



Hair Care Innovations



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Introduction

Active Concepts has built itself upon three pillars; innovative technology platforms, market leading customer support, and products with a purpose. For almost two decades, Active Concepts has diligently embarked on an endeavor to develop complex, active ingredients that provide formulators with unmatched function, in order to meet and exceed the rapidly increasing consumer demand for more effective cosmetic technologies.

Active Concepts prides themselves on their ability to identify market niches. In recent years, the hair care sector of the industry has slowly evolved and is now a focal point for personal care. In an effort to better serve the evolving Hair Care Industry, Active Concepts has established the Active Concepts Hair Research Institute in order to conduct extensive testing to produce multifunctional, next generation hair care active ingredients.

Each salon-tested active ingredient was assigned to a category for ease of browsing. Categories were chosen based on market demands and needs. Remedies for **Damaged**, **Dry**, and **Conditioning** the hair, improving **Moisturization** and **Volume**, plus evaluating innovative new claims, including hair **Protection** from multiple external stressors, and **Anti-Aging** hair care have become clear front-runners of interest.

Each product was assigned a multifunctional category based on a variety of criteria. Salon half-head studies were conducted by trained specialists for participant's self evaluation as one means of criteria selection. All products are assessed at Active Concepts Hair Research Institute. Although semi-quantitative, the purpose of these assays is to evaluate both a licensed cosmetologist and consumer's opinion of how the active performs in hair care. The attributes ranked in a half-head study are: smoothing, hydrating, wet combability, dry combability, shine, overall feel, and antifrizz capabilities both pre-treatment and post.

In addition to the subjective salon assays conducted on each raw material, Active Concepts has invested heavily into quantitative, instrument driven evaluation. Other criteria used in category selection include, but are not limited to; scanning electron microscopy imaging, evaluation of tensile properties in conjunction with the Textile Technology Center at Gaston College, North Carolina, energy dispersive analysis of X-rays, HIROX imaging, quantification via histograms, evaluation of hair diameter, and external effects on color treated hair.

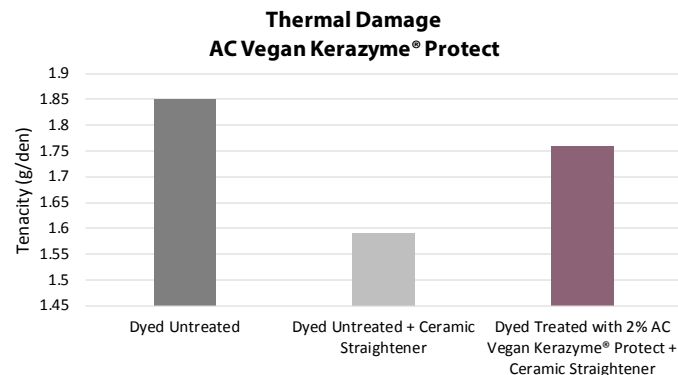
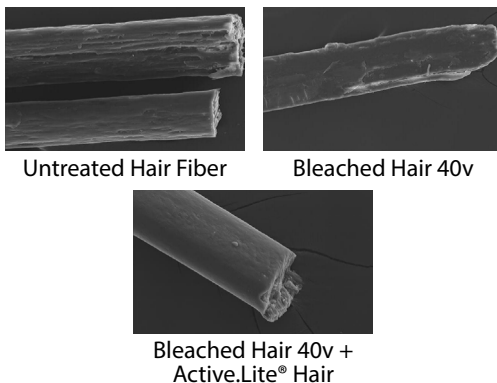


Technology Driven, Proven Results

The cuticle is the outermost layer of the hair which is formed by tightly packed scales. The ideal position of the cuticle for maximum defense and moisture retention is laying flat and sealed. When the cuticle becomes lifted due to thermal, mechanical, chemical, or environmental stress it becomes prone to additional damage, lacks moisture, and requires additional protection.

Scanning Electron Microscopy images at 20.0 kV illustrate 22045 **Active.lite® Hair**'s ability to protect and defend the hair from harsh chemical treatments via ionic bonds. **Active.lite® Hair** penetrates between uplifted scales on the cuticle to seal and close the cuticle while still allowing the chemical treatment to penetrate and deliver anticipated results.

An ex-vivo study was conducted on dyed human hair tresses to evaluate the ability of **AC Vegan Kerazyme® Protect** to provide perceivable benefits to the hair. 2.0% **AC Vegan Kerazyme® Protect** was tested in a base shampoo and conditioner against a control of the base shampoo and conditioner with no added actives. The dyed hair tresses were washed and air dried 14 times using the test and control products. The tresses were then heat styled using a ceramic straightener before being assessed for tenacity and modulus of elasticity. Tenacity was then measured to yield results showing **AC Vegan Kerazyme® Protect** has the ability to improve hair strength, therefore limiting the damage caused by heat styling.

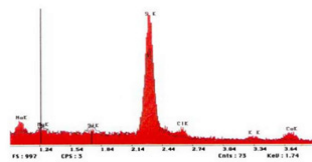


Technology Driven, Proven Results

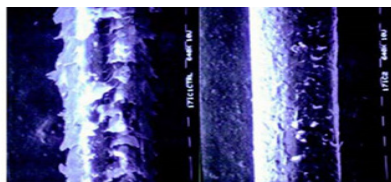
Hair efficacy was performed employing **ACB Bio-Chelate 5 PF**, a mineral glycopeptide complex containing Magnesium, Iron, Zinc, Copper, and Silicon. Scanning Electron Microscopy (SEM) was utilized to observe the surface architecture of the hair strands. Energy Dispersive Analysis of X-Rays (EDAX) was used to determine the elemental composition of the hair below the surface. EDAX studies confirmed penetration of magnesium and silicon. The EDAX scan shows the untreated controls in red and the ACB Bio-Chelate 5 PF treated samples as a black superimposed line. Analysis of the treated fibers by SEM demonstrated a smoothing of the hair cuticle, without a surface build-up of the treatment product.

As depicted below, **AC Kerazyme® Protect** is capable of decreasing hair color fade more than the control shampoo and conditioner. Observing the comparison of hair tresses, it is clear that both washing and exposure to UV light exacerbate the color fade process. However, with an application of 2.0% **AC Kerazyme® Protect** the fading of hair color is reduced greatly. Hair which has been exposed to 30hrs AFU and 14 wash cycles with the base shampoo and conditioner has very low color fastness, the blonde color of the virgin shade is easily perceived as visible. Conversely, the exposed hair treated with 2.0% **AC Kerazyme® Protect** maintained its red tones, and appears to bear a closer resemblance to that of the original dyed hair color.

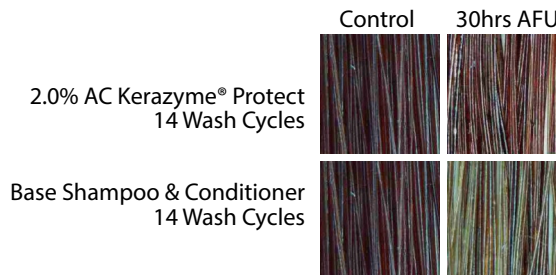
It is evident Active Concepts drives innovation, providing efficacious active ingredients supported through the documentation of proven results. Explore the designated categories to find the ideal, multifunctional active ingredient to compliment any hair care line that aims to deliver superior, consumer driven products.



Elemental Composition by EDAX analysis of mineral in the hair.



SEM of hair shaft following application of ACB Bio-Chelate 5 PF.







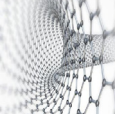
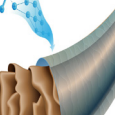



Tomorrow's vision...*Today!*

Product Categories

Damaged Hair








Hair is continuously exposed to environmental, chemical, and mechanical stress. These stressors will cause hair to become overly porous, dry, brittle, and more susceptible to breakage if proper care is not taken. The products below reflect different strategies and technologies for treating and correcting damaged hair.

Product Code & Name	INCI Name	Mechanism	Multifunctional Benefits
 20339PF ACB Bio-Chelate 5 PF	Water & Saccharomyces/Zinc Ferment & Saccharomyces/Copper Ferment & Saccharomyces/Magnesium Ferment & Saccharomyces/Iron Ferment & Saccharomyces/Silicon Ferment	Fractionated coconut lipids seal in moisture and transform the skin into a luxuriously soft, hydrated surface	<ul style="list-style-type: none"> • Penetrates the hair shaft to deliver benefits • Conditions hair fiber • Enhances health of the scalp • Minimizes dryness
 20375 AC Split End Complex	Hydroxypropyltrimonium Hydrolyzed Rice Protein/Siloxysilicate & Oryza Sativa (Rice) Extract	Moisture Retentive Complex delivers a protective film to the skin and allows for powerful, long-term moisturization	<ul style="list-style-type: none"> • Anti-frizz • Strengthens hair • Enhances lubricity • Increases shine
 20200 ACB Willow Bark Extract 20%	Water & Salix Nigra (Willow) Bark Extract	Transforms the texture of dry, brittle hair while locking in moisture	<ul style="list-style-type: none"> • Smooth styling • Nourishes curls • Shine therapy • Not ideal for all hair types
 22045 Active.Lite® Hair for Bleaching	Polyquaternium-80 & Water & Hydrolyzed Pea Protein & Selaginella Lepidophylla Extract	Ionically binds to hair cuticles offering long-term protection from harsh hair bleaching processes	<ul style="list-style-type: none"> • Chemically resilient material • Utilizes matrix-style scaffolding • Strengthens hair • Moisturizing
 22046 Active.Lite® Relaxer	Polyquaternium-80 & Water & Pisum Sativum (Pea) Peptide & Selaginella Lepidophylla Extract & Sclerocarya Birrea Fruit Extract	Supports the hair fiber throughout the harsh chemical treatment via a highly effective 3D hybrid biopolymer	<ul style="list-style-type: none"> • Strengthens hair • Restores resilience • Reduces breakage • Protects hair
 20829 ProCutiGen® Bond	Salvia Hispanica Seed Extract	Creates a biomimetic neocuticle on the hair that offers protection from harsh chemical treatments	<ul style="list-style-type: none"> • Protects and strengthens hair • Nourishing • Perfect for Pre and Post Treatments • Innovative ProBonding technology
 10414 ABS Acai Sterols EFA	Euterpe Oleracea Sterols & Linoleic Acid & Oleic Acid & Linolenic Acid	Eliminates frizz while delivering intense moisturization to tame hair for long term hair benefits	<ul style="list-style-type: none"> • Improves manageability • Ideal for damaged or unruly hair • Delivers shine • Hydrates



Dry Hair




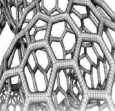

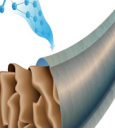

Dry hair is aesthetically displeasing, hard to style, lackluster, and is prone to breakage. In need of a dose of intense hydration or just daily moisture? Want to smooth the cuticle, and lock in moisture to heal dehydrated locks? The products below are a curated selection of materials delivering multifunctional benefits to meet demands.

Product Code & Name	INCI Name	Mechanism	Multifunctional Benefits
 20742 AcquaSeal® Coconut	Cocos Nucifera (Coconut) Fruit Extract	Fractionated lipids impart rapid, efficacious, immediate, and long term moisture relief to dehydrated hair	<ul style="list-style-type: none"> • Tactily manageable • Improves shine • Enhances combability • Ideal for multicultural hair • Adds necessary nourishment
 16810 ACB Pisum Sativum Peptide	Pisum Sativum (Pea) Peptide	Effectively conditions and moisturizes strands through its superior film forming and deep conditioning properties	<ul style="list-style-type: none"> • Improves combability • Creates softer hair • Conditions • Antioxidant
 20391PF ACB Cationic Glycoprotein PF	Lactobacillus/Eriodictyon Californicum Ferment Extract & Phospholipids	Hydrates the driest of locks to improve the health and appearance of each fiber	<ul style="list-style-type: none"> • Tactile improvements • Smooths unruly hair • Anti-chlorine damage • Decreases frizz
 20342PF ACB Yerba Santa Glycoprotein PF	Lactobacillus/Eriodictyon Californicum Ferment Extract	Mucopolysaccharides and glycoproteins work to counteract excessive dryness and deliver lasting moisture	<ul style="list-style-type: none"> • Increases shine • Anti-frizz • Improves appearance • Smooth styling
 20036 ACB Kale Protein Blend	Hydrolyzed Kale Protein & Hydrolyzed Carrot Protein & Hydrolyzed Lemon Protein	Proteins adhere to hair fiber to moisturize and simultaneously create a functional film and protective barrier	<ul style="list-style-type: none"> • Improves manageability • Volumizes • Locks in moisture • Enhances shine
 20037 ACB Quinoa Protein	Hydrolyzed Quinoa	Isolated, high content, naturally occurring proteins offer relief to even the thirstiest of tresses	<ul style="list-style-type: none"> • Repairing properties • Nourishes • Delivers intense hydration • Strengthens fibers
 10247 ABS Pomegranate Sterols	Punica Granatum Sterols	Lipid fractions produce increased moisture levels and a protective barrier from environmental stressors	<ul style="list-style-type: none"> • Minimal tackiness • Adds smooth shine to hair • Natural product replacement • Super fruit trend



Hair Protection


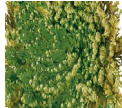






All types of hair require tailored protection from both intentional and unintentional stressors. Defend your hair from damage caused by chemical processes, such as coloring or bleaching, and mechanical processes, such as heat styling, to keep hair stronger and more radiant. The products below protect tresses from a range of chemical and mechanical stressors to color fade and frizz.

	Product Code & Name	INCI Name	Mechanism	Multifunctional Benefits
	16824 AC Kerazyme® Protect	Hydrolyzed Keratin & Bambusa Arundinacea Leaf Extract & Trametes Versicolor Extract	Protects against color fade, UV damage, and thermal stressors by structurally improving the integrity of hair cuticle	<ul style="list-style-type: none"> • Seals the cuticle • Natural & safe • Nourishes & conditions cuticle • Improves curl retention
	20488 AC Keratin Hydrolysate SILOX	Water & Hydrolyzed Vegetable Protein PG-Propyl Silanetriol	Penetrates cortex to repair and build strength from within the hair for more manageable, healthy locks	<ul style="list-style-type: none"> • Improves combability • reducing breakage • Enhances shine & smoothness • Forms a protective film
	16618 Probacillus Revive	Lactobacillus Ferment Lysate	Smooths unruly hair and protects against frizz for an overall improved aesthetic	<ul style="list-style-type: none"> • Moisturizes • Improves appearance • Anti-frizz • Capitalizes on probiotic trend
	22045 Active.Lite® Hair for Bleaching	Polyquaternium-80 & Water & Hydrolyzed Pea Protein & Selaginella Lepidophylla Extract	Ionically binds to hair cuticles offering long-term protection from harsh hair bleaching processes	<ul style="list-style-type: none"> • Chemically resilient material • Utilizes matrix-style scaffolding • Strengthens hair • Moisturizing
	16883 AC Vegan Kerazyme® Protect	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein & Bambusa Arundinacea Leaf Extract & Trametes Versicolor Extract	Improves properties of hair to protect against heat, UV damage, and everyday external aggressors	<ul style="list-style-type: none"> • Employs cross-linking properties • Creates protective seal • Prevents diffusion of colour • Conditions & hydrates
	20829 ProCutiGen® Bond	Salvia Hispanica Seed Extract	Creates a biomimetic neocuticle on the hair that offers protection from harsh chemical treatments	<ul style="list-style-type: none"> • Protects and strengthens hair • Nourishing • Perfect for Pre and Post Treatments • Innovative ProBonding technology
	20650PF AC Rice Curl Complex PF	Water & Lactobacillus/ Tomato Fruit Ferment Extract & Oryza Sativa (Rice) Extract & Keratin Amino Acids & Acyl Coenzyme A Desaturase	Stabilizes both the hydrogen and salt bonds to help strengthen the hair and maintain curl	<ul style="list-style-type: none"> • Delivers perfectly polished curls • Promotes curl health & hydration • Intensely conditions curls • Improves overall aesthetic of curls



Moisturizing







Moisture rich, hydrated fibers are evidence of healthy, nourished hair. Keeping hair moisturized aides in both resiliency, strength, and vibrancy. The products suggested below offer a range of mechanisms to quench hair's thirst and lock in hydration.

Product Code & Name	INCI Name	Mechanism	Multifunctional Benefits
 26001 AC Hyalurosome	Dimethicone & Phospholipids & Polymethylsilsesquioxane & Hyaluronic Acid	Hyaluronic acid readily absorbs moisture when exposed to a hydrophilic environment delivering unrivaled moisture	<ul style="list-style-type: none"> • Great for damaged or color treated hair • Liposome technology • Reduces static • Decreases frizz
 16586 Phytofuse Renew®	Selaginella Lepidophylla Extract	Imparts protective and moisture-retentive benefits associated with the secondary metabolites produced by the Resurrection Plant	<ul style="list-style-type: none"> • Eases manageability • Natural silicone replacement • Anti-pollution • Visibly improves shine
 15002 AC Flax Seed Oil	Linum Usitatissimum (Linseed) Seed Oil	Lipophilic nature replenishes the hair's moisture lacking strands or delivers the daily dose of necessary hydration	<ul style="list-style-type: none"> • Nourishes • Improves appearance • Protects hair • Ideal for multicultural hair
 15009 AC Olive Oil Clear	Olea Europaea (Olive) Fruit Oil	Rich emollient properties bring lasting hydration to coarse, unruly locks	<ul style="list-style-type: none"> • Style locking capabilities • Tames frizz • Ideal for multicultural hair • Perfect for coarse, unruly hair
 20649PF AC Quaternized Lemon Shine PF	Hydroxypropyltrimonium Lemon Protein	Light weight feel packed with moisture to provide everyday, long lasting nourishment	<ul style="list-style-type: none"> • Conditions cuticle • Great for all hair types • Enhances sleekness • Reduces frizz
 20624PF AC Plant Keratin PF	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein	Penetrates outermost layer of the hair to smooth & aid in attracting and retaining water	<ul style="list-style-type: none"> • Botanical origin • Increases strength and elasticity • Repairs split ends • Conditioning properties
 10116PF ABS Colloidal Oat PF	Colloidal Oatmeal	Long standing reputation of delivering smoothing, moisturizing, and soothing benefits in hair care products marketed to scalp and skin sensitive consumers	<ul style="list-style-type: none"> • Protectant • Ideal for sensitive scalps • Silky texture • Nourishes
 20039 ACB Botanical Sugar Complex	Tapioca Starch & Lactobacillus Ferment Lysate	Fermentation of botanicals result in enhanced bioavailability allowing for ready absorption of moisture into the hair strand	<ul style="list-style-type: none"> • Nourishes scalp • Anti-frizz • Antioxidant properties • Non-irritating material



Conditioning








Soft, touchable tresses are coveted worldwide. Obtaining such tresses can come from smoothing the hair cuticle. A smoothed cuticle yields greater manageability, improved combability, stronger fibers, and improved shine. The products below detail optimal solutions to obtaining the desired conditioned, healthy hair aesthetic.

Product Code & Name	INCI Name	Mechanism	Multifunctional Benefits
 20478 AC Royal Jelly Extract	Butylene Glycol & 10-Hydroxydecanoic Acid & Sebacic Acid & 1,10-Decanediol	Vitamins deeply nourish and condition cuticle to deliver a smooth, sleek aesthetic	<ul style="list-style-type: none"> • Reduces frizz • Vitamins B, C, D, & E • Seals cuticle • Anneals split ends
 20496 ACB Modified Pumpkin Enzyme PF	Lactobacillus/Pumpkin Fruit Ferment Filtrate	Intense conditioning benefits harvested from isolated phytochemicals via fermentation	<ul style="list-style-type: none"> • Anti-frizz • Hydrates • Improvement in overall feel • Capitalizes on health & wellness trend
 20339PF ACB Bio-Chelate 5 PF	Water & Saccharomyces/Zinc Ferment & Saccharomyces/Copper Ferment & Saccharomyces/Magnesium Ferment & Saccharomyces/Iron Ferment & Saccharomyces/Silicon Ferment	Smooths cuticle allowing penetration of rich minerals for optimal conditioning	<ul style="list-style-type: none"> • No excess buildup • Nourishes • Minimizes dryness • Enhances health of the scalp
 20530 AC Milk Hydrolysate SF	Hydrolyzed Milk Protein	Essential proteins in hydrolyzed form enhance functional properties to offer everyday hair therapy	<ul style="list-style-type: none"> • Hydrates • Reduces Frizz • Delivers shine • Improves hairs characteristics
 20037 ACB Quinoa Protein	Hydrolyzed Quinoa	Restores hydration to the hair's cuticle for effective conditioning benefits	<ul style="list-style-type: none"> • Gluten-free alternative • Perceivable benefits • Improves hair vitality • Moisturizes
 20615PF AC Wheat Hydrolysate PF	Hydrolyzed Wheat Protein	Hydrolyzed proteins allow for easy adherence leading to intense moisturizing and conditioning benefits	<ul style="list-style-type: none"> • Film-forming properties • Strengthens hair fiber • Increases substantivity over time • Resistant material
 20621PF AC Silk Hydrolysate PF	Hydrolyzed Silk	Imparts a soft, silky, hydrated aesthetic via hydrolyzed amino acids	<ul style="list-style-type: none"> • Increases shine • Anti-frizz capabilities • Improves overall feel • Conditions



Volumizing & Anti-Aging

Adding volume to hair gives the appearance of thicker more flexible locks. With the passage of time, hair fibers lose strength, become more porous, and are prone to damage. Anti-aging hair care offers a broad range of treatments that fight aging from biological protection of the scalp to the physical protection of the strand. The products listed below utilize diverse mechanisms to prevent dull, lifeless hair associated with the aging process.

Product Code & Name	INCI Name	Mechanism	Multifunctional Benefits
 16810 ACB Pisum Sativum Peptide	Pisum Sativum (Pea) Peptide	Innovative hydrolysis of the Pisum Sativum Peptide provides ideal volume	<ul style="list-style-type: none"> • Improved manageability • Soft & smooth appearance • Antioxidant • Volumizing
 16572PF AC Volumizing Complex PF	Water & Rice Amino Acids & Lactobacillus/Date Fruit Ferment Extract & Polyperfluoroethoxymethoxy Difluoroethyl PEG Phosphate	Employs a three pronged approach to maximize volume and retain curl for lasting style	<ul style="list-style-type: none"> • Improves thickness • Enhances overall feel • Hydrates • Curl retention
 20036 ACB Kale Protein Blend	Hydrolyzed Kale Protein & Hydrolyzed Carrot Protein & Hydrolyzed Lemon Protein	Proteins adhere evenly to hair fiber to moisturize and produce maximum volume	<ul style="list-style-type: none"> • Improves manageability • Volumizes • Locks in moisture • Enhances shine
 10286 ABS Apple AHA's	Water & Propylene Glycol & Malic Acid & Pyrus Malus (Apple) Fruit Extract & Glycolic Acid & Lactic Acid & Citric Acid	Adds a dose of hydration to prevent dull, lackluster locks while conditioning the scalp	<ul style="list-style-type: none"> • Style locking capabilities • Tames frizz • Ideal for multicultural hair • Perfect for coarse, unruly hair
 10229 ABS White Willow Bark Extract Powder	Salix Alba (Willow) Bark Extract	Offers antioxidant protection from daily stressors improving overall feel and shine	<ul style="list-style-type: none"> • Conditions cuticle • Great for all hair types • Enhances sleekness • Reduces frizz
 16883 AC Vegan Kerazyme® Protect	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein & Bambusa Arundinacea Leaf Extract & Trametes Versicolor	Naturally defends tresses from color fade and thermal damage using a multitude of hydrolyzed proteins that additionally help improve the hair's overall health	<ul style="list-style-type: none"> • Botanical origin • Increases strength and elasticity • Repairs split ends • Conditioning properties
 20488 AC Keratin Hydrolysate SILOX	Water & Hydrolyzed Vegetable Protein PG-Propyl Silanetriol	Delivers hair strengthening and anti-breakage benefits from the inside out	<ul style="list-style-type: none"> • Protectant • Ideal for sensitive scalps • Silky texture • Nourishes

Active Concepts



Sample Formulations

Color Protect Shampoo

Trade Name	INCI Name	%	Vendor
Phase A			
Deionized water	Water (Aqua)	26.30	Local
ABS Aloe Extract G	Glycerin & Water & Aloe Barbadensis Leaf Extract	0.50	Active Concepts
PhytoCide Aspen Bark Extract Powder	Populus Tremuloides (Aspen) Bark Extract	0.50	Active Micro Technologies
AC Vegan Kerazyme® Protect	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein & Bambusa Arundinacea Leaf Extract & Trametes Versicolor Extract	5.50	Active Concepts
Phase B			
Glycerin	Glycerin	3.00	Dow Chemical
Keltrol®	Xanthan Gum	1.00	CP Kelco
Phase C			
Wheat Germamidopropyl Betaine	Wheat Germamidopropyl Betaine	20.0	Mackam WGB/ McIntyre
AC Foaming Soy	Sodium Cocoyl Hydrolyzed Soy Protein	15.00	Active Concepts
Coco/Sunfloweramidopropyl Betaine	Coco/Sunfloweramidopropyl Betaine	10.00	Mackam SFB/McIntyre
Phase D			
AC Keratin Hydrolysate 30PF	Hydrolyzed Keratin	4.00	Active Concepts
AC Silk Amino Acids PF	Silk Amino Acids	4.00	Active Concepts
ACB Yerba Santa Glycoprotein PF	Lactobacillus/Eriodictyon Californicum Ferment Extract	2.00	Active Concepts
Phase E			
Citric acid 50%	Citric Acid	q.s.	Sigma-Aldrich
Leucidal® Liquid	Leuconostoc/Radish Root Ferment Filtrate	4.00	Active Micro Technologies
AMTicide® Coconut	Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	4.00	Active Micro Technologies

Procedure

1. Mix and charge water into main beaker and begin propeller mixing. A vortex should form.
2. Sift in PhytoCide Aspen Bark Extract Powder. Charge remaining ingredients and begin heating to 75°C. Mix until homogenous.
3. Pre-mix Phase B ingredients then add to main beaker and mix until homogenous.
4. Switch to sweep mixing. At 75°C add each Phase C ingredient individually to the main beaker. Allow each ingredient to disperse completely before adding the next. Begin force cooling.
5. At 50°C, add Phase D ingredients individually to the main beaker and mix until homogenous.
6. Once mixture is below 40°C add Phase E ingredients mixing thoroughly.
7. Adjust pH if necessary using Citric Acid 50% solution.

Active Concepts

Cleansing Conditioner

Trade Name	INCI Name	%	Vendor
Phase A			
Deionized water	Water (Aqua)	74.87	Local
Arquad® PC SV-60 PG	Soytrimonium Chloride & Propylene Glycol	0.83	AkzoNobel Global
Phase B			
Phytomulse® Coconut	Cetearyl Alcohol & Glyceryl Stearate & Coceth-20	6.00	Active Concepts
Armocare® VGH-70	Dipalmitoylethyl Dimonium Chloride	1.00	AkzoNobel Global
SilDerm® Conditioning	Cyclopentasiloxane & Dimethicone/Silsesquioxane Copolymer & Silk & Malva Sylvestris (Mallow) Extract & Liliun Candidum Bulb Extract & Lactobacillus/ Eriodictyon Californicum Ferment Extract & Cymbidium Grandiflorum (Orchid) Flower Extract	1.00	Active Concepts
Phase C			
Disodium EDTA	Disodium EDTA	0.30	Spectrum Chemical
Glycerol-99.5% (U.S.P.)	Glycerin	3.00	Textile Chemical Co.
ACB Bio-Chelate 5 PF	Water & Saccharomyces/Zinc Ferment & Saccharomyces/Copper Ferment & Saccharomyces/Magnesium Ferment & Saccharomyces/Iron Ferment & Saccharomyces/Silicon Ferment	5.00	Active Concepts
Phase D			
Citric acid 20%	Solution Citric Acid (and) Water	q.s.	Sigma-Aldrich
Leucidal® Liquid	Leuconostoc/Radish Root Ferment Filtrate	4.00	Active Micro Technologies
AMTicide® Coconut	Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	4.00	Active Micro Technologies

Procedure

1. In Phase A, add water and Arquad® PC SV-60 PG and mix at a speed that generates a vortex.
2. Cover and heat to 80°C in a water bath.
3. In a separate beaker add Phase B ingredients and heat covered until 80°C.
4. When both phases are at 80°C then combine Phase A and Phase B.
5. Hold at 80°C and mix for 15 minutes.
6. Mix thoroughly and keep beaker covered as it continues to cool. At 45°C add the ingredients of Phase C.
7. Once well mixed, add Phase D ingredients. If necessary, q.s. with citric acid until the pH is between 4.0-5.0.



Active Concepts

Thermal Protectant

Trade Name	INCI Name	%	Vendor
Phase A			
Deionized water	Water (Aqua)	83.75	Local
Disodium EDTA	Disodium EDTA	0.05	Spectrum Chemical
Glycerin	Glycerin	1.00	Dow
Rhodaquat M242 B/99	Cetrimonium Bromide	0.80	Solvay
ACB Pisum Sativum Peptide	Pisum Sativum (Pea) Peptide	2.00	Active Concepts
ACB Cationic Glycoprotein PF	Lactobacillus/Eriodictyon Californicum Ferment Extract & Phospholipids	2.00	Active Concepts
AC Kerazyme® Protect	Hydrolyzed Keratin & Bambusa Arundinacea Leaf Extract & trametes Versicolor Extract	1.00	Active Concepts
Polaxamer 430	Styrene VP/Copolymer	1.00	Univar
Phase B			
Alkamuls® PSML-20	Polysorbate 20	0.20	Nexeo Solutions
TEGO® SMO 80 V	Polysorbate 80	0.20	Evonik
Phase C			
Leucidal® Liquid SF	Leuconostoc/Radish Root Ferment Filtrate	4.00	Active Micro Technologies
Amicide® Coconut	Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	4.00	Active Micro Technologies
Citric Acid 50% Solution	Citric Acid	q.s.	Sigma-Aldrich

Procedure

1. Add Phase A ingredients one at a time into water while mixing, wait until dissolved to add another.
2. Add Polaxamer 430 lastly to phase A. Mix well.
3. Mix Phase B together.
4. Add Phase B to Phase A. Mix Well.
5. Add Phase C, adjust to pH 6 using citric acid 50% solution.



Anti-Frizz Treatment

Trade Name	INCI Name	%	Vendor
Phase A			
Deionized water	Water (Aqua)	79.25	Local
AC Silk Hydrolysate PF	Hydrolyzed Silk	1.00	Active Concepts
Disodium EDTA	Disodium EDTA	0.05	Spectrum Chemical
Carbopol® Ultrez 21 Polymer	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	0.25	Lubrizol
Sodium Hydroxide (18%)	Sodium Hydroxide	0.20	Sigma- Aldrich
Phase B			
AcquaSeal® Coconut	Cocos Nucifera (Coconut) Fruit Extract	5.00	Active Concepts
SilSense® Copolyol-1 Silicone	PEG-33 and PEG-8 Dimethicone and PEG-14 Glycerin	0.25	Lubrizol
	Glycerin	1.00	Dow
ACB Kale Protein Blend	Hydrolyzed Kale Protein & Hydrolyzed Carrot Protein & Hydrolyzed Lemon Protein	1.00	Active Concepts
Lanette® O	Cetearyl Alcohol	0.50	BASF
Phase C			
ABS Aloe Extract G	Glycerin & Water & Aloe Barbadensis Leaf Extract	2.00	Active Concepts
Phytofuse Renew®	Selaginella Lepidophylla Extract	1.50	Active Concepts
Leucidal® Liquid SF	Leuconostoc/Radish Root Ferment Filtrate	4.00	Active Micro Technologies
AMTicide® Coconut	Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	4.00	Active Micro Technologies

Procedure

1. Dissolve disodium EDTA and AC Silk Hydrolysate PF in deionized water. Use heat as necessary.
2. Add Carbopol® Ultrez 21 Polymer. Mix thoroughly.
3. Add sodium hydroxide, adjusting to pH 5.5.
4. Maintain Phase A at a temperature of 70°C.
5. Blend ingredients of Phase B at 70°C. Mix thoroughly.
6. Add Phase B to Phase A with high speed agitation.
7. Once mixed, cool product to 40°C with mixing.



Anti-Aging Hair Serum

Trade Name	INCI Name	%	Vendor
Phase A			
Deionized Water	Water (Aqua)	77.35	Local
Triquat 10L	Polyquaternium-10	0.80	Tri-K
Dermofeel® PA-3	Sodium Phytate & Water & Alcohol	0.05	Kinetik
Zemea Propanediol	Propanediol	5.00	DuPont Tate & Lyle
Phase B			
20830 ProCutiGen® Vegan Thermal Shield	Saccharomyces Cerevisiae Extract	3.00	Active Concepts
20391PF ACB Cationic Glycoprotein PF	Lactobacillus/Eriodictyon Californicum Ferment Extract & Phospholipids	2.00	Active Concepts
16810 ACB Pisum Sativum Peptide	Pisum Sativum (Pea) Peptide	2.00	Active Concepts
11332LNZ ABS Rhodiola Extract PG PET	Water & Pentylene Glycol & Rhodiola Rosea Root Extract	2.00	Active Concepts
M15025 Leucidal® SF Complete	Lactobacillus Ferment & Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	4.00	Active Micro Technologies
Phase C			
Poly Suga®Mulse D9	Sorbitan Oleate Decylglucoside Crosspolymer	3.00	Colonial Chemical
20742 AcquaSeal® Coconut	Cocos Nucifera (Coconut) Extract	0.50	Active Concepts

Procedure

1. Combine Phase A and propeller mix until clear and uniform.
2. Add Phase B to Phase A, mixing well between additions.
3. Combine and add Phase C to Phase AB. Mix well.



Leave In Multi-Benefit Spray

Trade Name	INCI Name	%	Vendor
Phase A			
Deionized water	Water (Aqua)	71.00	Local
Triquat 10L	Polyquaternium-10	0.20	Tri-K
Phase B			
11287PF ABS Cucumber Water PF	Cucumis Sativus (Cucumber) Fruit Water	3.00	Active Concepts
Propylene Glycol	Propylene Glycol	2.30	Spectrum
20037 ACB Quinoa Protein	Hydrolyzed Quinoa	1.70	Active Concepts
20831 ProCutiGen® Hold	Phyllostachis Bambusoide Extract	5.00	Active Concepts
20343LNZ ACB Fruit Mix	Water & Vaccinium Myrtillus Fruit Extract & Saccharum Officinarum (Sugar Cane) Extract & Citrus Aurantium Dulcis (Orange) Fruit Extract & Citrus Limon (Lemon) Fruit Extract & Acer Saccharum (Sugar Maple) Extract	2.00	Active Concepts
20036 ACB Kale Protein Blend	Hydrolyzed Kale Protein & Hydrolyzed Carrot Protein & Hydrolyzed Lemon Protein	2.00	Active Concepts
16586 Phytofuse Renew®	Selaginella Lepidophylla Extract	2.00	Active Concepts
20584PF AC Cashmere Protein PF	Hydrolyzed Wool	0.40	Active Concepts
10954LNZ AC Plant Keratin	Hydrolyzed Corn Protein & Hydrolyzed Wheat Protein & Hydrolyzed Soy Protein	2.00	Active Concepts
M15025 Leucidal® SF Complete	Lactobacillus Ferment & Lactobacillus & Cocos Nucifera (Coconut) Fruit Extract	4.00	Active Micro Technologies
Phase C			
Polysorbate 20	Polysorbate 20	4.00	Spectrum
Natural Blood Orange Fragrance	Fragrance	0.40	Carrubba

Procedure

1. Combine Phase A, slowly adding polyquaternium-10. Mix until completely clear and uniform.
2. Add Phase B to Phase A, mixing well between additions.
3. Premix Phase C and add to Phase AB. Mix well.





Tomorrow's vision... Today!

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