

Advanced High Viscosity (AHV)



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*Essederm*®  
FAMILY OF PRODUCTS



## Company info:

**ReCosmo** is a combination of researchers, directors, doctors & manufacturers, with years of experience in the medical aesthetic industry from around the world. Our talented and innovative groups continuously study, design and develop new products & are currently developing cutting edge products for the aesthetic market.

**ReCosmo** is involved in innovative designing manufacturing and distributing a full range of Medical cosmetic for this highly regulated industry. Our number one objective is to manufacture and offer high quality products without any compromise.





# Essederm®

## Thin

### *Essederm* Thin

Is a Sterile restorable cross-linked pyrogen free hyaluronic acid gel of non-animal origin which is used for:  
Filling superficial wrinkles (perioral, periorbital...),  
Augmentation of lip and injection in lip contour

- 1.0 ml cross link hyaluronic acid
- 30 G disposable glass syringe
- It is sterile pyrogen free, colorless, isotonic gels, transparent, odorless, viscous, no particle and 100% none animal base
- Cross linked NaHA content 5.6 to 6.5 mg per ml
- Not cross linked NaHA content .8 to 1.2 mg per ml
- Cross linking grade: 70 to 90 %
- Volume: 1.01 – 1.16 g
- Storage and condition: 2 to 25 C (35 to 77 F)

*Essederm* Thin  
Family of products



Essederm® Thin



- 1. Worry Lines, Essederm Thin
- 2. Glabellar Lines, Essederm Thin
- 3. Periorbital Lines, Essederm Thin

7. Perioral Lines, Essederm Thin

11. Lip Augmentation, Essederm Thin







# Essederm<sup>®</sup>

## **Essederm<sup>®</sup> Meduim**

Is a Sterile restorable cross-linked pyrogen free hyaluronic acid gel of non-animal origin which is used for: Filling medium and deep cutaneous depressions such as wrinkles, folds and other defects, restoring or creating volume in facial contours (cheekbones, chin) and lip contours

- \* 1.0 ml cross link hyaluronic acid
- \* 29G disposable glass syringe
- \* It is sterile pyrogen free, colorless, isotonic gels, transparent, odorless, viscous, no particle and 100% none animal base
- \* Cross linked NaHA content 11.5 to 12.5 mg per ml
- \* Not cross linked NaHA content .8 to 1.2 mg per ml
- \* Cross linking grade: 70 to 90 %
- Volume: 1.01 – 1.16 g
- \* Storage and condition: 2 to 25 C (35 to 77 F)

**Essederm<sup>®</sup>** Medium  
Family of products



# Essederm®

Medium

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1. Worry Lines, Essederm Medium
2. Glabellar Lines, Essederm Medium
4. Augmentation of Chickbones, Essederm Medium
5. Cheek Augmentation / Cheek Wrinkles, Essederm Medium
6. Nasolabial Folds, Essederm Medium
8. Vermilion Border, Essederm Medium
9. Oral Commissurer / Smile Lines, Essederm Medium
10. Lip Contour, Essederm Medium
12. Chin Augmentation, Essederm Medium







# Essederm<sup>®</sup>

## Deep

### **Essederm<sup>®</sup> Deep**

Is a Sterile restorable cross-linked pyrogen free hyaluronic acid gel of non-animal origin which is used for: deep cutaneous depressions like deep wrinkles, folds and other defects, restoring or creating volume in facial contours (cheekbones, chin)

- \* 1.0 ml cross link hyaluronic acid
- \* 27G disposable glass syringe
- \* It is sterile pyrogen free, colorless, isotonic gels, transparent, odorless, viscous, no particle and 100% non animal base
- \* Cross linked NaHA content 17 to 19 mg per ml
- \* Not cross linked NaHA content .8 to 1.2 mg per ml
- \* Cross linking grade: 70 to 90 %
- \* Volume: 1.01 - 1.16 g
- \* Storage and condition: 2 to 25 C (35 to 77 F)

**Essederm<sup>®</sup>** Deep  
Family of products



# Essederm<sup>®</sup> Deep

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- 4. Augmentation of Chickbones, Essederm **Deep**
- 5. Cheek Augmentation / Cheek Wrinkles, Essederm **Deep**
- 6. Nasolabial Folds, Essederm **Deep**

- 9. Oral Commissurer / Smile Lines, Essederm **Deep**

- 12. Chin Augmentation, Essederm **Deep**







# Essederm<sup>®</sup>

## Subline

### **Essederm<sup>®</sup>** Subline

Is a Sterile restorable cross-linked pyrogen free hyaluronic acid gel of non-animal origin which is used for: deep skin deformations and depressions, increasing volume and contours of the face (chin, cheek bones), rhinoplasty and scar correction

- \* 1.0 ml cross link hyaluronic acid
- \* 26G disposable glass syringe
- \* It is sterile pyrogen free, colorless, isotonic gels, transparent, odorless, viscous, no particle and 100% none animal base
- \* Cross linked NaHA content 26 to 28 mg per ml
- \* Not cross linked NaHA content .8 to 1.2 mg per ml
- \* Cross linking grade: 70 to 90 %
- \* Bacterial endotoxin: < 20 EU per implant
- \* Volume: 1.01 – 1.16 g
- \* Storage and condition: 2 to 25 C (35 to 77 F)

**Essederm<sup>®</sup>** Subline  
Family of products



**Essederm®** Subline

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- 4. Augmentation of Cheekbones, Essederm Subline
- 5. Cheek Augmentation / Cheek Wrinkles, Essederm Subline
- 6. Nasolabial Folds, Essederm Subline

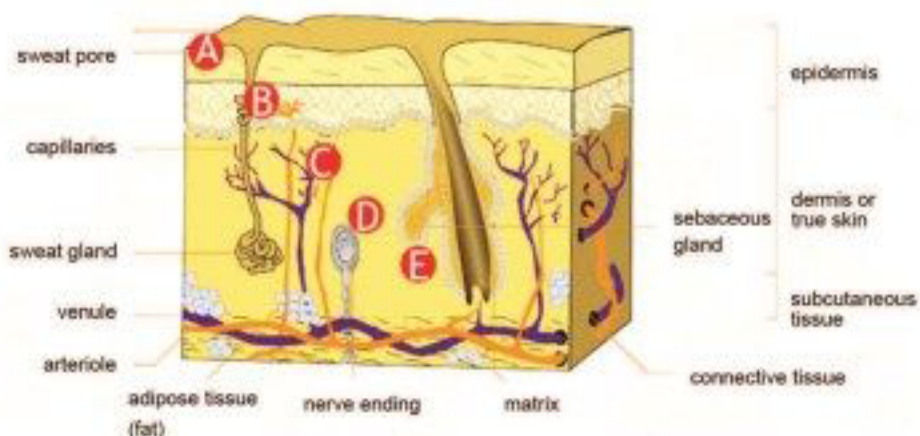
- 12. Chin Augmentation, Essederm Subline





# Essederm®

Family of products



The highest concentration of cross link  
70%-90% (Up to 4 times higher than others)  
Each package contains 2 x 1.0 ml syringes

	Concentration	Needle size	Indications	Skin level Injection Area
<b>Essederm</b> <b>Thin</b>	6 mg/ml	30 G	Superficial Wrinkles Crow's feet Red part of the lips Perioral lines	Superficial Dermis A
<b>Essederm</b> <b>Medium</b>	12 mg/ml	27 G	Medium and Deep Wrinkles In all areas Lip contours	Middle and Deep Dermis B & C
<b>Essederm</b> <b>Deep</b>	18 mg/ml	27 G	Deep Wrinkles Contour of the face Volume creation	Deep Dermis or Subcutis C & D
<b>Essederm</b> <b>Subline</b>	27 mg/ml	27 G	Specially Contour Of the face Very Deep Wrinkles Volume creation	Subcutis and Epiperiostal E
Injection technique based on the indications: Retrotracing, Criss Cross, Multiple Point and Fan Technique				





1. Worry Lines, Essederm **Thin, Medium**
2. Glabellar Lines, Essederm **Thin, Medium**
3. Periorbital Lines, Essederm **Thin**
4. Augmentation of Chickbones, Essederm **Medium, Deep, Subline**
5. Cheek Augmentation / Cheek Wrinkles, Essederm **Medium, Deep, Subline**
6. Nasolabial Folds, Essederm **Medium, Deep, Subline**
7. Perioral Lines, Essederm **Thin**
8. Vermilion Border, Essederm **Medium**
9. Oral Commissure / Smile Lines, Essederm **Medium, Deep**
10. Lip Contour, Essederm **Medium**
11. Lip Augmentation, Essederm **Thin**
12. Chin Augmentation, Essederm **Medium, Deep, Subline**





Essederm®

## What is hyaluronic acid and *Essederm* ?

Hyaluronic acid is a complex sugar of glucuronic acid & N acetyl glucosamine found in the human body cell. The concentration of hyaluronic acid in human body is about 50%.

### The function of hyaluronic acid is as follow:

- Moisture regulation
- Fibroblast activity increase
- Collagen synthesis stimulation
- Binding free radical
- Serves as diffusion medium for degradation products and nutrients

Young skin look fresh, firm and smooth due to high concentration of natural hyaluronic acid. By aging the presence of hyaluronic acid declines and body loses its elasticity, firmness, moisture and volume. Skin aging signs are wrinkles, folds, loss of volume around the face. Cross linked products are made from natural and non-genetically modified bacterial stem which is high in molecular weight. It is proven use of *Essederm* is highly effective and well-tolerated. The technology used to produce *Essederm* is the latest and it is a breakthrough in dermal fillers. It is a monophasic with CVH (Constant Visco-elastic Hyaluronic acid) technology, which make the injection much easier. *Essederm* has the highest concentration of cross link compare to other cross linked products. Cross linking with Divinylsulfon-DVS which makes the volume of cross linked concentration between 70 to 90% compare to 1 to 20%

The highly concentrated and cross-linked hyaluronic acid, which has a significantly higher viscosity compared to the initial mixture, is subsequently made into particles and stabilized, to facilitate the filling of the syringes without the need for any dilution.

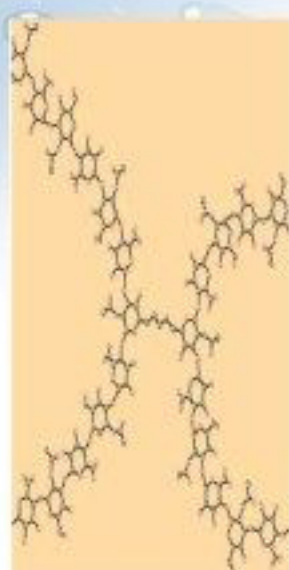
Particularisation of the strong cross linked HA-gel mass and homogenisation without dilution in order to get a high visco-elastic and easy injectable final product.

In the cross-linked sodium hyaluronate, the hydroxyl groups of the disaccharide from D-glucuronic acid and N-acetyl-D-glucosamine are cross-linked to each other by sulfonyl - to ethyl bridges. Sodium hyaluronate and divinyl sulfone form a continuous network and an aqueous gel during the reaction.

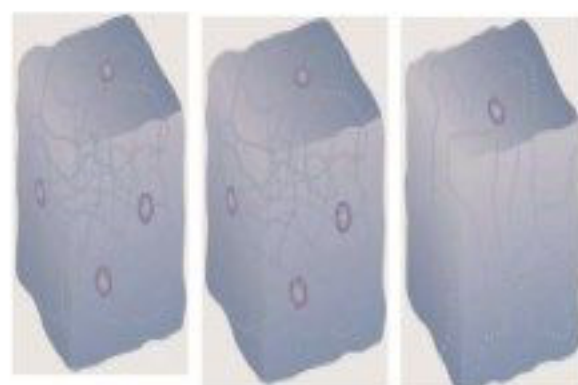
*Essederm*®



All our Esthetic products are biodegradable. However our extremely effective stabilization method makes it possible to maintain more volume with less material over a longer period of time. As *Sculptra* gel is degraded, each molecule progressively binds more water (more free water-binding sites per molecule). This is known as isovolumic degradation. In practical terms it means that the implant volume is maintained until the hyaluronic acid is almost fully degraded. Since the body has its own system for absorbing hyaluronic acid, it disappears over time without trace.



The stabilized material is a continuous 3-dimensional molecular network i.e. a true gel in any shape and form.



Initial

at 4 months

at 12 months

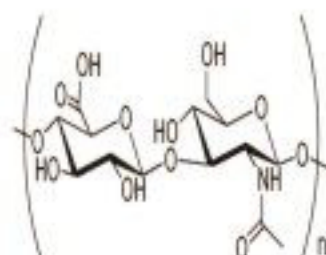
The products are isovolemically degraded because they can hold more water the less concentrated they are.

The diagram illustrates three different cross-linking processes for hyaluronic acid (HA) gels:

- Top Process:** Hyaluronic acid (70 dafang) undergoes a standard cross-linking process with BDE. The resulting gel has a cross-linking grade between 1% to 20%. The final product preparation involves concentration between 13.5 and 26 mg/ml, packaging in 1 x 0.6 ml or 2 x 0.3 ml syringes, and stabilization with calcium chloride.
- Middle Process:** Hyaluronic acid (70 dafang) undergoes a standard cross-linking process with BDE, DMS, and DEO. The resulting gel has a cross-linking grade between 1% to 20%. The final product preparation involves concentration between 20 to 30 mg/ml, packaging in 1 x 0.6 ml or 2 x 0.3 ml syringes, and stabilization with calcium chloride.
- Bottom Process:** Hyaluronic acid (70 dafang) undergoes a standard cross-linking process with BDE. The resulting gel has a cross-linking grade between 1% to 20%. The final product preparation involves concentration between 13.5 and 26 mg/ml, packaging in 1 x 0.6 ml or 2 x 0.3 ml syringes, and stabilization with calcium chloride.

Why *Essederm* is so different and better?

- ▢ 4 times more cross linked as other fillers
- ▢ *Evolve* is 100% cross-linked hyaluronic acid is the first and only soft-tissue filler with this characteristic
- ▢ From 6 mg/ml to 27 mg/ml cross linking is the specification of the "density" of the final cross-linked hyaluronic acid
- ▢ No solvent, no anesthetics nor preservatives added
- ▢ Excellent volume effect without overcorrection
- ▢ Natural aesthetic results
- ▢ Easy to inject without pre-testing with 26/27/29/30G needles
- ▢ Less re-injections needed to continue the clinical results
- ▢ Storable at room temperature





#### **Essederm performance:**

The *Essederm* products are easy to apply, accompanied by very mild pain, very safe and effective means to provide the skin with volume and improve contour irregularities associated with age. The follow-up after 9-12 months shows the long durability of the *Essederm* products.

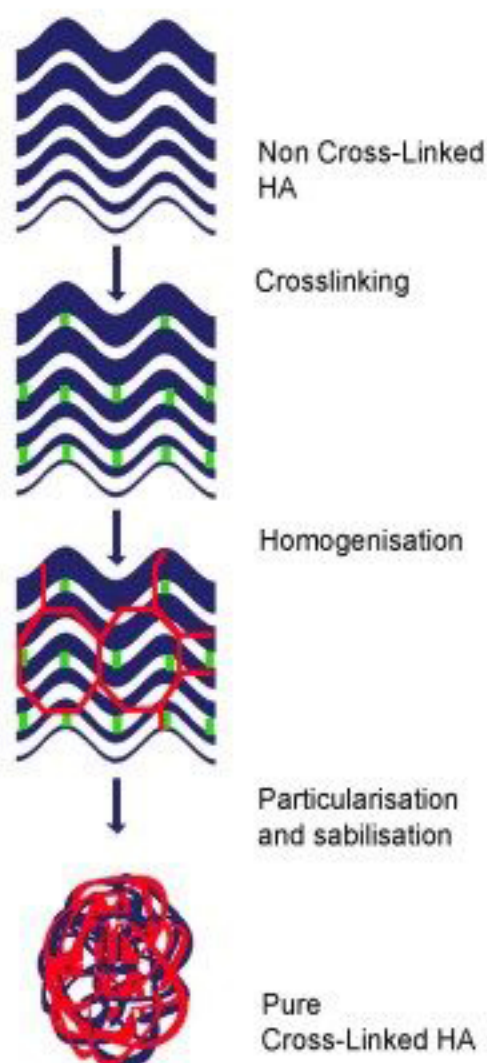
*Essederm* filler must be used for skin, according to the level of injection and the quantity is used.

The application is easy to perform & it is pleasant to the patient. Small number of patient have reported immediate reaction and medium term side effect as redness, swelling and hardening which faded away within about 1-3 days. Swelling which was resolved within 8 to 14 days.

#### **New generation of cross link hyaluronic acid filler:**

*Essederm* family of products is the newest dermal filler which is the first and only soft-tissue filler made of highly cross-linked and pure hyaluronic acid. With this excellent innovation in the manufacturing stage, *Essederm* product line combines excellent viscoelastic properties which made it possible for easy injection and allows an exceptional long duration in the skin.

#### **Essederm product line manufacturing process:**



*Essederm* contains Hyaluronic acid products which are obtained by biofermentation. There is no need for preliminary cutaneous test because it is non-animal origin. It is important to note that *Essederm* family of products contains neither anesthetics nor preservatives. The optimal concentration and overall high degree of cross linking is unique characteristics of *Essederm*.

#### **Essederm product line with long lasting results:**

Due to a new manufacturing method resulting in highly cross-linked /highly concentrated hyaluronic acid with a high molecular weight that can resist degradation better with time. This characteristic allows not only to obtain optimal volume effect with less quantity but also slows down the degradation process. This unique characteristic, results in avoiding repeated and short time injections (which could be possible risks of complications) are no longer necessary.

#### **Safe and effective:**

*Essederm* is a new generation of dermal filler, which sets higher standard in the market of cross link hyaluronic acid.

ReCosmo Inc, with the technology used to manufacture *Essederm* family of products based on research and development of the product is enjoying a great success. The *Essederm* family of products manufactures under strict quality controls to meet and surpass international standards.

#### **Essederm with its unique long lasting characteristics:**

Hyaluronic acid (glycosaminoglycane) has the characteristic to adopt much stretched conformations, which can create volume much greater than its mass. With its strong density of negative charges attracts a cloud of cations, like  $\text{Na}^+$  causing the absorption of great quantities of water molecules in the matrix, which creates an osmotic pressure, or turgescence, which makes it possible for the matrix to resist compressive forces.

*Essederm* is a nanotechnology that allows higher encapsulation of the active ingredients in a smaller molecule; this allows deeper penetration in the skin and more effective results.

As a result the degradation process is slowed considerably because *Essederm* has a high molecular weight and highly cross-linked. With its precisely adjusted concentration repeated and short time injections (which could be possible risks of complications) are no longer necessary.

**Essederm®**



# FAQ

## How long the treatment last?

The high degree of cross-linking supports a slower degradation of *Essederm* products in the tissue therefore *Essederm* products persist at least 6 to 12 months. The durability in the skin varies according to skin type, age and the way of life of the patient as well as treated area and injection technique. It can be necessary to renew the treatment partially in order to optimize the results and durability of the correction.

## Who should not use Essederm?

*Essederm* products should not be used on pregnant woman or breast feeding, patients presenting an auto-immune disease, antecedents of allergy or over-sensitiveness to the hyaluronic acid, or an immune-therapeutic treatment also *Essederm* products should not be injected into inflammatory and/or infectious skin (acne, herpes, impetigo...), a tendency to develop hypertrophic scars.

It should not be used in conjunction with any laser treatment, chemical peeling or dermabrasion.

A prior consultation of the patient is necessary to know the medical history, especially aesthetic treatments (like prior injections) and to determine if *Essederm* products are suitable. For more information please refer to the packaging insert of *Essederm* products.

## Are there any adverse effects?

As with all skin fillers swelling and/or redness, with or without associated pain, may occur after the injection. These generally disappear within a few hours, days or in some cases within a week. Some rare cases of necrosis, abscess, granuloma or of over-sensitivity were described in the scientific literature after injections of hyaluronic acid.

Continuation of these reactions or appearance of any other side effects must be reported to the practitioner as soon as possible in order to resolve it by appropriate treatment. The distributor should also be informed about this incident. Before treatment, please inform your patient about the potential side effects related to this injectable implant.

**Essederm®**  
Cross linked Hyaluronic Acid

Before



After

