

Natralipid® Ahiflower® Seed Oil

Ahiflower® delivers an optimally balanced, 100% plant-based blend of pro-collagen forming omegas that helps build a strong cellular lipid barrier and reduces the impacts of inflammatory environmental exposures.



INCI: *Buglossoides Arvensis* Seed Oil (Ahiflower®)

Ahiflower is a clean-label, regeneratively sourced, certified non-GMO ingredient containing the richest omega-3 ALA plus SDA in combination with hormone and skin balancing GLA. Most people do not get sufficient omega-3s in their regular diets, but every cell in our bodies needs these essential fatty acids to support dermal cell functioning and regeneration.

Excellent for use in functional dietary applications seeking to:

- Help reduce the appearance of redness
- Protect against premature photo-aging
- Support skin hydration, elasticity, and smoothness
- Reduce the appearance of fine lines and wrinkles

Delivery System Advice:

- Topical: Formulate into single-use serum pods, gel-tabs, or sachets
- Internal: In beauty-from-within applications, formulate into vegan softgels or use available water-soluble powdered form in functional powder blends

Benefits:

- Richest, most advanced 'multi-omega' source of essential fatty acids from a single non-GMO plant
- 100% plant-based means suitable for all natural and vegan formulations
- Unique stearidonic acid (SDA) + gamma linolenic acid (GLA) content has anti-inflammatory activity, ideal for topical oil formulations
- SDA & GLA fatty acids have demonstrated collagen synthesis support, ideal for advanced anti-aging skin care formulations
- Fatty acids shown to reduce skin wrinkle depth & roughness, applied topically
- Excellent compatibility with other oils permits formulation for wide range of aesthetics and skin feel effects

Sensory:

Good skin spreading, non-greasy, improves skin smoothness. Mild odor.

Topical Inclusion Rate:

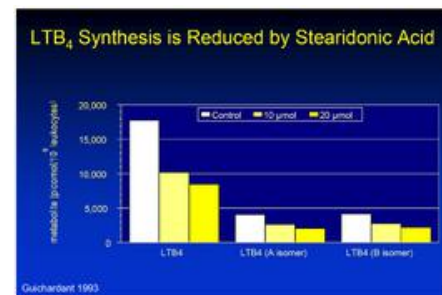
Recommended at 1% to 10% depending on formula performance needs.

Formulation Advice:

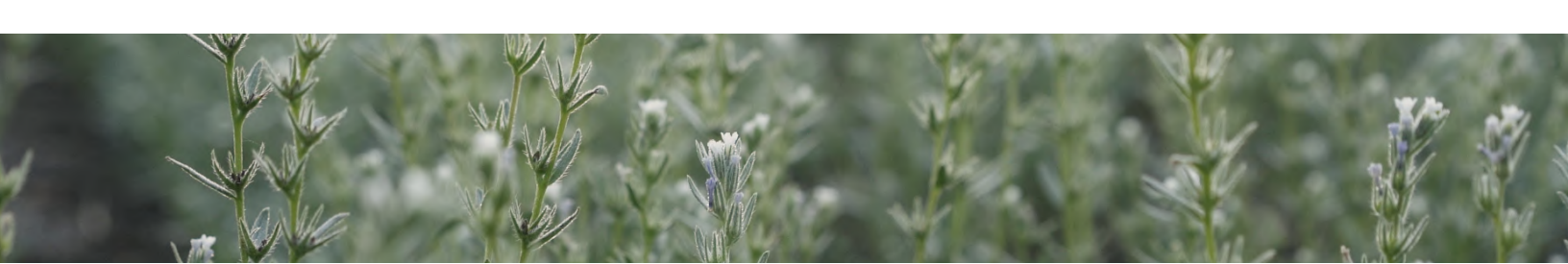
Blend into oil-phase preparations. Minimize exposure to oxygen during processing.

Unique Profile:

Natralipid® Ahiflower® Seed Oil is plant-derived, uniquely high in combined omega-3 stearidonic acid & omega-6 gamma-linolenic acid. It has the highest overall omega 3-6-9 content (>85%) among plant-based dietary oils. Ahiflower oil has excellent topical anti-inflammaging and skin microbiome support properties.



Leukotriene B₄ synthesis inhibition from SDA.



Product Properties:

Appearance@ 25° C:	Clear pale yellow
Odor:	Mild, clean, nutty
Color:	< 2.0 R; <20.0 Y (AOCS Cc I 3j-97)
Refractive Index @ 20° c:	1.465-1.475
Iodine Value (cg/g):	210-250
Peroxide Value (meq/kg):	5 max
Acid Value (mg KOH/g):	0.6 max
Alpha Linolenic Acid:	42-45% 16-20%
Stearidonic Acid (cl 8:4n-3):	18-21%
Gamma Linolenic Acid (cl 8:3n-6):	5-6%
Allergens:	None

Heavy Metal Limits:

Arsenic (mg/kg)	<0.1
Cadmium (mg/kg)	<0.1
Lead (mg/kg)	<0.1
Mercury (mg/kg)	<0.1

Microbial Limits:

Total Aerobic Plate Count (CFU/g)	<1000
Yeasts and Molds (CFU/g)	<10
Staphylococcus aureus	ND per 10g
Total Coliforms / . E. coli	ND per 10g
Pseudomonas aeruginosa	ND per 10g
Salmonella spp.	ND per 10g
Enterobacter	ND per 10g

Typical values provided. Please inquire for official specifications.

Manufacture:

Seeds grown directly by NCI are expeller-pressed to crude oil and then physically refined in a solvent-free process. Natralipid® oils are always fully traceable from soil to oil, regeneratively grown, and sustainably processed in a risk-mitigated and assured supply chain.

Storage & Shelf Life/Retest Date:

Natralipid® Ahiflower® Seed Oil should be stored unopened in a cool, dry place out of direct sunlight. Retest after 3 years from manufacturing date. Once opened, product should be handled for minimal exposure to oxygen. Recap with nitrogen to maintain highest quality.

Packaging:

Available in 190 kg polylined steel drums and 20 kg HDPE pails.

Safety:

Refer to Safety Data Sheet before handling.



Sustainability Summary

Natralipid® Ahiflower® (Buglossoides arvensis) seed oil has the plant kingdom’s richest available anti-inflammatory omega-3 SDA and omega-6 GLA content, surpassing the benefits of evening primrose oil. Ahiflower oil is superior compositionally and more cost-effective than echium seed oil.

Ahiflower oilseed crops are grown traceably and regeneratively in the UK. The harvested seeds are then minimally processed, filtered, and low-temperature refined to yield a very light, pure, clean-smelling oil—equally suitable in topical “anti-inflammaging” skin care products and in dietary supplements boosting beauty from within.

Brands seeking to formulate more complete solutions combining ingestible (daytime) and topical (nighttime) protocols can leverage this unique 100% plant-based platform's versatility.

The Natralipid® Difference:

- 100% plant lipids from the seeds of specialty crops grown by Natures Crops
- Selected for unique fatty acid composition & excellent functionality by application
- Always traceable from soil to oil
- Never processed with hexane & organic solvents
- Regeneratively grown, sustainably processed
- A risk-mitigated and assured supply chain

