

THE OLIVE LEAF

Native to the Mediterranean Basin the leaves of the olive tree have been used by humans dating back to Ancient Egypt. They have been used in folk medicine and have current-day applications.

Olive leaf extractions are known for their antioxidant, anti-inflammatory, anti-bacterial properties, and other bioactivities.

The leaves contain a complex variety of bioactive substances, including phenolic compounds, triterpenic acids, iridoids, and sugars.

Among these, other substantial constituents are oleanolic and maslinic acids, oleuropein, oleuropeoside, ligustroside, hydroxytyrosol and their glucosides, and mannitol.

These compounds impart a wide range of benefits for topical skincare.

WE'RE SOCIAL!



LEARN MORE ON OUR WEBSITE:
WWW.DEVERAUXSPECIALTIES.COM



Deveraux Specialties





est. 1998

12835 ARROYO STREET, SYLMAR CA 91342 | MAIN: +1 (818) 837-3700 | INFO@DEVERAUXSPECIALTIES.COM



DL Linefade™

OLIVE LEAF EXTRACT FOR ANTI-AGING SKIN CARE
DEJ COLLAGEN IV ACTIVATOR DELIVERING RETINOID-LIKE BENEFITS

-  Erases fine lines by reducing wrinkle depth in as early as 15 days
-  Lifts and re-volumizes sagging skin in as early as 45 days
-  Smooths the appearance of crepey and dry, rough skin
-  Amplifies performance of retinol and niacinamide



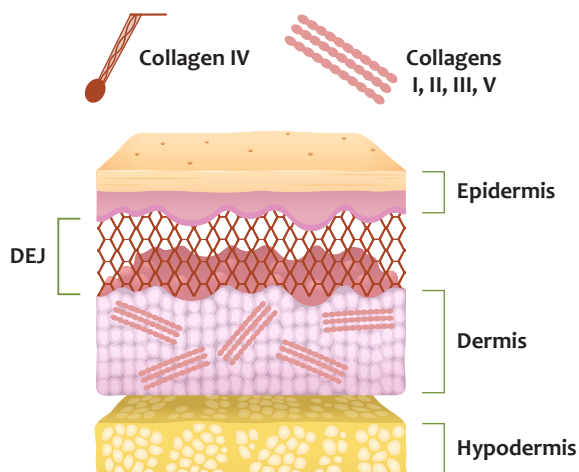
A NOVEL

COLLAGEN IV PROMOTOR

Collagen, an abundant structural protein found in human skin, has been a cornerstone focus in skincare product development for decades. However, existing cosmetic ingredients in cell studies often target dermal collagens I and III. Both are found deeper in the layer of the skin (the dermis). As a result, a new approach toward targeting collagen has been discovered.

Collagen IV is a protein that resides closer to the skin's surface, located at the interface of the epidermis and dermis. The structural features of collagen IV include a unique pliable consistency which organizes a sheet-like network forming an anchor between the skin layers.⁽¹⁾

With chronological aging, collagen IV progressively depletes, and the dermal-epidermal junction (DEJ) flattens leading to a loss of the skin's youthful structural properties⁽²⁾. These changes that occur at the DEJ contribute to the age-related remodeling of the skin and produce visible signs of aging.



Olive leaf, rich in a variety of antioxidants and bio-active compounds, is known to contain several lipid-soluble molecules which exhibit PPAR-activation. Peroxisome proliferator-activated receptors (PPAR) are known to play an important role in maintaining epidermal homeostasis and regulating the synthesis of lipids and proteins⁽³⁾.

In early research, we have discovered that DL Linefade™ prepared from olive leaf, imparts a stimulatory effect on collagen IV.

PRODUCT INFORMATION

Trade Name: DL Linefade™

INCI: Glyceryl Ricinoleate, Dimethyl Isosorbide, Olea Europaea (Olive) Leaf Extract

Origin: 100% plant renewably sourced in the USA

Appearance: Clear to slightly hazy liquid

Color: Transparent to slightly yellow

Odor: Characteristic

Solubility: Liposoluble

Recommended Use Level: 1% - 3%

CONFORMS TO A VARIETY OF
GEOGRAPHIC REGULATIONS, CLEAN BEAUTY RETAIL
STANDARDS AND CONSUMER CERTIFICATIONS

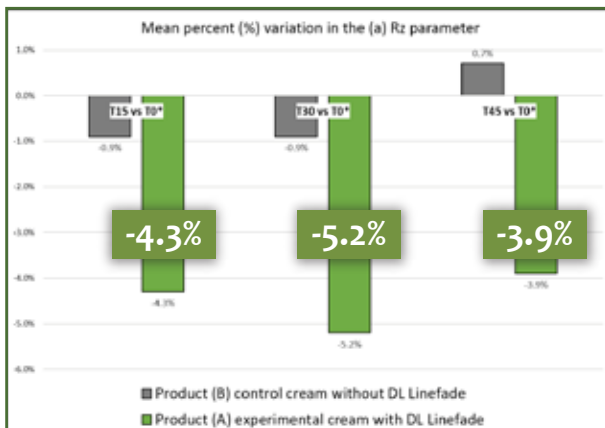
Regulatory compliance report available upon request.



CLINICALLY PROVEN TO REDUCE THE SIGNS OF AGING

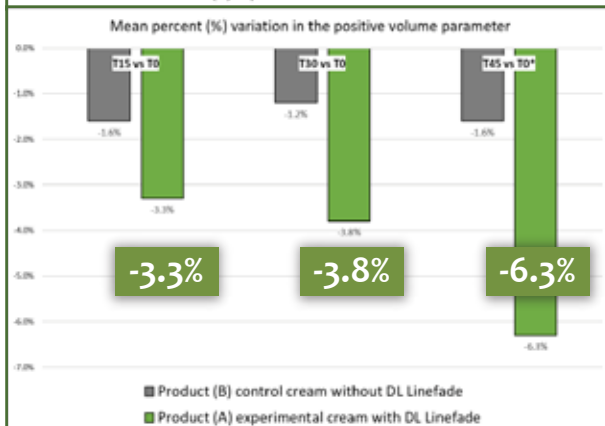
DL Linefade was shown to activate PPAR- α transcriptional regulation and induces collagen IV synthesis in both human and skin explant models⁽⁴⁾. In a human fibroblast cell-culture model, DL Linefade increased collagen IV output by +219% and with just 1% application in a triglycerides carrier, had increased collagen IV along the DEJ.

With such compelling in vitro and ex vivo findings, two skin creams were prepared with and without DL Linefade to examine the possible clinical skin care benefits. Using VisioTOP-300 + AEVA-V3 imaging and analysis techniques, a 20-subject single-blinded randomized split-face study was conducted over 45 days on women between the ages of 35 to 65. The results statistically showed significant improvement in both crow's feet wrinkles and facial sagging. Products A & B were applied to each half of the face twice daily, measurements taken at days 0, 15, 30 and 45.



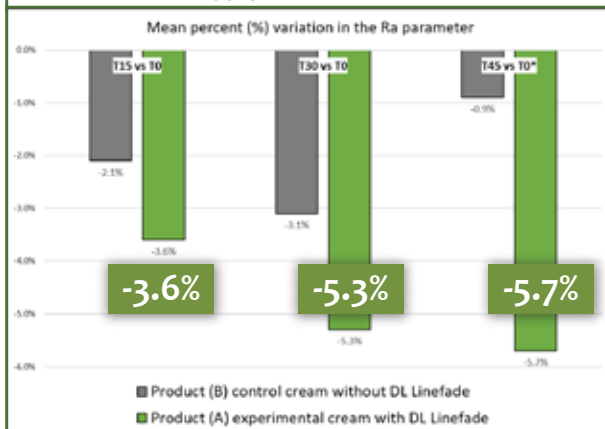
MEAN DEPTH OF ROUGHNESS (RZ)

Demonstrated a **significant reduction in wrinkle appearance** at Day 15, Day 30 and Day 45



VARIATION OF POSITIVE VOLUME (%)

Demonstrated a **significant reduction in facial sagging** at Day 15, Day 30 and Day 45



ARITHMETICAL MEAN OF ROUGHNESS (RA)

Demonstrated a **significant reduction in skin roughness and fine line appearance** at Day 15, Day 30 and Day 45



APPLICATIONS

DL Linefade™ prepared from plant-derived compounds is lipid-soluble and easy to formulate, while also shown to improve the performance of niacinamide containing creams. An ideal inclusion into functional skin care products offering formulators a new option for creating result-driven skin care.

This application can be incorporated in skincare and makeup products which target age-related changes in skin. DL Linefade can help manage the visible signs of wrinkles and sagging skin as well as minimize the appearance of crepey-skin while firming, lifting, smoothing and line-filling.



SUSTAINABLE PLANT ORIGIN



NIACINAMIDE PERFORMANCE
ENHANCING



LINE FILLING/SKIN SMOOTHING



ANTI-SAGGING



MINIMIZING CREPEY SKIN



SKIN FIRMING/LIFTING



WRINKLE REDUCING



VITAMIN A BOOSTING



SKIN BARRIER ENHANCING



DEJ STRENGTHENING



NECK/EYE CREAMS



FORMULATES INTO SKIN CARE AND COLOR

References:

1. Abreu-Velez AM, Howard MS. Collagen IV in Normal Skin and in Pathological Processes. N Am J Med Sci. 2012 Jan;4(1):1-8. doi: 10.4103/1947-2714.92892. PMID: 22393540; PMCID: PMC3289483
2. Langton AK, Halai P, Griffiths CE, Sherratt MJ, Watson RE. The impact of intrinsic ageing on the protein composition of the dermal-epidermal junction. Mech Ageing Dev. 2016 Jun;156:14-6. doi: 10.1016/j.mad.2016.03.006. Epub 2016 Mar 21. PMID: 27013376.
3. Majewski G, Crow J, Falla T. Accelerated Barrier Repair in Human Skin Explants Induced with a Plant-Derived PPAR-α Activating Complex via Cooperative Interactions. Clin Cosmet Investig Dermatol. 2021 Sep 18;14:1271-1293. doi: 10.2147/CCID.S325967. PMID: 34566418; PMCID: PMC8458040.
4. Majewski GP, Singh S, Bojanowski K. Olive leaf-derived PPAR agonist complex induces collagen IV synthesis in human skin models. Int J Cosmet Sci. 2021 Dec;43(6):662-676. <https://doi.org/10.1111/ics.12742>. Epub 2021 Nov 4. PMID: 34661292.

