

Deveraux Specialties
est. 1998

DL HHA range

ADVANCED HYALURONIC ACID SOLUTIONS
HARNESS THE POWER OF PRECISION HYDRATION

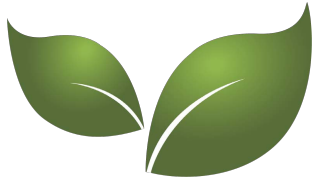


“Take good care of your skin
and hydrate. If you have good
skin, everything else will fall
into place.”

- *Liya Kebede*



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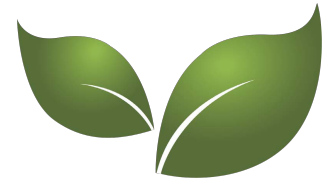


III. THE DL HA RANGE

The background features a dark green gradient with several stylized green leaves of varying sizes and orientations. A thin, light green vertical line runs down the left side of the image. The text is centered horizontally in the upper half of the image.

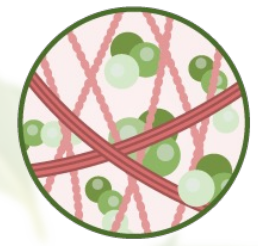
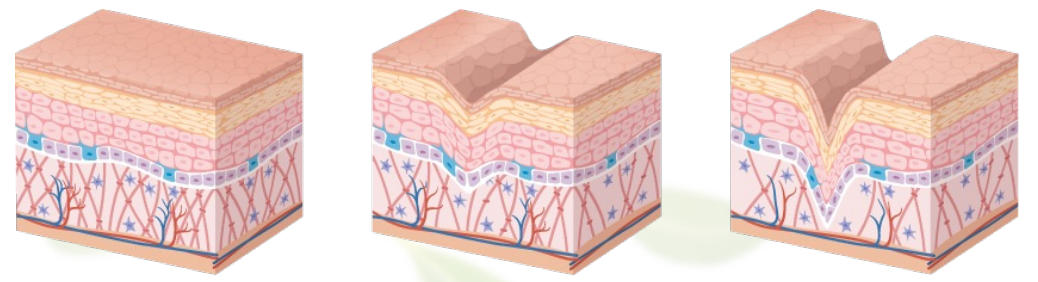
I. WHAT IS HYALURONIC ACID?

A Key Molecule in Skin Aging

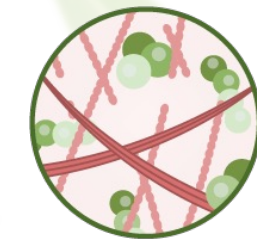


Properly hydrated skin maintains the skin barrier to help the skin appear more plump, healthier and vibrant

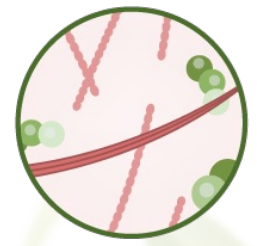
- Skin aging is a complex biological process of the skin's structural integrity and physiological functioning resulting in the gradual loss of skin moisture and degradation of collagen and skin elasticity thus the appearance of fine lines and wrinkles
- The key molecule involved in sustaining skin moisture is Hyaluronic Acid (HA) which has a unique capacity in retaining water, serving as a support for collagen and elastin fibers
- Naturally present in the body; the average person has 15g of HA (50% of the dermis) of which 5g is replaced daily but has a very short turnover time—half-life of less than a day
- While HA is naturally renewed, the pace of renewal decreases with age and external aggressions
- The skin's HA content starts to decrease in as early as 20 years of age and is reduced to half by the age of 50



35 YEARS

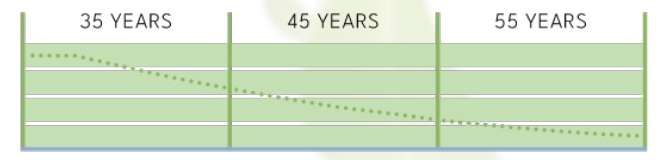


45 YEARS



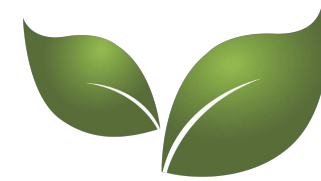
55 YEARS

- Hyaluronic Acid
- Collagen
- Elastin



SKIN AGING AND COLLAGEN LEVELS

Hyaluronic Acid (HA)



🌿 **Hyaluronic Acid (HA) is a naturally occurring polysaccharide found throughout the body's connective tissue**

- Known also as hyaluronan or hyaluronate was discovered in the vitreous humour of the eye by Karl Meyer in 1934
- It is a polysaccharide belonging to glycosaminoglycans; made up of disaccharide units constituted of N-acetylglucosamine and D-glucuronic acid predominantly found in the extracellular matrix (ECM)
- HA plays a regulatory role in the control of fibroblasts and keratinocytes cell physiology through the extracellular interaction with a key cell surface receptor

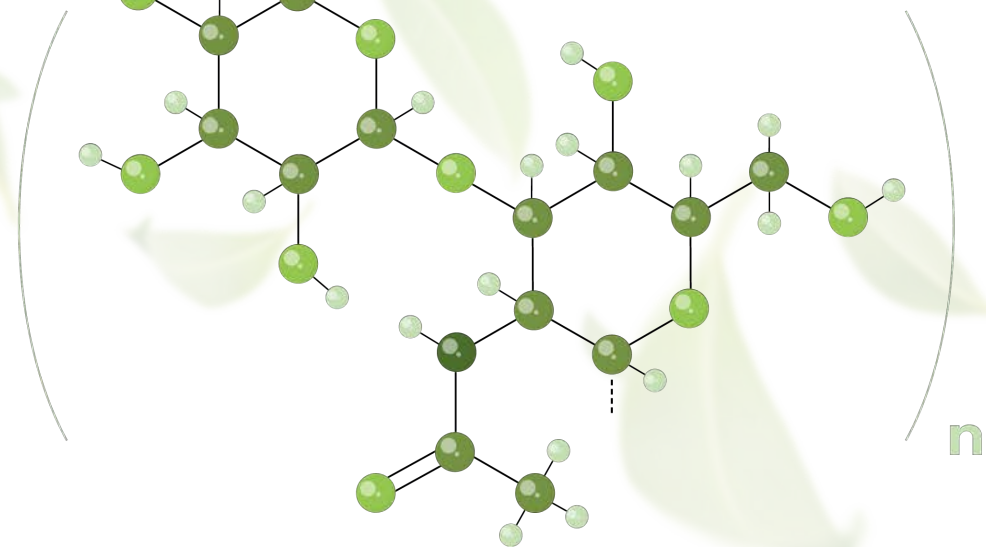
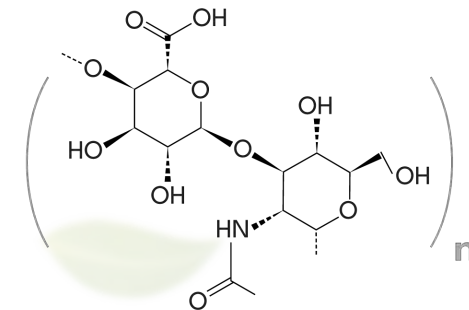
Hyaluronic Acid HA (Hyaluronan)

Molecular Formula of
Hyaluronic Acid:

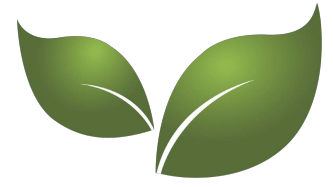


- **N** Nitrogen
- **C** Carbon
- **O** Oxygen
- **H** Hydrogen

Structural Formula of
Hyaluronic Acid:



How Does It Work?

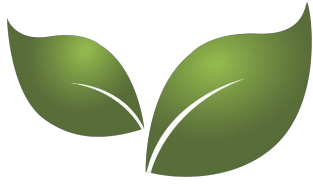


🌿 **A direct correlation exists between the amount of HA in dermal tissue and the content of water in the dermis**

- Naturally decreases with age
- Acts like a molecular sponge: capturing and retaining water molecules
- Can hold up to 1000x its weight in water
- Vital role in the synthesis of the extracellular matrix and epidermal cell interaction
- Helps bind water to collagen
- Can attach and hold large amounts of moisture
 - **6 LITERS OF WATER IN JUST 1 GRAM!**



A Powerful Humectant



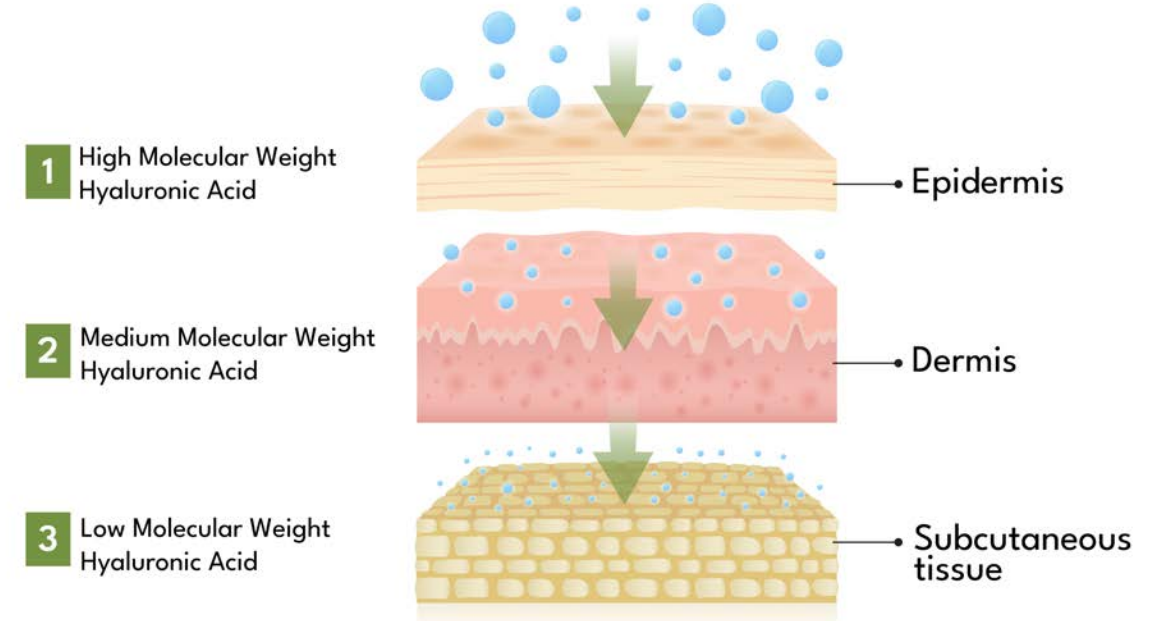
HA is so powerful at pulling moisture to the surface of the skin

- Used as a humectant to continually keep skin moisturized throughout the day
- Gives skin a soft, plumper texture
- Evens skin tone
- Improves fine lines and wrinkles
- Gentle on the skin barrier

Formulates well with most other ingredients

- Retinols, peels, vitamins, acids with high pH

Hyaluronic Acid Molecular Weight Skin Layer Permeation



II. TYPES OF HYALURONIC ACID



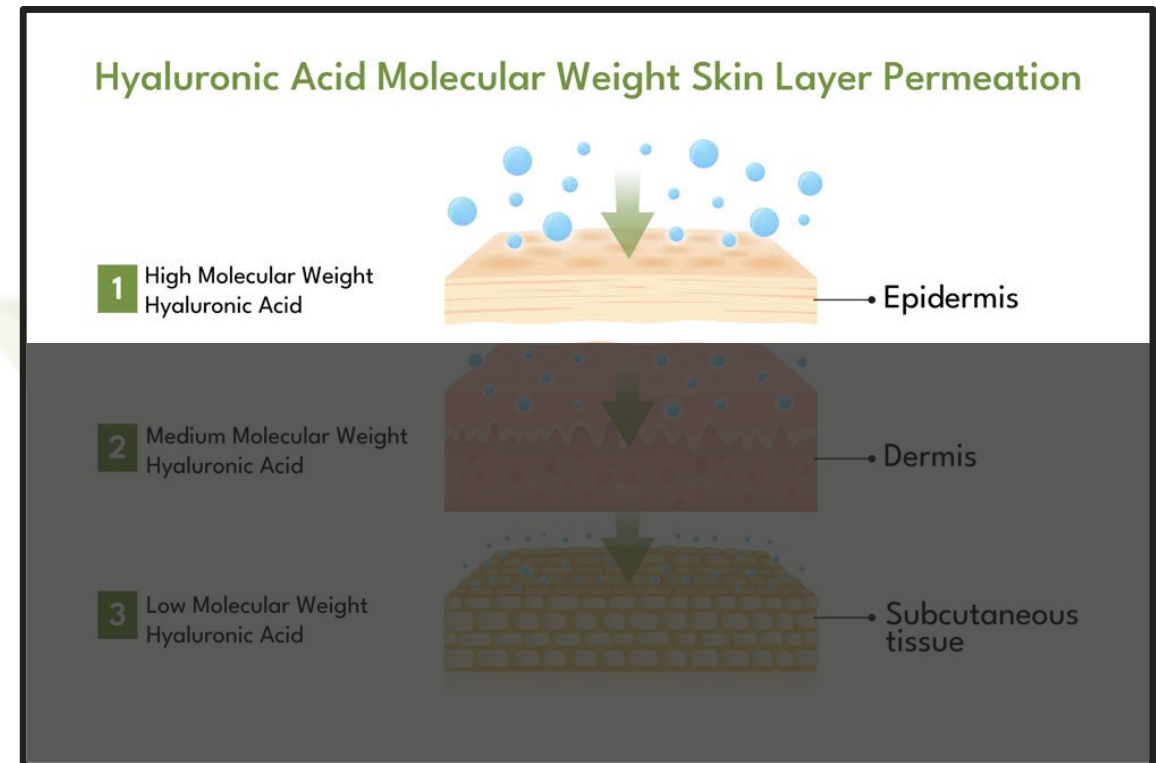
High Molecular Weight



High Molecular Weight

(> 500,000 Da)

- The main action of film-formation with its slip texture sitting on top of the skin; reducing water evaporation and forms an occlusive effect counteracting skin dehydration
- Protects and the skin barrier by preventing water loss, improving skin elasticity which can help promote healthier skin aging over time
- Instantly moisturizes the skin's surface, giving it a plump and dewy look
- Protects and the skin barrier by preventing water loss, improving skin elasticity which can help promote healthier skin aging over time
- This protecting film coating helps keep the skin soft, smooth and hydrated
- Delivers the most visible results, but with a shorter life-span and is easily washed away
- Extends moisturization, provides TEWL protection and suppleness retention



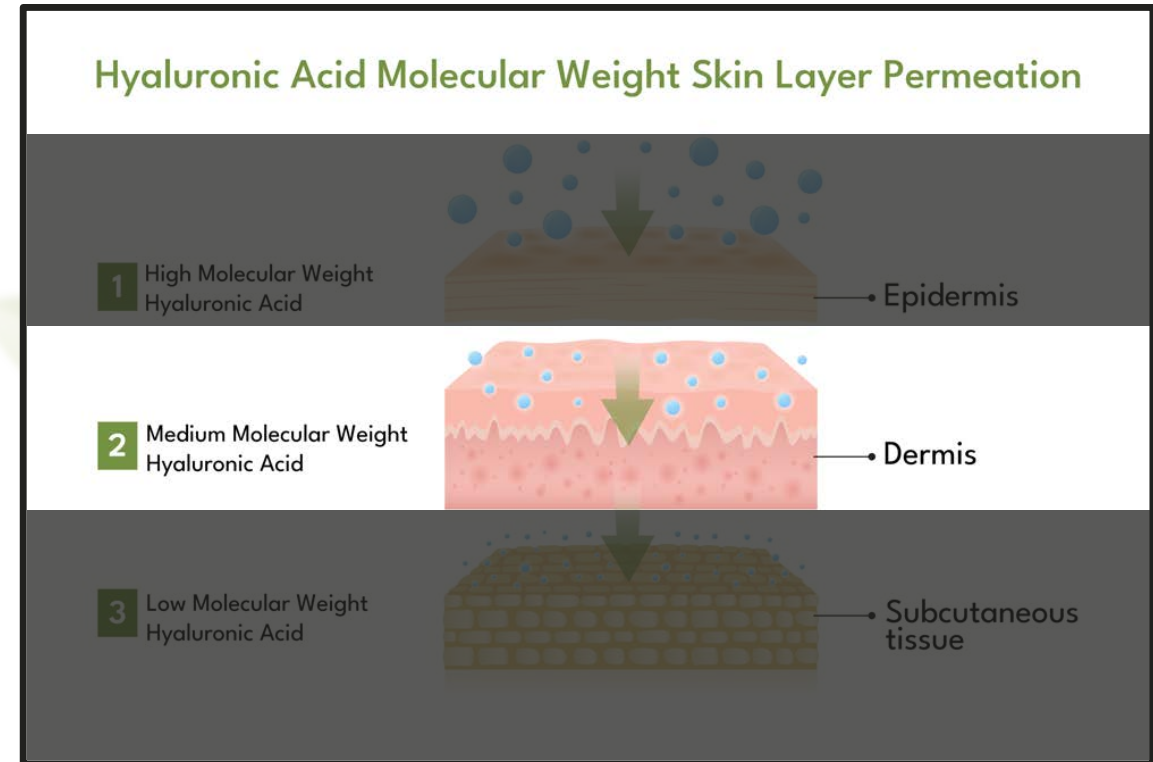
High Molecular Weight



Medium Molecular Weight

(100,000 to 500,000 Da)

- Has the advantages of both HMW-HA (occlusive effect) and LMW-HA (skin penetration) providing smoothness and softening of the skin
- Protects and the skin barrier by preventing water loss, improving skin elasticity which can help promote healthier skin aging over time
- Provides some penetrating qualities and binds with water in the connective tissue to help provide and retain short- and long-term skin hydration, dryness reduction as well as wrinkle reduction
- Instantly moisturizes the skin's surface, giving it a plump and dewy look
- Cross links with other HA molecules to knit together a temporary barrier
- An ideal ingredient for after skin peels



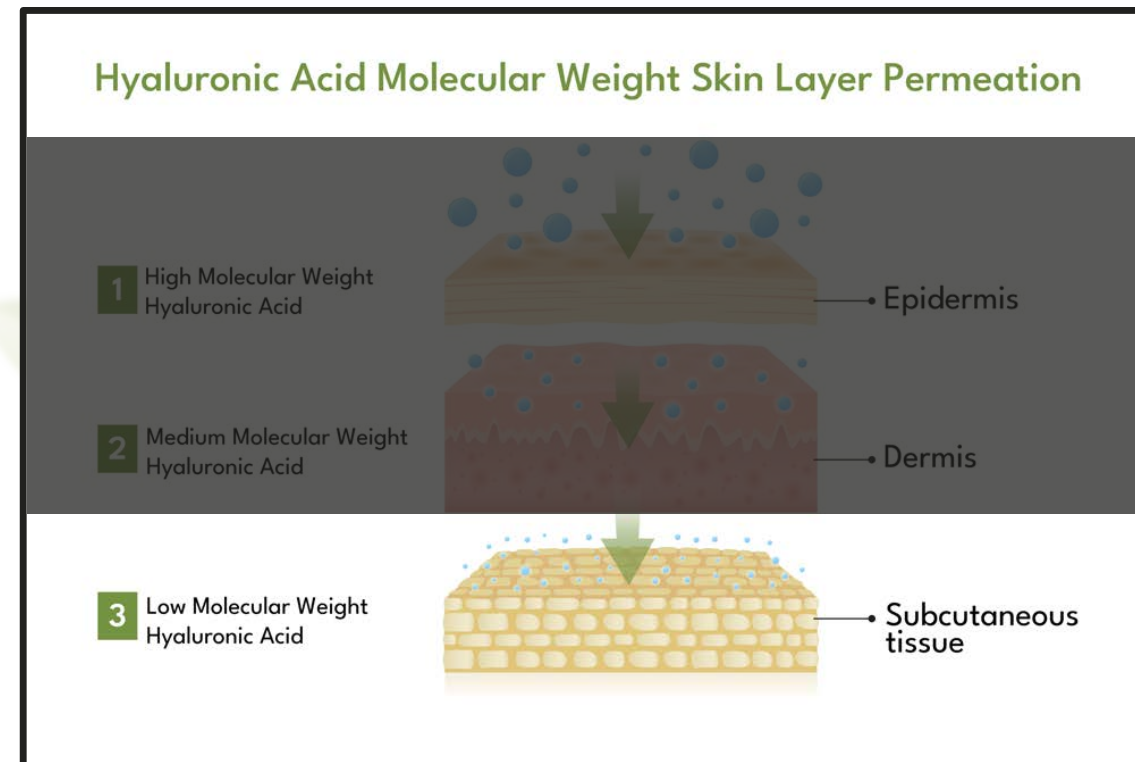
High Molecular Weight



Low Molecular Weight

(< 100,000 Da)

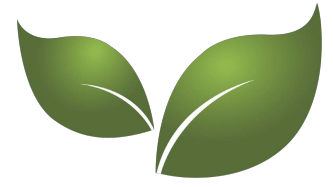
- Watery texture penetrates more deeply into the epidermis until reaching the subcutaneous layers, favoring the physiological production of collagen on the skin, improving skin density and compactness
- Holds on to water for longer-lasting intense moisture and sustained hydration on the skin, protecting and stabilizing the skin at the cellular level
- More effective for the reduction in wrinkle depth and plumping of the skin
- Provides a good conditioning and suppleness effect, with a slower release and absorption
- Reduces skin inflammation by signaling the production of beta-defensin 2; promotes tissue healing by controlling the activity of inflammatory cells



III. THE DL HA RANGE

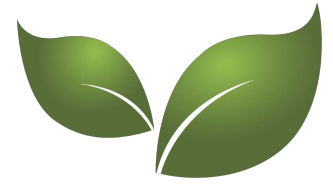


Standard Offer - HA Powders



Product	Molecular Weight
DL Super Low MW HA	<3,000
DL Super Low 6000	3,000 to 6,000
DL Low MW HA	5,000 to 10,000
DL Oligo 10	<10,000
DL Oligo HA	8,000 to 15,000
DL Oligo 50	20,000 to 50,000
DL Medium MW HA	200,000 to 500,000
DL Regular MW HA	500,000 to 1,500,000
DL High MW HA	1,500,000 to 1,800,000
DL HA Powder 100% 1.6	1,500,000 to 2,000,000
DL HA Powder 100%	1,800,000 to 2,200,000
DL HA Powder 2.0	2,000,000 to 2,400,000

DL Biomoist AcHA

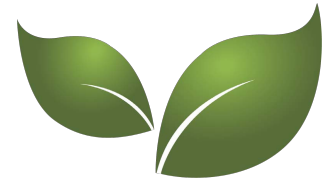


DL Biomoist AcHA ($\leq 100,000$ Da)

- Acetyl Hyaluronic Acid for increased skin moisturization and delivery of active ingredients
- High hydration and moisture retention effect
- High skin softening and barrier repair effect
- High solubility
- Low viscosity and thread forming
- High stability in emulsions and serums
- Reduced cost of goods



DL HA Plus



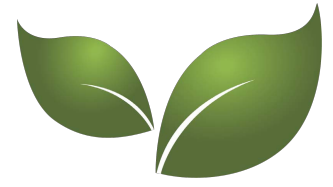
DL HA Plus

(MW 200,000 to 300,000 Da)

- High moisture and viscoelasticity coupled with high absorption on skin and HAIR!
- Once attached to hair it cannot be washed away easily
- In skin care products, provides a refreshing feel



DL Biomoist 1%

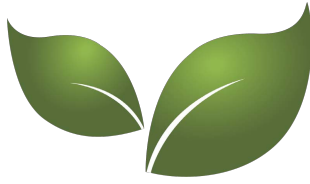


DL Biomoist 1% (MW 1.8M to 2.2M Da)

- High molecular weight polymer
- Penetrates deeper layers of the skin
- Strong lubricating and film forming properties
- Powerful humectant
- Reactive in cellular renewal and repair
- Less susceptible to oxidation



DL HA 2.5

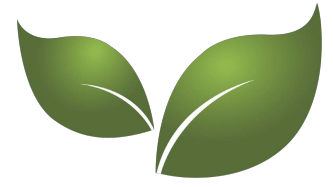


DL HA 2.5 (2M to 2.5M Da)

- High molecular weight polymer
- Provides deep hydration, effectively moisturizing the skin
- Helps reduce moisture loss and protect the skin from environmental stressors.
- It enhances skin elasticity and firmness, reduces the appearance of fine lines and wrinkles.
- Soothes the skin, reducing redness and irritation, particularly in sensitive skin types.
- It can improve skin texture, giving a plumper and smoother appearance, which enhances the skin's overall aesthetic appeal.
- Helps to ensure that the skin remains supple and resilient against physical stresses.
- Supports the efficacy of other skincare ingredients by keeping the skin's surface receptive to treatment.



DL HA Blend 2%

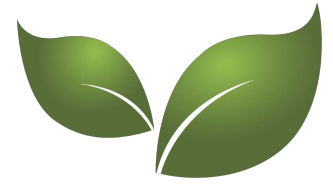


DL HA Blend 2% (Multi-Molecular Weight)

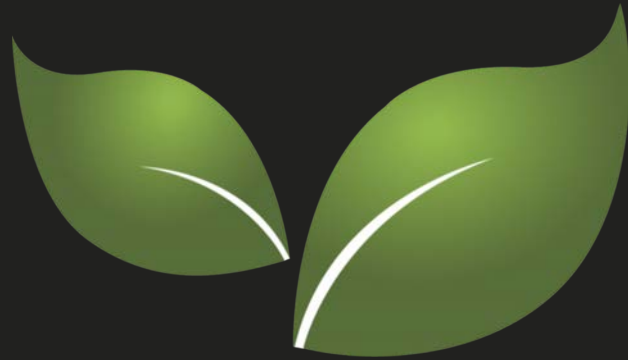
- A DL HA Blend composed of
 - DL Oligo HA
 - DL Low MW HA
 - DL Medium HA
 - DL Biomoist AcHA



DL HA Range



We offer the possibility to customize YOUR solution using different molecular weights at many concentrations!



Thank you!

Deveraux Specialties, LLC

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