## Anti-seborrhea

SEBARYL® FL LS 9088 - Sulfopeptides and vitamins associated to natural botanical extracts.



## Anti-dandruff

ELESTAB® HP 100 - Cutaneous antimicrobial with a wide spectrum: Hexamidine diisethionate.  
VEGELES® AHA LS 8763 - Complex of fruit acids for a gentle exfoliation of the scalp.



## Anti-hair loss

TRICHOGEN® VEG LS 8960 - Synergistic trichogenic complex to slow down hair loss, and stimulate hair growth.  
DERMOSACCHARIDES® GY - Concentrated solution of glycogen of marine origin.



## Anti-age

TRICHOLASTYL® LS 9267 - Phyto-complex based on the extract of the Indian Ayurvedic plant, *Pterocarpus marsupium*.  
SPHINGOCERYL® VEG LS 8712 - Sunflower phytoceramides with restructuring effect.



# Product range

Product name	Benefits	INCI name	Use level
<b>ACTICERAMIDES RC LS 9283</b> <i>Ready to use solubilized ceramides</i> 	Hair shine enhancer Protecting, restructuring, repairing effect on hair shaft	Water (and) Glycerin (and) Glycosphingolipids (and) Phospholipids (and) Acrylates / C10 - 30 Alkyl Acrylate Cross Polymer (and) Cholesterol (and) Sodium Hydroxide	1 - 2 %
<b>ALMONDERMIN AF LS 8767</b> <i>Botanical biopolymer</i> 	Hair softening Moisturizing Smoothness	Water (and) Linum Usitatissimum (Linseed) Seed Extract (and) Xanthan Gum (and) Althaea Officinalis Root Extract (and) Prunus Amygdalus Dulcis (Sweet Almond) Fruit Extract	1 - 3 %
<b>CASHMILAN® LS 9604</b> <i>Cashmere keratin</i> 	Softening - Substantivity Conditioning - Protection and repair of damaged hair (perm)	Water (and) Hydrolyzed Keratin	2 - 5 %
<b>CERAVITIN® LS 9534</b> <i>Complex of wild mango butter and sunflower phytoceramides</i> 	Anti-cold protection Conditioning Improvement of hair sensorial properties	Octyldodecanol (and) Hydrogenated Coco-Glycerides (and) Irvingia Gabonensis Kernel Butter (and) Helianthus Annuus (Sunflower) Seed Extract	1 - 2 %
<b>DANSONYL® LS 9175</b> <i>Purified mucilages from baobab leaves</i> 	Volume Moisturization Softness	Hydrolyzed Adansonia Digitata Extract	2 %
<b>DERMOSACCHARIDES® GY</b> <i>Marine glycogen</i> 	Stimulation of hair bulb metabolism and hair growth Strength and vitality	Water (and) Glycerin (and) Glycogen	1 %
<b>ELESTAB® HP 100</b> <i>Hexamidine diisethionate</i> 	Scalp aseptizer (oily scalp and hair) Anti-dandruff	Hexamidine Diisethionate	0.03 - 0.08%
<b>HIBISCIN® LP LS 9321</b> <i>Hydrolyzed hibiscus protein</i> 	Improvement of hair combing Conditioning Film-forming Repair	Hydrolyzed Hibiscus Esculentus Extract	2 %
<b>HYDRO TRICHOSYL® LS 8846</b> <i>Synergistic complex</i> 	Protection against perm damage Conditioning Softness	Water (and) Hydrolyzed Soy Protein (and) PEG-12 Dimethicone (and) Hydroxycetyl Hydroxyethyl Dimonium Chloride	0.5 - 1 %
<b>INDINYL® CA LS 8998</b> <i>Heteropolysaccharides from ayurvedic plant</i> 	Improvement of hair shine and sensorial properties Conditioning Repair of damaged hair	Water (and) Cassia Angustifolia Seed Polysaccharide	1 - 3 %
<b>IRWINOL® LS 9319</b> <i>Botanical butter of "wild mango"</i> 	Improves hair combing Bio-conditioner Alternative to shea butter	Octyldodecanol (and) Irvingia Gabonensis Kernel Butter (and) Hydrogenated Coco-Glycerides	0.5 - 1 %
<b>LACTOLAN® LS 5879</b> <i>Milk bio-metabolisate</i> 	Moisturization - Nutrition - Conditioning Protection and repair of damaged hair Regeneration and stimulation of hair bulb Protection of dyed hair	Hydrolyzed Milk Protein	1 - 3 %
<b>MELHYDRAN® LS 4420</b> <i>Honey extract</i> 	Prolonged moisturization Hygroscopic - Substantive	Honey extract	1 - 5 %
<b>PURICARE® LS 9658</b> <i>Moringa protein</i> 	Hair protection against environmental stress and pollution UV protection - Conditioner - Strengthener Also "anti-greasy" effect for oily hair	Water (and) Glycerin (and) Moringa Pterygosperma Seed Extract	2 %
<b>SEBARYL® FL LS 9088</b> <i>Synergistic complex</i> 	Sebum regulation (oily hair / scalp)	Water (and) Niacinamide (and) Yeast Extract (and) Aesculus Hippocastanum (Horse Chestnut) Seed Extract (and) Ammonium Glycyrhizate (and) Panthenol (and) Propylene Glycol (and) Zinc Gluconate (and) Caffeine (and) Biotin	3 %
<b>SPHINGOCERYL® VEG LS 8712</b> <i>Sunflower phyto-ceramides</i> 	Hair dye protection Structuring - Protection Improvement of cuticle scale cohesion	Octyldodecanol (and) Hydrogenated Coco-Glycerides (and) Helianthus Annuus (Sunflower) Seed Extract	1 - 3 %
<b>TECHNOBION® BL LS 8407</b> <i>Pro-biotic extract</i> 	Nutrition Moisturization Stimulation of metabolism Repair	Lactococcus Ferment (and) Propylene Glycol	3 - 5 %
<b>TRICHOGEN® VEG LS 8960</b> <i>Phyto-synthetic complex</i> 	Anti-hair loss Stimulation of hair growth Conditioning Improvement of hair strength	Water (and) Panax Ginseng Root Extract (and) Arginine (and) Acetyl Tyrosine (and) Arctium Majus Root Extract (and) Hydrolyzed Soy Protein (and) Polyquaternium-11 (and) PEG-12 Dimethicone (and) Calcium Pantothenate (and) Zinc Gluconate (and) Niacinamide (and) Ornithine HCl (and) Citrulline (and) Glucosamine HCl (and) Biotin	5 - 10 %
<b>TRICHOLASTYL® LS 9267</b> <i>Phyto-complex based on an Indian plant</i> 	Anti-age concept for scalp Protection of hair youthfulness Slowing down of seasonal hair loss	Water (and) Mannitol (and) Pterocarpus Marsupium Bark Extract (and) Disodium Succinate (and) Glutamic Acid	Intensive treatment: 10 % Complementary care: 2 - 5 %
<b>VEGELES® AHA LS 8763</b> <i>Synergistic AHA-complex</i> 	Smooth exfoliation of the scalp Helps to eliminate dandruff	Water (and) Glycerin (and) Sodium Lactate (and) Glycolic Acid (and) Sucrose (and) Urea (and) Sodium Citrate (and) Malic Acid (and) Tartaric Acid	3 - 5 %
<b>VEGELES® PHYTO FILTRE AD LS 9370</b> <i>Natural flavonoids</i> 	Protection of hair against UV damage Prevents UV-induced color fading	Water (and) Propylene Glycol (and) Bioflavonoids (and) Hydrolyzed Adansonia Digitata Extract (and) Dextrin	2 - 4 %

# LS photo gallery of hair

The Laboratoires Sérobiologiques R&D Centre has a specific unit specifically dedicated to hair. The following hair pictures have been taken using the internal equipments and softwares.

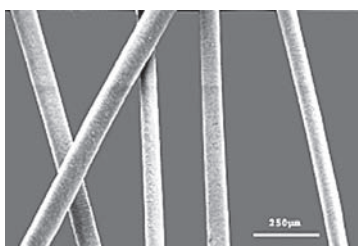
## Scanning Electron Microscopy

Study of human hair structure and specificity. Pictures from the hair shaft surface to its internal structure.

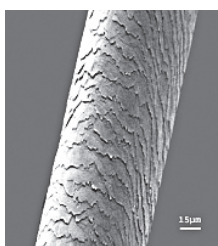
Hair is taken off, covered with gold and observed by SEM (Scanning Electron Microscope).

This technique allows to visualize hair surface and its constitutive scales. It is used for the evaluation of the cosmetic activity of various active ingredients claiming a surface activity: conditioning, repairing, smoothing, softening properties.

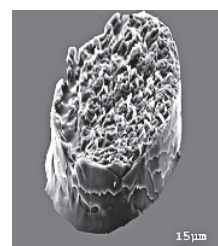
With a higher magnification, it is possible to visualize hair internal structure: the organization of macro-fibrilla, surrounded by the external cuticle scales.



Hair shafts

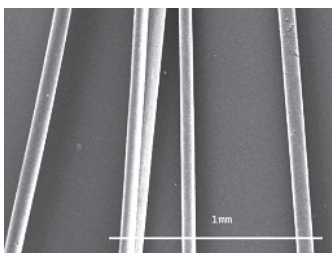


Zoom on hair cuticle scales

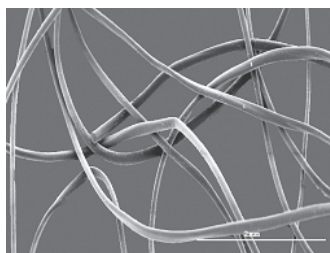


Cross-section of a hair shaft

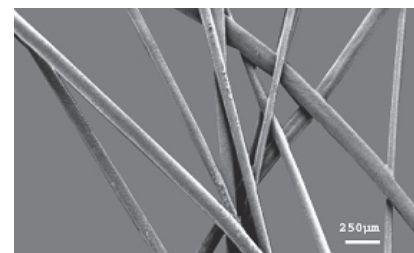
## General aspect of hair of different origins



Asian hair



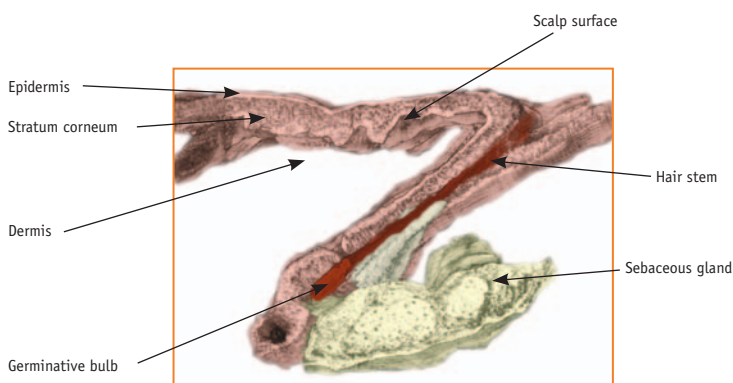
African hair



Caucasian hair

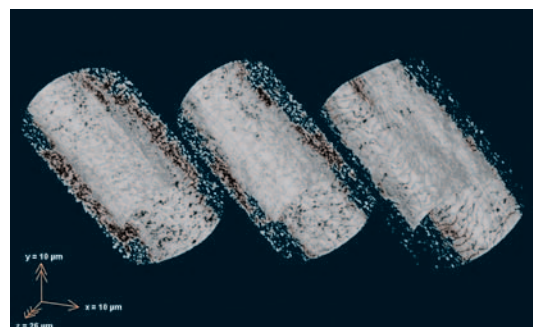
## 3D imagery

### Application to the structural study of hair and scalp



This picture has been prepared from human scalp biopsy. Successive cross-sections have been taken and dyed using standard histological techniques. The images to constitute 2D plan (x and y directions) were acquired by optical microscopy (1 cross section is composed of 15 - 20 images). The reconstruction in z direction allowed the visualization in 3D. The different colors were attributed to the different structural components of scalp biopsy. This technique allows the preparation of 3D videos.

### Application to the visualization of the efficacy of an active ingredient



The serial image acquisitions of hair fibers were obtained by reflectance microscopy. All the 2D data were converted to obtain a 3D image. A transparency effect was added on hair after a 120° rotation to highlight the efficacy of the active ingredient (PURICARE® LS 9658)



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