

StrataPhix® Technology Series

Solutions for skin inflammaging



STRATAPHIX POLY

INCI: Water (and) Glycerin (and) Laminaria Digitata Extract (and) Opuntia Ficus-Indica Stem Extract (and) Galactoarabinan (and) Schizophyllan

STRATAPHIX AWS

INCI: Water (and) Citrus Aurantium Dulcis (Orange) Fruit Extract (and) Opuntia Ficus-Indica Fruit Extract (and) Lycium Chinense Fruit Extract (and) Camellia Sinensis Leaf Extract

STRATAPHIX AOS

INCI: Caprylic/Capric Triglyceride (and) Camellia Sinensis Leaf (and) Lithospermum Erythrorhizon Root Extract (and) Haematococcus Pluvialis Extract (and) Glycyrrhiza Glabra (Licorice) Root Extract

**Designed to help
address signs of skin
inflammaging**

Hydrating

**Reduces irritation &
redness induced by
retinol**

**Supports in barrier
recovery**

Recommended applications



Skin care



Body care

STRATAPHIX Technology is a series of optimal composites of naturally based actives designed to help address skin inflammaging* brought on by various external threats such as UV, chemicals and the like.

Did you know that chronic inflammation, also known as inflammaging, can be a key culprit of many skin troubles?

STRATAPHIX Technology Series utilizes carefully balanced, naturally-derived, active compounds to curtail inflammatory pathways, leading to reductions in inflammation responses.

These unique products help to mitigate skin damage by inhibiting a key protein, Caspase-1, which starts the processes of cellular inflammation.

Chronic skin inflammation leads to continuous cellular aging which eventually leads to symptoms of aging that can be seen visually such as sagging skin, skin "yellowing", fine lines and wrinkles, thinning skin, slower barrier response, melasma age spots, and skin sensitivity.

STRATAPHIX Technology Series is sustainably sourced, rigorously tested and recommended for differentiated functional activity in personal care and beauty products.

STRATAPHIX Technology Series consists of 3 complexes; POLY, AWS and AOS.

**The term 'Inflammaging' is used to describe the aging phenomenon induced by chronic, persistent inflammation.*



Vantage®

How inflammaging affects the skin

Individually, as well as collaboratively, modern and environmental stressors such as pollution, blue light, sun burn, excessive stress, anxiety and poor diets can yield to one common side effect; inflammation. Consistent and frequent inflammatory response exhausts the skin's defense system, causing tissue damage and accelerates skin aging, leading to a condition known as inflammaging. The effects of skin inflammaging:

- ✓ Dehydrates by accelerating the depletion of Hyaluronic Acid naturally produced and stored by our bodies
- ✓ Damages the skin's fibroblasts, which are responsible for producing collagen and elastin
- ✓ Triggers glycation, which results in loss of skin elasticity
- ✓ Compromises skin barrier function + microbiome
- ✓ Results in uneven skin tone
- ✓ Provokes skin sensitivity and acne

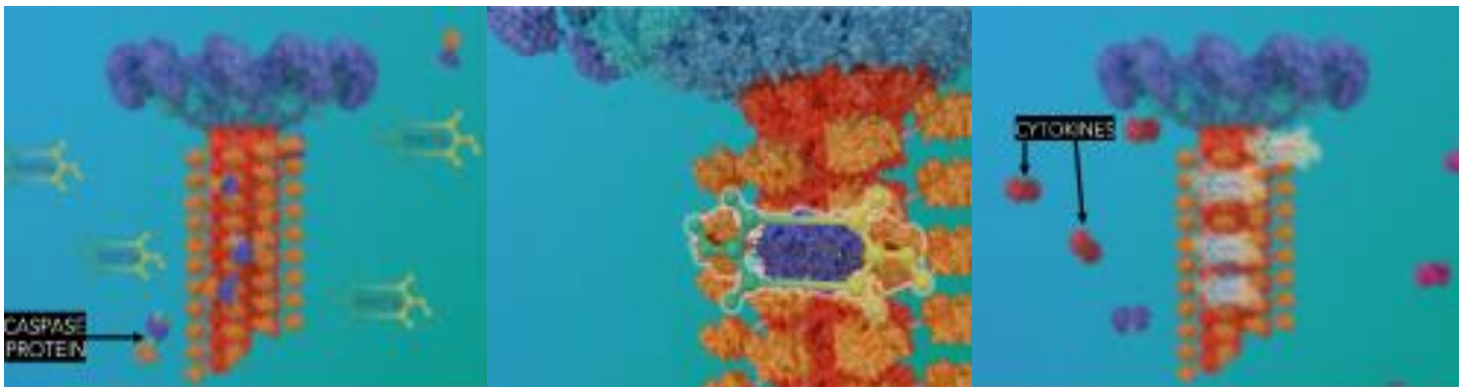
How STRATAPHIX slows down inflammaging

Skin inflammation is the body's innate immune response to protect the skin from harmful threats. Consistent and frequent inflammatory response exhausts the skin's defense system, causing tissue damage and accelerates skin aging.

Inflammasomes are instigators of inflammaging. First reported in 2002, these structures are responsible for starting the inflammation process in cells. Inflammasome production increases as we age.



A fully assembled inflammasome complex



Deployment of STRATAPHIX suppresses the formation of Active Caspase-1.

This leads to reductions in inflammation responses.

By reducing the expressions of potent cytokines through STRATAPHIX, the process of inflammaging can be subsequently slowed down.

STRATAPHIX POLY – Water-Soluble Polysaccharide Complex

An efficacious complex of botanically derived, water-soluble polysaccharides known for their ability to boost the immune system. Backed by clinical trials to support claims related to inflammation, skin barrier recovery, redness, extended hydration, retinol tolerance and more.

IN-VIVO SKIN BARRIER REPAIR STUDY

- ✓ Accelerated skin barrier recovery by 7%
- ✓ Accelerated reduction in redness ~ 40%

EXTENDED SKIN HYDRATION STUDY AFTER 48HRS CESSATION OF TREATMENT

- ✓ Improved skin hydration by 16% vs placebo
- ✓ Improved skin hydration by 60% compared to untreated skin

INFLAMMATORY ACNE STUDY

- ✓ Reduction of salicylic acid-induced inflammation

RETINOL HYDRATION STUDY

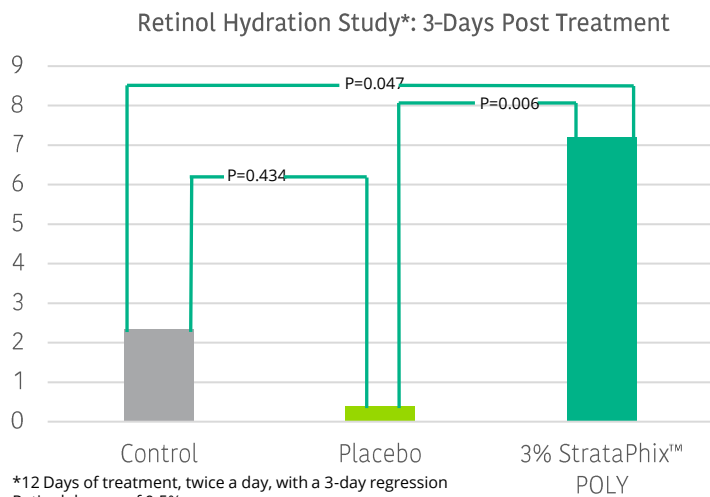
- ✓ Overcame severe drying effects
- ✓ Significantly helped maintain skin hydration

RETINOL HYDRATION STUDY: 72HRS POST-TREATMENT

- ✓ Improved skin hydration by 70% compared to untreated skin
- ✓ Improved skin hydration by 93% compared to retinol treated skin



After a 3-Day regression, skin hydration data indicates the area treated with the 0.5% Retinol Placebo formula begins to return to Control normal levels but still suffers from dehydration. The treated with STRATAPHIX POLY was able to show skin hydration superior to the Placebo and to the Untreated Control.

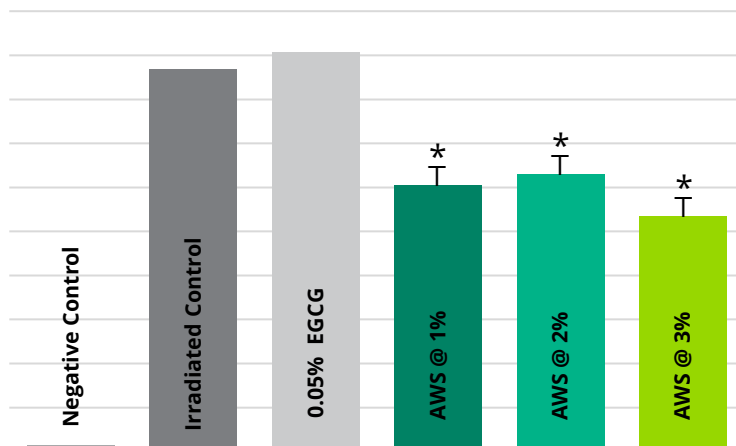


STRATAPHIX AWS – Water-Soluble Antioxidant Complex

Comprised of strategically sourced, water-soluble botanical extracts known to provide potent antioxidants and address a critical element of NLRP (Nucleotide-binding oligomerization domain, Leucine rich Repeat and Pyrin domain containing) inflammasome activation.



STRATAPHIX AWS Caspase-1 Results
Absorption Units (AU)



IN VITRO & EX-VIVO TESTING: INHIBITION OF CASPASE-1 EXPRESSION

- ✓ Proven to be successful in reducing expression of active Caspase-1 in skin cells activated by UVA/UVB radiation

Results of Examination for active Caspase-1 release of STRATAPHIX AWS on Reconstructed Human Epidermis (RHE) models

Tissues were physically lightly abraded and then subjected to 2MED of UVB/UVA irradiation to activate inflammasomes and then treated with STRATAPHIX products

Epigallocatechin-3-gallate (EGCG) (0.05%) was used as a positive control

*Statistically significant (95% confidence) compared to the Irradiated Control

STRATAPHIX Technology Series

Solutions for skin inflammaging

	STRATAPHIX POLY	STRATAPHIX AWS	STRATAPHIX AOS
Appearance @ 25°C	Clear to Hazy, Pale to Dark Yellow Gel	Clear, Dark Deep Burgundy Red Liquid	Deep, Red, Orange Liquid
Odor	Characteristic	Characteristic	Characteristic
pH	4.5 – 6.5	3.0 – 5.0	N/A
Solubility	Soluble in Water	Soluble in Water	Soluble in Oil, Insoluble in Water

STRATAPHIX AOS – Oil-Soluble Antioxidant Complex

An antioxidant powerhouse composed of oil-based extracts used at optimum levels to ensure potency and compatibility with anhydrous systems to fight and protect from free-radicals.



IN VITRO & EX-VIVO TESTING: INHIBITION OF CASPASE-1 EXPRESSION

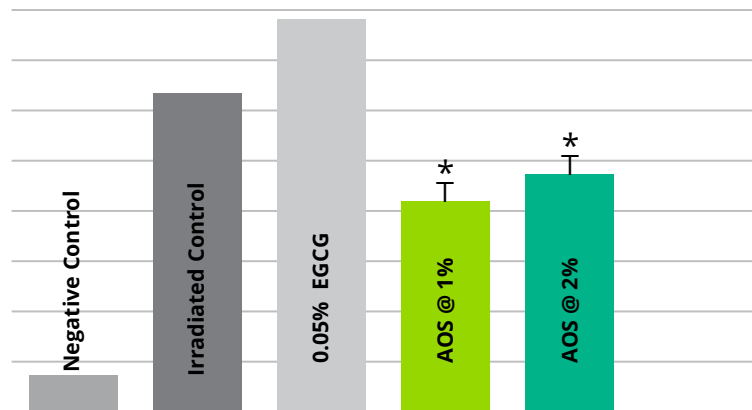
- ✓ Proven to be successful in reducing expression of active Caspase-1 in skin cells activated by UVA/UVB radiation.

Results of Examination for active Caspase-1 release of STRATAPHIX AOS on Reconstructed Human Epidermis (RHE) models

Tissues were physically lightly abraded and then subjected to 2MED of UVB/UVA irradiation to activate inflammasomes and then treated with STRATAPHIX products

Epigallocatechin-3-gallate (EGCG) (0.05%) was used as a positive control

STRATAPHIX AOS Caspase-1 Results
Absorption Units (AU)



*Statistically significant (95% confidence) compared to the Irradiated Control

How STRATAPHIX can support skin

- ✓ Helps recovery of skin hydration when moisturization is decreased
- ✓ Helps recovery of skin when
 - ✓ Autophagy is decelerated
 - ✓ Circadian rhythm is interrupted
 - ✓ Barrier recovery is decreased
- ✓ Helps recovery of skin when there is an increase in
 - ✓ UV exposure
 - ✓ Pollution exposure
 - ✓ Redness (erythema)
 - ✓ Irritation

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