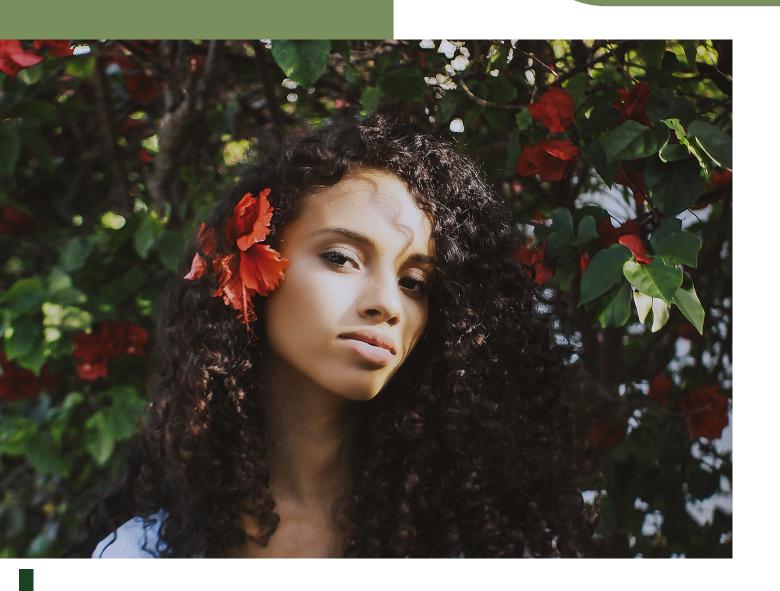


EXOTIC Botanicals & Actives

Suggested Applications

Moisturizing Antioxidant Anti-Aging Great for Skin & Hair



THE BACKGROUND.



Everyone can be in need of a vacation sometimes, but sometimes an oasis is so far away. Bring the vacation to life through the use of exotic botanicals and actives until you can book your next trip!

When looking for an exotic ingredient, it is important to know that the definition of exotic may vary depending on the individual person. However, when exotic botanicals and actives are sought after, all definitions can agree on one thing: uniqueness. Not only are the ingredients listed throughout this catalog catered for the skin and hair, but each one incorporates the abundance of their biologically active compounds. These phytochemicals are naturally present in plants, fruits, vegetables, and more, providing nutrient-rich additions to chemical formulations. Some of the ingredients in this list can also be used as alternatives to certain synthetic counterparts.

Formulator Sample Shop is proud to offer many brand-differentiating ingredients of exotic origin stories for formulators to harness. From the desert to the jungle, these ingredients each have aspects that make them exotic. Not only are these botanicals unique, but they are effective at improving the appearance of skin and hair when used in cosmetic and personal care applications.

EXOTIC ACTIVES.



FSS Wasabi Extract PF

PRODUCT CODE: FSS20351PF

INCI NAME: Lactobacillus/Wasabia Japonica Root Ferment Extract

- Antioxidant Protection - Anti-Aging Properties - Antimicrobial Protection

FSS Wasabi Extract PF is derived from the fermentation of *Wasabia japonica* in the presence of *Lactobacillus*. This ingredient is designed to provide potent antioxidant and antimicrobial benefits to formulations. In its country of origin, *Wasabia japonica*, the most popular cultivar, has been used extensively in holistic and homeopathic medications, having shown to exhibit powerful antimicrobial properties. Active bio-flavonoids and polyphenolic compounds, such as gallic acid or tannin, help contribute to the antioxidant capability of **FSS Wasabi Extract PF**.

In vitro Efficacy: Intracellular Calcium Assay, ORAC Assay, ROS Assay



FSS Bamboo Bioferment PF

PRODUCT CODE: FSS20225PF

INCI NAME: Lactobacillus/Arundinaria Gigantea Ferment Filtrate

Rejuvenating Nourishing Silicone Replacement

FSS Bamboo Bioferment PF is a potent concoction of *Lactobacillus lactis*, silica-rich bamboo leaves, and *Leuconostoc*/radish root ferment filtrate, a natural antimicrobial. Beginning with macerated bamboo leaves, the mixture is then fermented with lactic acid bacteria that complexes with the bio-silicate from the plant matrix without using harsh chemicals, thus leaving a slightly acidic solution containing biochelated silica. **FSS Bamboo Bioferment PF** can be used as a natural alternative to silicone.

EXOTIC ACTIVES.





FSS Kigelia Extract G PF

PRODUCT CODE: FSS11063

INCI NAME: Water & Glycerin & Kigelia Africana Fruit Extract

– Revitalizing – Nourishung – Antioxidant Protection

FSS Kigelia Extract G PF is a rich mixture of *Kigelia africana* fruit extract and *Leuconostoc*/radish root ferment filtrate, a natural antimicrobial. *Kigelia africana* naturally occurs in the tropical regions of South Africa. The name Kigelia originates from the Mozambican Bantu term 'Kigeli-keia', which roughly translates to 'Sausage Tree'. This ingredient is standardized for its flavonoid content with the ability to act as a potent antioxidant, being able to quench free radicals that have the potential to react with and damage cellular components.

In vitro Efficacy: ORAC Assay



FSS Prickly Pear Extract PF

PRODUCT CODE: FSS10505PF

INCI NAME: Water & Butylene Glycol & Opuntia Tuna Flower/Stem Extract

Conditioning Nourishing Rejuvenating

FSS Prickly Pear Extract PF combines the nourishing benefits of *Opuntia tuna* flower/stem extract with *Leuconostoc*/radish root ferment filtrate, a natural antimicrobial. *Opuntia tuna* is one of the most cold tolerant of lowland cacti, native to Mexico, and can protect the body during times of stress. This species of cacti produces a fruit, which is commonly eaten in Mexico and is often referred to as tuna or cactus fruit. Originally, Spanish sailors ate this fruit to prevent scurvy due to its high levels of Vitamin C. **FSS Prickly Pear Extract PF** is a vegan, water-soluble ingredient that can help condition and rejuvenate the skin and hair.



FSS Guava Extract

PRODUCT CODE: FSS11050
INCI NAME: Psidium Guajava Fruit Extract

Nourishing Rejuvenating Conditioning

FSS Guava Extract harnesses the capabilities of *Psidium guajava* with the addition of *Leuconostoc*/radish root ferment filtrate, a natural antimicrobial. Native to South America and commonly cultivated in tropical climates, *Psidium guajava* has traditionally been used in herbal medicine for its natural phytonutrients and antibacterial properties. With a powerhouse of nutrients, *Psidium guajava* is a staple superfruit in the food and cosmetic industries. **FSS Guava Extract** may be used in a variety of hair and skin care applications to offer nourishing and rejuvenating effects while capitalizing on the benefits associated with *Psidium guajava*.

EXOTIC ACTIVES.





FSS Maqui Berry Extract

PRODUCT CODE: FSS15097

INCI NAME: Water & Aristotelia Chilensis Fruit Extract

Reduces Transepidermal Water Loss Promotes Collagen Binding Agent

FSS Maqui Berry Extract hones the power of *Aristotelia chilensis* in this water-soluble, vegan ingredient. Native to the rainforests in Chile and Southern Argentina, the Mapuche people of these regions knew this fruit as being sacred, having used it to make drinks which were associated with the strength and stamina of warriors. *Aristotelia chilensis* was also used during ancient times as a healing fruit for its anti-inflammatory properties. **FSS Maqui Berry Extract** capitalizes on the benefits associated with *Aristotelia chilensis* to be further implemented in various skin and hair formulations.



FSS Coconut Water PF

PRODUCT CODE: FSS10568PF

INCI NAME: Cocos Nucifera (Coconut) Water

'Antioxidant Protection Moisturizing 'Hydrating

FSS Coconut Water PF contains the moisturizing capabilities of *Cocos nucifera* water and the natural antimicrobial, *Leuconostoc/* radish root ferment filtrate. Coconut water has been used for centuries in tropical climates for hydration. While also having a strong history of use in medical applications, this nutrient rich water is a viable source of bio-water, packed with nutritional benefits. **FSS Coconut Water PF** offers potent antioxidant, moisturizing, and skin hydrating effects that can be applied to many cosmetic and personal care formulations.

In vitro Efficacy: ORAC Assay

In vivo Efficacy: Moisturization Assay



FSS Hibiscus Extract OS

PRODUCT CODE: FSS11144

INCI NAME: Helianthus Annuus (Sunflower) Seed Oil & Hibiscus Rosa-Sinensis Flower Extract

- Nourishing - Conditioning - Rejuvenating

FSS Hibiscus Extract OS contains a unique mix of *Helianthus annuus* seed oil, sourced from Spain, and *Hibiscus rosa-sinensis* flower extract, sourced from the United States. *Hibiscus rosa-sinensis* is a tropical flowering plant believed to be native to Asia. Also known as Chinese hibiscus, China rose, or Hawaiian hibiscus, this flower has offered medicinal properties in many cultures and society to address problem skin and more. FSS Hibiscus Extract OS offers the opportunity to capitalize on the benefits associated with *Hibiscus rosa-sinensis* in oil-soluble cosmetic and personal care formulations.

EXOTIC ACTIVES.





FSS Tonka Bean Bioferment PF

PRODUCT CODE: FSS20431PF

INCI NAME: Lactobacillus/Dipteryx Odorata Seed Ferment Filtrate

Moisturizing Hydrating Antioxidant Protection

FSS Tonka Bean Bioferment PF is comprised of Lactobacillus/Dipteryx odorata seed ferment filtrate and Leuconostoc/radish root ferment filtrate, a natural antimicrobial. Originating in the South American region of Guyana, Dipteryx odorata are seeds of the Dipteryx odorata tree and are used commercially as a substitute for vanilla. The manufacturer processes Dipteryx odorata by macerating and fermenting the upcycled waste using Lactobacillus prior to several filtration methods and followed by the addition of Leuconostoc/radish root ferment filtrate. As a water-soluble ingredient, FSS Tonka Bean Bioferment PF can be used to capitalize on the antioxidant, moisturizing, and hydrating effects of Dipteryx odorata seed in a variety of cosmetic and personal care formulations.

In vitro Efficacy: ORAC Assay, ROS Assay

In vivo Efficacy: Anti-Pollution Assay Analysis, Moisturization/Hydration Assay



PRODUCT CODE: FSS20228

INCI NAME: Saccharomyces/Agave Americana Leaf Ferment Filtrate

Collagen Synthesis Moisturizing Antioxidant Protection

FSS Agave HSP provides a potent mixture of *Saccharomyces/Agave americana* leaf ferment filtrate and *Leuconostoc*/radish root ferment filtrate, a natural antimicrobial. *Saccharomyces/Agave americana* leaf ferment extract is derived from the fermentation of *Agave americana* in the presence of *Saccharomyces cerevisisae*, and *Leuconostoc*/radish root ferment filtrate is derived from the fermentation of *Raphanus sativus* in the presence of *Leuconostoc*. Agave is a perennial plant found in tropical and subtropical arid environments. **FSS Agave HSP** can be used in cosmetic and personal care products as the perfect addition to promote moisturization, wound healing, soothing, and the overall health of the skin.

In vitro Efficacy: Scratch Assay Analysis, ORAC Assay, Collagen Production Assay

In vivo Efficacy: Transepidermal Water Loss Assay, Reduction in Sunburn Pain Assay, Moisturization Assay, High Resolution

Ultrasound Skin Imaging Assay



FSS PolyJackharides

PRODUCT CODE: FSS20963

INCI NAME: Water & Artocarpus Heterophyllus Fruit Extract

Moisturizing Improves Smoothness & Anti-Frizz Enhances Barrier Function

FSS PolyJackharides delivers an exotic mixture of *Artocarpus heterophyllus* fruit extract and *Lactobacillus* ferment, a natural antimicrobial. *Artocarpus heterophyllus* is a tropical fruit originating in southern Asia. Now cultivated in many tropical regions of the world, *Artocarpus heterophyllus* bears the largest fruit of all trees, some reported weighing up to one hundred pounds. *Artocarpus heterophyllus* has historically been used in medicine for its immunomodulatory effects, and is more recently becoming consumer recognizable as a popular vegan, meat alternative. FSS PolyJackharides, comprised of *Artocarpus heterophyllus* polysaccharides extracted from upcycled food industry waste, is a functional cosmetic active capable of providing moisturization to the skin, as well as smoothing and anti-frizz benefits to the hair.

In vivo Efficacy: Rinse-Off Moisturization Assay, Salon Half-Head Study