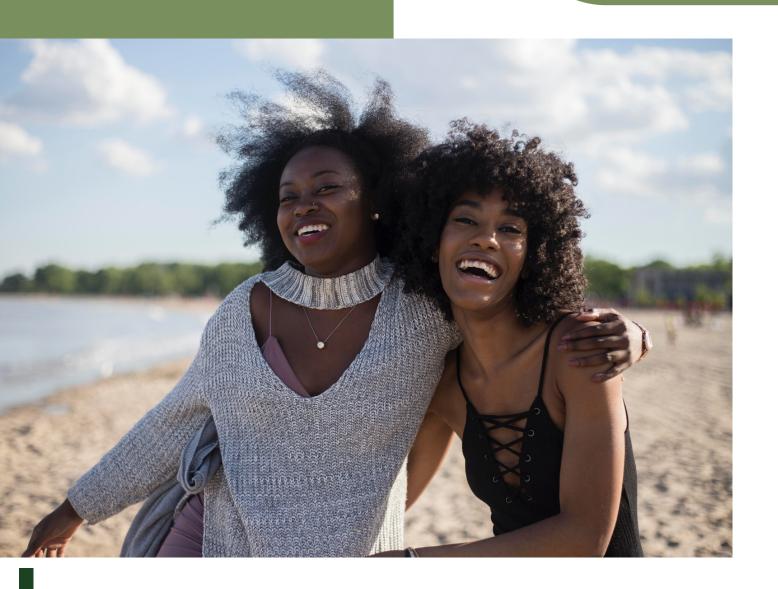


HAIR CARE For Ethnic Hair

Suggested
Applications
Condition
Protect
Nourish
Revitalize



THE BACKGROUND.



Different ethnic groups have observable differences when it comes to hair, such as structure, density, and growth rate. Although all human hair has the same basic chemical position, each individual has a specific hair color, texture, and density to set them apart in society. Ethnic hair refers to hair that is especially thick and dense, compared to thinner and straighter hair. When looking to express natural ethnic hair for the beautiful, individualistic qualities it has, one must consider using products that will implement protective, reparative, and preventative measures to ensure the hair is thriving in an often environmentally-damaging world.

Hair is very sensitive to its environment in that too much sun, humidity, pollution, and temperature variations can have a detrimental effect on the hair causing it to become largely porous, dry and frizzy, or lose elasticity, causing breakage. Products that can provide a sleek appearance while minimizing the effect of stressors is ideal. Consumers often opt for nourishing and conditioning products that will rejuvenate tired hair and protect it long-term. Formulator Sample Shop supplies many products recommended especially for thick and dense hair. These ingredients may be included in a variety of hair care formulations to help the consumer groom their hair while decreasing the damage and stress of harsh products and environmental factors.

ETHNIC HAIR CARE ACTIVES.



AcquaSeal® Coconut

PRODUCT CODE: FSS20742

INCI NAME: Cocos Nucifera (Coconut) Fruit Extract

Intense Moisturization Improved Barrier Function Antioxidant Protection

The manufacturer has selectively fractionated coconut lipids to create a multifunctional ingredient, AcquaSeal® Coconut. The key to restoring the skin's barrier function is normalizing the epidermal lipids. AcquaSeal® Coconut is ideal for this due to its high concentration of Medium Chain Triglycerides (MTCs), and non-estrogenic phytosterols. Application of AcquaSeal® Coconut demonstrates the utility of this approach via rapid and efficacious hydration. As a multifunctional ingredient, AcquaSeal® Coconut endows the skin and hair with a silky texture without the feel of an oily or greasy residue. When incorporated into personal care products, AcquaSeal® Coconut seals in moisture and delivers critical macronutrients. By implementing the coconut's hydration retention strategy into skin and hair care formulations, we can capitalize on the undeniable and immediately perceivable benefits such as reduction in transepidermal water loss, intense moisturization, and the sensorial experience that accompanies AcquaSeal® Coconut as is assimilates with the skin transforming it into a luxuriously soft, hydrated surface.

In vitro Efficacy: Lipophilic ORAC Assay, TEWL Regression Assay
In vivo Efficacy: Moisturization Assay, Salon Half Head Study, Hydration Potential



FSS Foaming Wheat PF

PRODUCT CODE: FSS20611PF
INCI NAME: Sodium Cocoyl Hydrolyzed Wheat Protein

— Nourishing — Mild Foaming — Conditioning

FSS Foaming Wheat PF is a product designed to provide moisturizing and conditioning benefits to the skin and hair. It creates mild foaming and can be used as a natural surfactant. Its gentle cleansing benefits make it perfect for sensitive skin and scalp care applications. However, this unique ingredient also enhances smoothing, wet and dry combability, anti-frizz overall feel, shine and hydration when used in hair care applications.

In vivo Efficacy: Salon Half Head Study

ETHNIC HAIR CARE ACTIVES.





FSS Kale Protein Blend

PRODUCT CODE: FSS20036

INCI NAME: Hydrolyzed Kale Protein & Hydrolyzed Carrote Protein & Hydrolyzed Lemon Protein

"Improves Barrier Function "Moisturizing Super-Food "Film Forming

Kale is packed full of Vitamin A and E, known to work together to boost hydration, elasticity, collagen production, and other incredible benefits. Kale also boosts the health of your skin and hair due to its Vitamin C content. Vitamin C's antioxidant function allows for natural protection from the sun, preventing the skin and the hair from damage cause by exposure to UV. Carrots play a significant role in keeping your skin and hair healthy as well. The most advantageous antioxidant packed into this vegetable is Vitamin A, or beta-carotene. Beta-carotene provides protection from damage-causing free-radicals, which are responsible for premature signs of aging. Lastly, lemons have been used traditionally as a source of alpha-hydroxy acids (AHAs), specifically citric acid, for chemical exfoliation. **FSS Kale Protein Blend** combines the power of kale, carrot, and lemon into one nutrient-rich formula to condition and moisutirze while fighting the signs of aging and sun damage.

In vitro Efficacy: ORAC Assay, TEWL Study, Sirius Red Fast Green Assay, Cellular Viability Assay In vivo Efficacy: Hydration Assay, Volumizing Assay, Bella Rouge Hair Test



PRODUCT CODE: FSS20829

INCI NAME: Salvia Hispanica Seed Extract

- Nourishing - Provides Support - ProBonding

ProCutiGen® Bond is a lipopeptide derived from chia protein, harnessing the natural strength of the seed for hair protection. The bivalent cation of **ProCutiGen® Bond** is the anchor to secure the neo-cuticle, as hair is naturally anionic. The specific amino acid composition, the structural material of the anchor, allows these properties which differentiate the bio-films formed by the ProCutiGen® line. **ProCutiGen® Bond** utilizes a polymeric chain, forming a conglomeration of proteins, amino acids, and polysaccharides that creates a complex, supporting, interwoven matric on the hair cuticle. A major benefit of the bio-film is its action as a scaffolding rather than a true barrier. Able to support and protect the hair, this scaffolding allows small molecules, like those in harsh chemical treatments, in via its semi-permeable facade. This bio-film and its semi-permeable membrane promote the exhibition of properties such as moisturization, pH balance, barrier protection, and protection from the hair weakening after exposure to chemical processes.

In vitro Efficacy: IR Covalent Bond Formation, Scanning Electron Microscopy Assay In vivo Efficacy: Hair Swatch Study, Salon Half Head Study, Tensile Strength

FSS Acai Sterols EFA

PRODUCT CODE: FSS10414

INCI NAME: Euterpe Oleracea Sterols & Linoleic Acid & Oleic Acid & Linolenic Acid

- Moisturizing - Improved Barrier Function - Standardized for Essential Fatty Acids

Fatty Acids consist of long hydrocarbon chains terminating in a carboxyl group that bonds to glycerol to form fat. Oleic acid is a monounsaturated omega-9 fatty acid found in olive and grape seed oils. Palmitic acid is the first fatty acid produced during lipogenesis, other fatty acids can be produced from palmitic acid. Essential Fatty Acids (EFAs) are fatty acids that cannot be synthesized by the body and therefore must be obtained via an outside source. Polyunsaturated linoleic acid is an Omega-6 EFA. Symptoms of Omega-6 deficiencies include dry hair, hair loss and poor wound healing. This super fruit ingredient can be used as a natural replacement for synthetic materials such as petrolatum and animal-derived materials, like lanolin. **FSS Acai Sterols EFA** is capable of increasing moisture levels on the skin while enhancing the skin's barrier function to protect against environmental stress responsible for extrinsic again. As we know, many of the oils extracted from acai are beneficial skin and hair care ingredients. The combined benefits, compliments of acai's essential fatty acid content and known antioxidant properties, make **FSS Acai Sterols EFA** a one-two punch, perfectly designed by nature to quench our skin while providing protection.

In vitro Efficacy: Barrier Function

In vivo Efficacy: Hydration Potential, Salon Half Head Study

ETHNIC HAIR CARE ACTIVES.





FSS Milk Hydrolysate PF

PRODUCT CODE: FSS20575PF
INCI NAME: Hydrolyzed Milk Protein

Conditioning Hydrating Rejuvenating

FSS Milk Hydrolysate SF provides hydrolyzed milk proteins that are essential for enhancing moisture that are able to help reduce irritation caused by most common surfactants. The proteins are isolated by membrane filtration and have excellent solubility and emulsifying properties. FSS Milk Hydrolysate SF is non-toxic and non-irritating. Milk products are also known for their dispersion capabilities and whitening control. The hydrolyzed proteins are stable in lower pH's and can be heated up to 70°C, so they can be added to a variety of skin and hair care products that are designed to deliver intense moisturization. Excessive dehydration causes dry, scaly or even cracked skin. This may be prevented by the protective action of FSS Milk Hydrolysate SF.

In vivo Efficacy: Salon Half Head Study



FSS Foaming Collagen PF

PRODUCT CODE: FSS20597PF
INCI NAME: Potassium Cocoyl Hydrolyzed Collagen

– Gentle Cleansing – Conditioning – Mild Foaming

FSS Foaming Collagen PF is a product designed for use in mild cleansing products to provide moisturizing and conditioning benefits to the skin and hair. In hair care applications, FSS Foaming Collagen PF enhances smoothing, wet and dry combability, anti-frizz, overall feel, shine and hydration. Due to the protein/acid moieties associated with the structure, FSS Foaming Collagen PF can be added to mild detergent products such as body gels, shampoos, body washes and facial cleansers. FSS Foaming Collagen PF creates mild foaming and can be used as a natural surfactant, making it perfect for sensitive skin and scalp care applications as well as baby products.

In vivo Efficacy: Salon Half Head Study



Active.Lite® Relaxer

PRODUCT CODE: FSS22046

INCI NAME: Polyquaternium-80 & Water & Pisum Sativum (Pea) Peptide & Selaginella Lepidophylla Extract & Sclerocarya Birrea Fruit Extract

– Strengthening – Creates Supportive Matrix – Conditioning

The components that comprise **Active.Lite® Relaxer** create a highly effective hybrid biopolymer that offers a vast array of benefits. It protects the hair from damage associated with the harsh effects of chemical treatments. **Active.Lite® Relaxer** is a chemically resilient material that ionically binds to hair cuticles and offers long-term protection from harsh hair relaxers. The cationic charge of **Active.Lite® Relaxer** attracts to anionic porous hair and creates a supporting scaffolding like matrix to support hair whilst still allowing the relaxer to penetrate between uplifted scales in the cuticle to smooth the texture of coarse, kinky hair. **Active.Lite® Relaxer** promotes healthy cuticles post treatment and creates a visually smoother, shinier, straighter, silkier, more conditioned feel to the hair. **Active.Lite® Relaxer** can be added to virgin relaxer and all touch up treatments to protect the hair over the lifespan of relaxer treatments. **Active.Lite® Relaxer** is the ideal addition for hair relaxers to help protect and create healthier looking and feeling hair.

In vitro Efficacy: IR Covalent Bond Formation, Scanning Electron Microscopy Assay In vivo Efficacy: Tensile Strength, Salon Half Head Study

ETHNIC HAIR CARE ACTIVES.





FSS Pisum Sativum Peptide

PRODUCT CODE: FSS16810

INCI NAME: Pisum Sativum (Pea) Peptide

Antioxidant Volumizing Smoothing

Proteins are traditionally hydrolyzed, using acids, alkalis and enzymes or a combination to produce random amino acid sequences. While traditional methods of hydrolysis are well accepted and effective, they are simplistic efforts to duplicate normal cellular protein catabolism whereby cells digest proteins into specific sequences to meet nutritional needs. The manufacturer has harnessed the digestive abilities of a non-GMO bacterial strain, Lactobacillus bulgaricus, to produce **FSS Pisum Sativum Peptide** with a controlled molecular weight of approximately 750 Da. For decades hydrolyzed proteins, such as soy, wheat and oat, have been used to deliver conditioning benefits and film forming properties to cosmetic formulations. As these traditional proteins continue to fall out of favor, due to press from consumers, new and exotic proteins with greater benefit are needed. Anti-Aging is the latest trend in Hair Care. **FSS Pisum Sativum Peptide** can effectively condition and moisturize the skin and hair, keeping them both healthy and nourished. Free radical and UV damage can also accelerate the aging process thus making the appearance of fine lines and wrinkles more noticeable. The aging process is also accompanied by dry skin and hair. Both of these can be counteracted with the antioxidant and moisturization benefits of **FSS Pisum Sativum Peptide**. **FSS Pisum Sativum Peptide** targets anti-aging so vibrant, healthy skin and voluminous hair can shine through.

In vitro Efficacy: ORAC Assay, TGF-B1 ELISA Assay, Sirius Red Fast Green Assay, Cellular Viability
In vivo Efficacy: Volumizing Assay, Hair Pollution Protection Assay, Bella Rouge Hair Test, Salon Half Head Study