# nnovative manual





Kalichem

#### A HIGH TECH MANUFACTURER

### >> 5 REASONS TO CHOOSE KALICHEM

#### THE FUTURE AT YOUR FINGERTIPS

Anticipating trends and creating the future of dermocosmetics are the pillars of Kalichem's Research and Development.

#### A VAST SCIENTIFIC KNOW HOW

Our raw materials are the right answer to the most challenging market needs. Kalichem is an innovative company centered around the collective and cumulative learning process that needs a prolonged use and coordination of the skills and efforts of many persons with the end objective of producing competitive ingredients that customers want and are willing to buy.

#### THE CAPACITY TO ADAPT AND COMBINE

Kalichem possesses the capacity to adopt and combine, often in an original manner, new and already existing ideas, knowledge and innovations. This is an innovative approach, open and able to absorb knowledge and steer it towards new applications, tailored for new markets.

#### **UNCOMPROMISING CONTROLS**

**We work on rigorous basis** from the R&D study to the realization of the product (quality of plants, processes and controls). Kalichem's priority is **validation of processes** and managing the improvement of controls, while standardization and reproducibility are our main commitment.

#### A STABLE, STILL DYNAMIC AND FLEXIBLE, REALITY

Kalichem and Lamberti combined have more than 120 years of history full of patents, innovation, awards and love for the scientific research.

### >> OUR TECHNOLOGIES



#### **Vegetable lipoproteins & lipoaminoacids**

made of fatty acids derived from olive oil and other vegetable sources which, condensed with a vegetable aminoacidic portion, form an amphiphilic anionic unit. The **emulsifiers** and the **surfactant** included in this category are not only technical effective ingredients but also real actives able to provide moisturization, emolliency and much more...



3



#### Molecular biology & biotechnology

our Clinical beauty: raw materials at the highest level of innovation from the best national and international research institutes. Fermentation biotechnologies, peptides, DNA and much more, find their maximum expression in this group of raw materials. In this category: Cosmetobiomic postbiotics, double helix DNA and neurocosmetics





### Functionalized Hydroxyapatite & biomimetic expertise

thanks to the close collaboration with the most advanced and recognized Research Institutes, Kalichem offers in this section a selection of functionalized biomimetic hydroxyapatites that meet the most varied needs: from sun protection, to deodorization, to dental applications... and much more



# In ovative manual



### KALICHEM

### A GREEN AND SUSTAINABLE COMPANY, A CONSISTANT PARTNER IN THE DEVELOPMENT OF RAW MATERIALS

Scientific research has always been part of Kalichem's DNA since its foundation in 2004. Every new Kalichem product is the result of the hard work of a number of scientists and researchers who are committed to the research and the realization of products based on avant-garde cosmetic technologies. Investing in research is a high priority :

- a high percentage of the total turnover of the Kalichem Group is dedicated to base research and product development;
- a number of specialists are engaged daily in Research Centres which collaborate with Kalichem;
- the R&D Kalichem laboratory works closely with the most prestigious universities and the most influential research centres all over the world.

Kalichem has been awarded a silver medal in recognition of CSR (Corporate Social Responsibility) achievement for its attention to environment, ethics, labor and human rights by Ecovadis: the world's most trusted provider of business sustainability ratings.

### >> FROM ITALIAN INNOVATION: THE ACTIVES



**Microbiome balance / microbeauty - postbiotic actives** Skin microbiota helps protect the skin from allergens, free radicals photoaging and pollutants. The microbial balance is the key factor ensuring skin protection and homeostasis. Kalichem's postbiotics rebalance the native microbiota in all skin types, by strengthening the skin mechanical barrier, modulating its immune defences and restoring the primary distribution of local bacterial communities.

**"Smart" deodorant system** Skin friendly and not irritant, able to efficiently adsorb odors and sweat, ensuring a long-lasting natural dry feel and a silky smoothing effect. A state of the art approach to minimize the safety concerns related to the use of chlorhydrate actives commonly found on the market.



**Dermatological antiage** The era of cosmetic ingredients as simple "decorating" actives is over. Today's focus is oriented towards using ingredients aimed to provide dermatological added value. Kalichem's actives work through innovative mechanisms of action through specific pathways to bring physiological benefits at different levels to improve the skin condition and prevent ageing.



**Face** • **body care** Kalichem actives for face/body care are based on patented technologies and/or the use of extracts whose action is addressed to specific actions: working on several applications like cellulite, acne support treatment, deodorants, de-reddening, etc. Kalichem specialties bring innovation through the selection of natural actives and the creation of synergies between them.



**Sun care** Kalichem suncare actives are comprehensive of sunscreen boosters, actives preserving skin elasticity and able to reduce the UV related stress on the dermis, and specialties working on the reduction of the erythema and the typical reddening events caused by sun exposure: in other words, smart solutions both for pre- and after- sun exposure.



Hair care Working on the hair health has become one of the greatest challenges in cosmetics. Kalichem actives work both on the health status of the hair bulb, and on the upper structures composing it, through nourishing and film-forming features. In depilatories the strategy to counteract hair regrowth relies on different mechanisms working on the pigmentation and the reduced stimulation of the hair's regrowth.



**Oral care** Changing the rules of oral care. Revolutionary as it may sound, that's what happened with Kalichem oral care actives. The introduction of the physiological Calcium Hydroxyapatite changed radically the approach in oral care, making obsolete the use of fluorides and creating a new option to abrasive active ingredients.



Make up Today the industry is running on a new path trying to reconciliate the traditional approach based on the use of synthetic ingredients with the new one, characterized by the strong influence of green. Ingredients for mascara, soft focus actives, elasticity enhancers and strong antioxidants. Kalichem enters this market segment with cutting edge technologies.



**Moisturization** • **emolliency** Having a moisturized skin means working on its epidermis, and more specifically on the hydro-lipidic film. Such film is composed of fats and hydrophilic substances, whose balance is fundamental in keeping the skin properly moisturized. Kalichem actives work on both such factors, improving physiologically the skin hydration.

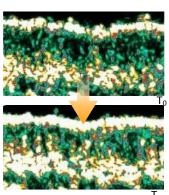
For all ingredients we have certifications with regards to their quality, safety and efficacy, in line with the most rigorous norms and the most elevated technical and qualitative standards and a vast documentation.

## **MICROBIOME BALANCE**



### >> KALIBIOME AGE [0,1 - 0,2%] <<

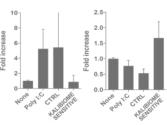
- Skin boosting, antiaging ingredient
- Revitalizes the extracellular matrix, by promoting the synthesis of hyaluronic acid in human keratinocytes and pro-collagen I alpha 1 in fibroblasts
- Effective as the Epidermal Growth Factor (EGF) in enhancing skin repair, thus exerting a significant antiaging effect



### >> KALIBIOME SENSITIVE [0,1 - 0,2%] <<

- Postbiotic specifically designed for sensitive and reactive skin. It reduces irritation and improves skin health and appearance
- Strengthens the skin barrier by sealing the epithelial layers, reduces redness and irritation due to its immunomodulatory activity
- Significantly reduces the level of long isoform of TSLP, the pruritogenic trigger involved in skin inflammation

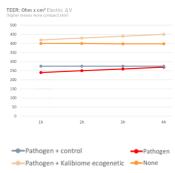




# COGENETIC •

### >> KALIBIOME ECOGENETIC [0,1 - 0,2%] <<

- Postbiotics able to balance the skin microbiome and promote the reinforcement of the skin defense mechanisms
- Keeps the integrity of the barrier function even in presence of pathogens
- Shows bacteriostatic action against skin pathogens (eg Staphilococcus Aureus)
- Promotes skin redensification, as result of a regeneration activity counteracting mechanical stress (eg. prolonged use of face masks etc.)



## **SMART DEODORANT SYSTEM**





### >> DEOHAP DRY [3 - 5%] <<

- Deodorizing and sweat control mineral ingredient
- Performances optimized to ensure a long lasting effect and skin tolerability
- Natural powerful odors and sweat absorption without effecting perspiration
- Instant skin smoothing effect , leaves the skin dry to the touch for up to 48h.

#### % OF WETNESS REDUCTION DEO<sub>AP</sub> VS PLACEBO (T24h-T48h)



# DERMATOLOGICAL ANTIAGE





### >> APALIGHT [1 - 5%] <<

- Hides skin spots and wrinkles since the first application through optical effect
- Increases skin Elasticity by 10% after 1 month
- Reduces skin roughness by 9% after 1 month
- Soft Focus active ingredient
- Gives a glowing look to the skin
- Boosts sun protection more than  $TiO_2$  when combined with filters
- Physiological ingredient, Cosmos approved versions available

### >> CIKADERM [1 - 5%] <<

- Contains Croton Lechleri, popular extract from Amazon
- Increases Collagen, Fibronectin and Integrins production
- Speeds up the formation of scar tissue
- Prevents the formation of Stretch Marks
- Reduces Itching, Stretch Marks roughness and redness
- Targeted for restoring treatments for dry hands and damaged skin
- Increases skin elasticity; one of the most effective anti-aging extract in nature

### >> OXISOL [0,1 - 3%] <<

- Reduces by 30% the pollution related toxicity
- Antioxidant much more effective than Vit.C, Vit. E., Resveratrol
- Stable structure, it works faster and longer than common antioxidants
- Boosts UV-A & UV-B protection
  - Ideal for obtaining antiaging creams with SPF and UVA Protection Factor
  - Reduces the ageing process caused by InfraRed radiations
- Watersoluble

### >> KALINAT [0,1 - 0,5%] <<

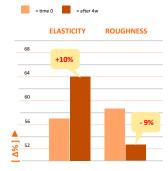
- Increases skin elasticity by 26%
- Increases skin thickness by 8%, giving a repulping effect
- Increases the production of stem cells and fibroblasts
- Immune system modulator
- Reduction by 4% of pre-existing wrinkles, +5% moisturization
- Targets molecularly A2 Adenosine receptor on fibroblasts
- Regulates microcirculation (dark circles treatment)
- Cell regenerating action (for Medical Devices & Cosmeceuticals)

### >> KALILIGHT [1 - 5%]<<

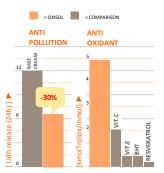
CTIONALIZED HYDROXYAPATITE

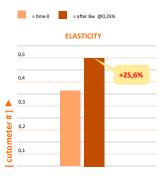
.

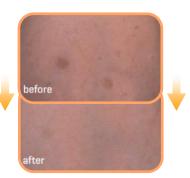
- Winner of the PCHi China as most innovative brightening and whitening raw material
- Skin Spot Correction both on short and long term
- Soft-focus effect : immediate coverage of skin spots and wrinkles
- Long term effect: direct reduction of Eumelanin through Tyrosinase inhibition / Long term effect: shifts Eumelanin production into Pheomelanin production / Antioxidant features (Glutathione & Cysteine action)
- ITA° Grade :+4.2%, very close to Hydroquinone
- +2,2 % skin brightness, -4,3% change of shade of skin color











CIKADERM REGENERATES AND REPAIRS

**Xis** 

### DERMATOLOGICAL ANTIAGE (continues)

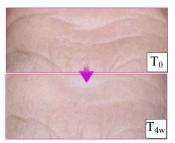




ш

### >> PEPTILIFT [2,0 - 10,0 %] <<

- Based on biomimetic endorphin, included in delivery system: it is able to promote a Botox-like effect on face mimic muscles
- Reduces wrinkle volume by 55% and increases elasticity by 49%
- Proven active in reducing forehead and frown lines, nasolabial folds and crow's feet
- Promotes damaged skin regeneration with an EGF like activity
- Modulates the expression of skin growth factors and MMP (metalloproteinases) leading to skin revitalization and retexturizing



FILLEDERM' KALIBIOM

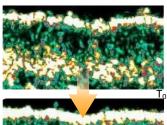
### >> KALIBIOME AGE [0,1 - 0,2%] <<

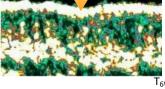
- Skin boosting, antiaging ingredient
  - Revitalizes the extracellular matrix, by promoting the synthesis of hyaluronic acid in human keratinocytes and pro-collagen I alpha 1 in fibroblasts
- Effective as the Epidermal Growth Factor (EGF) in enhancing skin repair, thus exerting a significant antiaging effect

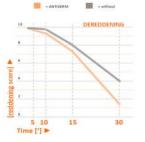
### >> FILLEDERM [0,3 - 3%] <<

- Natural anti-wrinkle filler with homogenizing, smoothing and texturizing properties
- Boosts the production of epidermal keratinocytes cells (+22%)
- Increases in vivo skin firmness, density and smoothness
- Penetrates inside the wrinkle, filling it and reflecting the UV/visible rays
- Proven SPF 15 measured in vitro

FACE • BODY CARE











### >> ANTIDERM [3 - 5%] <<

- Dereddens the skin and increases moisturization
- Composed of natural anti-inflammatories, antiseptic, emollient and moisturizing compounds (Panthenol, Allantoin, Glycirrhetinic Acid, Copaiba Balsam, Olive Oil)
  - Targeted for sensitive skin creams, anti-couperose creams, soothing baby creams

### >> BATTERIKAL F [3 - 5%] <<

Combination of vegetable oils specific for anti-microbial action

- BATTERIKA
- Based on Manuka Oil, Copaiba Balsam, Black Currant Oil, Olive Oil Powerful combination of the fatty acids of the Black Currant Oil and Olive oil, which improve the fluency of sebum and the Babassu Oil and Copaiba bactericidal action
- Significant effectiveness against Gram+ bacteria likes Propionibacterium acnes and Staphylococcus aureus and fungi such as Trichophyton spp. and Candida albicans

+Filederm @2% - Not treated Cells



### MIC



Ideal for deodorants and acne treatments



### FACE • BODY CARE

nature



# CIKADERM REGENERATES AND REPAIRS

REDU

LOK KALIBIOM

### >> CIKADERM [1 - 5%] <<

- Contains Croton Lechleri, popular extract from Amazzonia
- Increases Collagen, Fibronectin and Integrins production
- Speeds up the formation of scar tissue
- Prevents the formation of Stretch Marks
  - Reduces Itching, Stretch Marks roughness and redness
- Targeted for restoring treatments for dry hands and damaged skin Increases skin elasticity; one of the most effective anti-aging extract in

### >> LIPOREDUX PRO FOR [1 - 5%]<<

- Combination of 3 synergic lipolytic compounds (CLA-Carnitine-Forskolin)
- CLA Carnitine is a synergistic blend with which Carnitine absorption is maximized; CLA furthermore induces the increase of physiological Carnitine production
- Reduces the thigh circumference of -2,34 cm
- Proved to reduce the Orange Peel effect, and improve the skin tone compactness
- Gives a long term action; the body does not get used to its effect
- No side effects, no interference with cardiovascular system and thyroid

### >> MIX OXI STOP [5 - 20%] <<

Slows down hair regrowth by 30-40%

Helps reduce the hair intense pigmentation, through the reduction of the post depilatory skin stressing conditions (Aloe, Chamomilla, Mimosa extracts)

- Retards hair re-growth (Papaya extract)
- Reduces irritation and redness after depilation



Postbiotic specifically designed for sensitive and reactive skin. It reduces irritation and improves skin health and appearance

Strengthens the skin barrier by sealing the epithelial layers, reduces redness and irritation due to its immunomodulatory activity

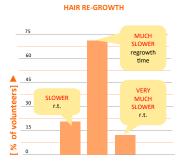
Significantly reduces the level of long isoform of TSLP, the pruritogenic trigger involved in skin inflamation

### >> FLYBLOK [3 - 5%] <<

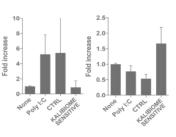
- Mosquitos are repelled by the slight odor of the raw material
- Natural molecule (Catalpolo) from a selected species of the plant
- Catambra, from Italy
- Tested in vivo, with single applications it helps reduce the number of bites from mosquitos
- Not toxic, vegetal
  - Ideal for sprays, lotions, wet wipes, creams, environmental products

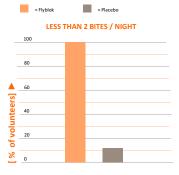












### **SUN CARE**





### >> ANTIDERM [5%] <<

- Ideal active ingredient for after sun
- Lowers the toxic effects related to prolonged UV exposure
- Dereddens the skin and increases skin moisturization
- It can be used in the oily phase for the formulation of sunscreens
- Composed of natural anti-inflammatories, antiseptic, emollient and moisturizing compounds (Panthenol, Allantoin, Glycirrhetinic Acid, Copaiba Balsam, Olive Oil), rebalancing skin normality

### >> APALIGHT [3 - 6%]<<

- Physical sunscreen booster
- In order to declare SPF, it must be combined with registered filters
- Tested in vivo, when combined with organic filters, it boosts SPF better than TiO<sub>2</sub> in SPF 15,30,50+ formulas, and boosts ZnO SPF features
- Tested and active both with old and new generation filters combination
- No whitening effect when applied
- Not nanomaterial (and not biopersisant, it is easily metabolized by human body)
- Cosmos approved versions available

### >> OLIVOIL AVENATE EMULSIFIER [2-10%] <<

Liquid crystal emulsifier, based on Olive Oil fatty acids and aminoacids and polypeptides from Oat / Allows a uniform distribution of the sun filters on the skin / High dermocompatibility: Olive Oil fatty acids have the same thermodynamic behavior of skin cells membranes, and restore skin barrier (with a big reduction of the TEWL)

Avoids sun-exposure related dryness and the loss of elasticity and prolongates sun tan / Specific to formulate sunscreens and regenerating After sun Oat aminoacids create a soft silky velvety protective layer on the skin / Emulsifies up to 50% of oily phase, with no HLB restrictions

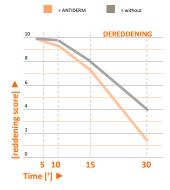
Cosmos Ecocert approved versions available

>> OLISUN [5 - 35%] <<

- Innovative technology of pre-solubilized filters for cold emulsions making
- Allows having already solubilized and stable different UV-A & UV-B filters (including some filters traditionally tough to work with)
- Gives SPF lotions and sprayable emulsions working at cold, with simple water addition
- With acrylic polymer gives SPF gels, with addition of Lipidic Consistency factors gives SPF creams

>> OXISOL [0,5 - 3%] <<

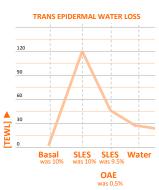
- Wide spectrum booster, working both on SPF and UVA protection
  - Improves SPF more than approved UV-B filters
  - Improves UVA-Protection factor and strong Anti-Pollution action
  - Photo-stable , reduces by 30% the pollution related toxicity
- Water Soluble, easy to use
- Stabilizes UV-A Protection Factor, counteracting Avobenzone loss of efficacy
- Dualistic booster: stable and free radicals scavenger to prevent Photo Ageing and Infrared related ageing, along with anti-pollutants features

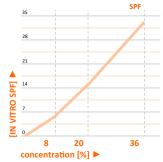


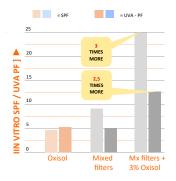
= with Apalight



= with TiO<sub>2</sub>









## HAIR CARE



OLIV OIL FRUTTOSIDE

### >> OLIVOIL FRUTTOSIDE [2 - 20%] <<

- Conditioning surfactant based on Olive Oil and Fructose
- Increases hair shining and softness more than Cocoglucoside
- Hyper delicate on skin and mucous (targeted for products with low eye irritation)
- TEWL better than the other known mild surfactants on the market
- Foam and viscosity booster, to be used as primary or secondary surfactant
- Cosmos Ecocert approved versions available

### >> KERASHAFT V [0,5 - 10%] <<

- Green Keratin technologies: vegetable aminoacids and polypeptides with keratin like performances
- Hair surface conditioning and hair shaft restructuring
- Substantivity, volumizing, repairing, detangling, moisturizing, luminosity increase and nourishing
- 100% green and sustainable, Cosmos approved
- To be used in all types of shampoo and hair treatment products (leaveon or rinse-off)

### >> KERASHAFT Q [0,5 - 10%] <<

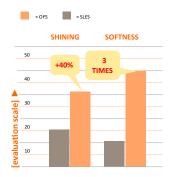
- Quaternized Version of Green Keratin technologies: vegetable aminoacids and polypeptides with keratin like performances
- Hair Conditioning and Detangling effects given by an efficient anti-static action
- Nourishes and repairs the hair by increasing Sulphur available for disulfide bonds formation
- Specific for "professional" performances
- Boosts hair shining and increases resistance against hair drying and straightning
- To be used in shampoos, conditioners, dyes, masks

### >> HYDROLIZED PROTEINS [0,5 - 5%] <<

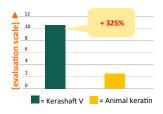
- Kemicher/ Hydrolyzed Keratin: the same component of the hair. Active specific for nourishing hair shaft and regenerating damaged hair
- Kemisilk/ Hydrolyzed Silk: Aminoacids and polipeptides from Sericin, known protein providing film forming, velvety and silky after feel on the skin and hair
- Kemigran/ Hydrolyzed Wheat Protein: volumizing and conditioning active, specific for hair lotions, masks, balms, shampoos

### >> STIMUCAP [1-3%] <<

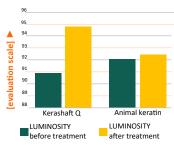
- Based on the combination of the patented synergistic specialty CLA-Glutathione and Sodium DNA
- CLA Glutathione gives a combined anti-oxidant anti-inflammatory action to counteract hair fibrosis and stress
- Sodium DNA has been proven to be able to thicken and increase hair count, through a strong regenerative and proliferative action
  - Tested in vivo vs Minoxidil, it gives better resistance to traction (less hair fallen) and is more pleasant during and after the application
  - No side effects, it is very well tolerated and with a high functional impact

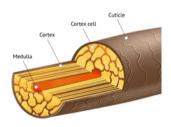


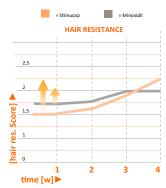
EDX MICROANALYSIS Sulphur Atoms Concentration (%) Found in Treated Hair

















## **ORAL CARE**



KALIDENTO

OHOSPHACTEETH

### >> KALIDENT [3 - 15%] <<

- Remineralizing active ingredient
- Option to Fluorides and abrasive actives in new generation toothpaste formulations
- Microlesions repairer
- Anti-caries action
- Filler of dental scratches, it prevents hypersensitivity
- Increases by one shade of white the color of the tooth
- Boosts the removal of bacterial plaque
- Cosmos approved versions available

### >> PHOSPHACTEETH [10 - 15%] <<

- Promotes the in vivo formation of Calcium Hydroxyapatite, Carbonate Apatite and Fluoride Apatite
- Increases the tooth protection against the acid erosion, through an increase of resistance of the enamel
- Increases 4 times the delivery of Fluoride and Carbonates in saliva and tooth surface in comparison to the benchmark found on the market
- Targets more efficiently the tooth surface through the use of Citrates, with a bio-mimicry mechanism
- Specific for Remineralizing, Anti-Hypersensitivity and Anti-Caries applications

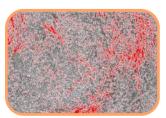
### >> OLIVOIL GLUTAMATE [2 - 5%] <<

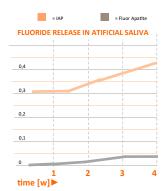
- Olivoil Glutamate: based on the combination of Olive Oil with sugar cane derived Glutamic Acid
- Mild surfactant with delicate and efficient cleaning action on tooth and gums
- Foaming agent performing better than SLES in Ross Miles measurement Surfactant tasting better than other commonly used surfactants in oral care
- Ecocert and Cosmos approved versions available

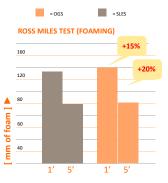
<ALIBIOM E</pre>

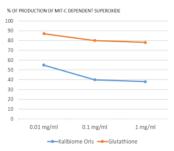
### >> KALIBIOME ORIS [0,1 - 0,5%] <<

- Postbiotics ideal for sensitive gingiva and support periodontitis treatments
- Promotes gingiva inflammation reduction through a modulatory activity on immune system cytokines
- Exerts bacteriostatic action against oral pathogens (eg. Pseudomonas Aeruginosa)
- Reduces free radicals formation, aimed to counteract oral dysbiosis and inflammation triggering
- Promotes the oral mucosa barrier strengthening, through the increase of ZO-1 tight junctions (leading to oral keratinocyte cells sealing)









### MAKE UP ( to be continued ... )



LLEDERN R POWER 

### >> FILLEDERM [0,3-3%] <<

- Texturizing agent (it gives a smooth and silicon like texture to the cream)
- It makes BB, CC creams and foundations more creamy and fluid
- To be used in color cosmetics for its unique light pink color
- Soft Focus effect better than Silica and benchmarks (superior surface area and intensity of light transmission)
- It improves the powders adhesion to the skin
- Homogenizing the uniformity of the color
- Adjuvant of the compression of powdery formulations

### >> APALIGHT [1 - 5%]<<

- Mineral Make up
- Soft Focus Effect
- Gives a glow appearance to the skin from the first application
- Hides skin wrinkles and blemishes immediately
- Ideal for loose powders as illuminating active
- Boosts SPF (Color cosmetics with SPF)
  - Ideal physical sunscreen booster for lipsticks and color cosmetics creams
  - Cosmos approved versions available

### >> KALINAT [0,1 - 0,25%] <<

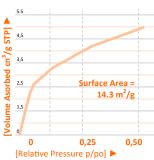
- Increases skin elasticity by 26%
- Increases skin thickness by 8%, giving a repulping effect
- Increases the production of stem cells and fibroblasts Immune system modulator
- Reduction by 4% of pre-existing wrinkles, +5% moisturization
- Targets molecularly A2 Adenosine receptor on fibroblasts
- Regularizes the microcirculation (dark circles treatment)

### >> KALILIGHT [1 - 5%]<<

- Mineral Make up
- Soft Focus Effect
- Hides skin wrinkles and blemishes immediately
- Ideal for color cosmetics as illuminating, whitening active
  - Strong anti-oxidant (Glutathione and Cysteine contribution)
- Winner of the PCHi China as most innovative brightening and whitening raw material

### >> OLIVOIL AVENATE EMULSIFIER [2-10%] <<

- Liquid crystal emulsifier, based on Olive Oil fatty acids and aminoacids and polypeptides from Oat / Allows a uniform distribution of pigments / High dermocompatibility: Olive Oil fatty acids have the same thermodynamic behavior of skin cells membranes, and restore skin barrier (with a big reduction of the TEWL)
- Emulsifies up to 50% of oily phase, with no HLB restrictions
- Olivoil fatty acids are very stable mineral and pigments suspenders
  - Ideal for foundation mousse, colored creams, mascara, primers, etc..
- Silky after feel but totally green
- Cosmos Ecocert approved versions available











Very fine Homogeneous







### MAKE UP ( continues )





### >> STIMUCAP [1 - 3%] <<

- Based on the combination of the patented synergistic specialty CLA-Glutathione and Sodium DNA
- Eyelashes thickener (the specialty contains DNA, raw material proven to increase and thicken hair in women), Stimucap gives them a natural and healthier look
- CLA works as prostaglandin modulator, able to control the process of the inflammation
- Glutathione is one of the strongest anti-oxidants in nature
- Stimucap reduces also the itching sensation more than benchmark actives

# MOISTURIZATION & EMOLLIENCY

### >> OLIVOIL PCA [1 - 20%] <<

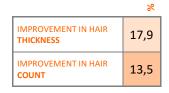
- Skin moisturizer working on the hydrolipidic film
- Composed of Olive Oil fatty acids (more skin biocompatible than other vegetal oils) to restore the skin barrier of the epidermis
- Composed of PCA (most found compound in skin Natural Moisturizing Factor) to hydrate skin surface through water binding
- Increases skin moisturization of +19% and gives +13% emolliency
- To be used as an emollient/moisturizer in washes & skin care
- Cosmos Ecocert approved versions available

### >> KEMIDERM NMF V [1 - 5%] <<

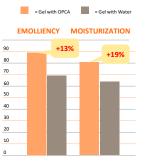
- Reproduction of the physiological Natural Moisturizing Factor
- Specialty containing sugars, aminoacids, PCA, Urea, Alfa-Hydroxyacids
- Increases directly the skin moisturization binding water from the environment to skin surface
- Urea forms well known emollient compounds with skin fats increasing the final moisturization of the skin
- Vegetable based ingredient

### >> KEMIDERM KMF [1 - 5%] <<

- Reproduction of the physiological Natural Moisturizing Factor
- Specialty containg sugars, aminoacids, PCA, Urea, Alfa-Hydroxyacids Increases directly skin moisturization binding water from the environ-
- ment to skin surface
- Contains phospholipids creating a liposomic structure
- Prolonged moisturization & retarded release of its active ingredients

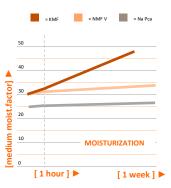






[ **∆%** ]







BATTERIKAL **CIKADERM DEO AP FILLEDERM** FLYBLOK **KALIBIOME KALIDENT KALILIGHT KALINAT KEMIDERM** LIPOREDUX PRO FOR **MIX OXI STOP OLISUN** OXISOL PEPTILIFT **PHOSPHACTEETH STIMUCAP** 

ANTIDERM

**APALIGHT** 





Head Office and Production:

Via Alessandrini 8 - 25086 Brescia - ITALY Tel: +39.030.26.93.532 - Fax: +39.030.21.93.581 kalichem@kalichem.it

www.kalichem.it



Vegetable/Vegan derived emulsifiers, surfactants and emollients

Patented composition based on Olive Oil fatty acids

Ecosustainable and highly biodegradable

Water saving features

Ideal for formulating certified organic cosmetics

Silicon like texture

RSPO and PALM FREE composition



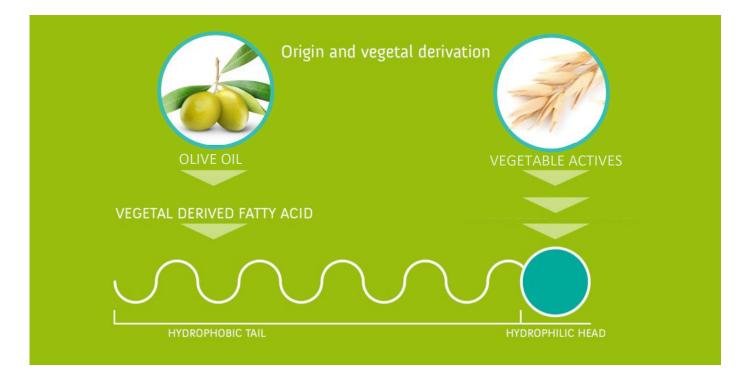
## **OLIVOIL TECHNOLOGY**



### ITALIAN INNOVATION FROM THE OLIVE FRUIT

### >> THE TECHNOLOGY

Combining the best of both vegetal oils and protein sources allowed Kalichem to achieve new molecoles having relevant interfacial properties. These new surfactants can be used to formulate "totally natural" finished products that are very suitable for sensitive skin, baby-care, hair-care and personal-hygiene. Furthermore, besides being extremely performing as vehicle ingredients (as surfactants and emulsifiers), thanks to their special composition they may act as functional substances with protecting, soothing and restoring ability. As for their environmental impact, they are characterized by high biodegradability (according to the CEE regulation N.82/242 OECD Method).



### >> OLIVOIL FAMILY LABELLING AND CERTIFICATIONS

Olivoil family products are specialties ideal for "green" certified and vegan cosmetics: approved by Cosmos Ecocert, they can be used in end cosmetics certified by Cosmos and other certifying labels (eg. Natrue and many others) both in natural and organic cosmetics.

Their composition is mainly based on olive oil fatty acids: all the surfactants and emollients have a 100% palm free composition, whereas the emulsifiers are available both in RSPO and PALM FREE versions.

Their use is approved in all cosmetics regulatory systems, including China



## **SURFACTANTS**

# ш ∢ Ζ L > ∢ AMAT CTAN SURFA TOSIDE FRUJ OLIVERICE UL

### >> OLIVOIL AVENATE [2 - 20%]

- Ideal for sensitive skin, baby care, extra-mild washes
- Contains olive fatty acids and oat polypeptides; silicon like after feel
- Reduces sulfate based systems TEWL more than 50% when used at 2%

### >> OLIVOIL GLUTAMATE [2 - 20%]

- Water saving features, ideal base for ecosustainable and biodegradable washes
- Foam building and boosting features, ideal both as primary or secondary surfactant
- More delicate than physiological water, in vivo tested

### >> OLIVOIL SURFACTANT [2 - 20%]

- Ideal for the hair shaft protection, face and body care applications
- Based on olive oil fatty acids and vegetable polypeptides; silicon like after feel
- Emollient, moisturizing action in vivo tested

### >> OLIVOIL FRUTTOSIDE [2 - 20%]

- Ideal for hair care and sensitive skin
- Based on soothing oat aminoacids, olive oil fatty acids and fructose
- Hair conditioning, low TEWL, foam builder/ booster, ideal for "tear free" formulations

### >> OLIVERICE [2 - 20%]

- Based on olive oil fatty acids and rice polypeptides
- Foam builder/booster
- Low TEWL, ideal for sensitive skin and hair care applications
- •

### >> POTASSIUM OLIVATE [2 - 20%]

- Liquid soap based on olive oil fatty acids
- Main ingredient of several traditional soap recipes (Marseille, Aleppo, Castile, Nablus soaps)
- Ideal for both personal care and household applications

### **EMULSIFIERS**

#### 

μ ω

A M A s I F I

\_ Σ

ΰū

### OLIVOIL AVENATE EMULSIFIER << [2 - 20%]

- Liquid crystal emulsifier based on olive oil fatty acids and oat polypeptides
- Silicon like texture, medium-quick absorption
- Ideal for hyper-fluid sprayable emulsions, serum, creams, sunscreens and foundation

### OLIVOIL GLUTAMATE EMULSIFIER << [2 - 20%]

- Liquid crystal emulsifier based on olive oil fatty acids and glutamic acid
- Available in PALM FREE and PRESERVATIVE FREE version
- Silicon like texture, medium absorption, rich after feel

### 

#### OLIVOIL EMULSIFIER << [2 - 20%]

- Liquid crystal emulsifier based on olive oil fatty acids and vegetable polypeptides
- Silicon like texture, medium-quick absorption
- Ideal for hyper-fluid sprayable emulsions, serum, creams, sunscreens and foundation

### OLIVE MILK << [2 - 20%]

- Cold process emulsifier for milky and fluid emulsion
- Able to promote the formation of liquid crystals and silicon like texture
- Emollient and moisturizing action

# MOISTURIZING & NOURISHING

### OLIVOIL PCA << [2 - 20%]

- Balanced hydration booster based on olive oil fatty acids combined to PCA
- Ideal for both skin care and rinse off application
- Foam builder in rinse off system, "green silicon" in skin care emulsions



0

0

OLIVERICE OLIVOIL AVENATE EMULSIFIER OLIVOIL AVENATE SURFACTANT OLIVOIL EMULSIFIER OLIVOIL FRUTTOSIDE SURFACTANT OLIVOIL GLUTAMATE EMULSIFIER OLIVOIL GLUTAMATE SURFACTANT OLIVOIL PCA OLIVOIL SURFACTANT POTASSIUM OLIVATE OLIVE MILK





Head Office and Production:

Via L. Alessandrini, 8 - 25086 Brescia - ITALY Tel: +39.030.26.93.532 - Fax: +39.030.21.93.581 kalichem@kalichem.it

www.kalichem.it

K X Kalichem a lamberti company

### SERVICES

### TAILOR MADE

A team of experts always available and the many collaborations with valued Universities and Research Centers raise the level of professionalism and quality of our team. According to a client brief the customer is walked through each step of the fine tuning of the project and of the desired claims' substantiation

### FORMULATION

The R&D formulation development university laboratory partner of Kalixhem offers research and development interventions, through which one can have available the entire know how necessary to the fulfilment and the commercialization of the end product



R&D LABORATORIES

### ASSETS

### IDEAS, KNWOLEDGE

Kalichem is able to interpret and satisfy the increasing market demand for ever more sophisticated, innovative and highly technological ingredients, thanks to its continuous commitment in very selective research projects.

### **SUSTAINABILITY**

Kalichem has always been involved in the research of natural ingredients delicate to the skin, with a low environmental impact. Particular attention is being paid to the respect of the ecosystem and of the natural resources, to the scrupulous research of «green chemistry».

### TESTING SERVICE

Our company offers ervices in the field of safety and efficacy valuations of dermo-cosmetological products, medical devices. Experts in clinical and laboratory testing, consulting and technical-scientific, markeing and regulatory assistance, with national and international clients.





Follow us:



Head Office and Production:

Via L. Alessandrini, 8 - 25086 Brescia - ITALY Tel: +39.030.26.93.532 - Fax: +39.030.21.93.581 kalichem@kalichem.it