



CHARACTERISTICS OF THE PRODUCTS

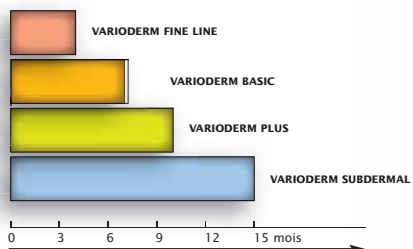
Concentration of Hyaluronic acid	12 mg/ml Hyaluronic acid highly crosslinked
Indications	Average to deep wrinkles, lip contour
Estimated duration*	minimum 7 months
Needle Size	27G
Skin level	Average to deep dermis 
Packaging	- Two syringes 2 x 1.0 ml - Two tracking labels - Two needles
Technique of injection	Linear threading, serial puncture, or a combination of both
Storage	temperature between +2°C et +25°C
Expiry Date	2 years



VARIODERM® is intended to be used by a medical professional trained in injection technique of soft tissue fillers. The information contained in this brochure is not complete and describes the product only in general way. For more information, please refer to the packaging insert .

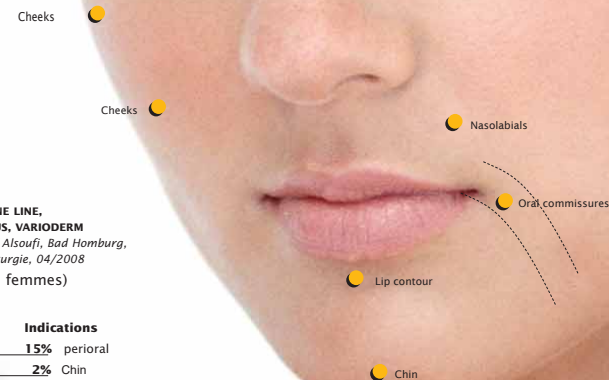
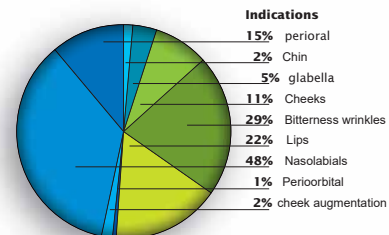
Before performing the treatment, inform your patients about the composition, characteristics, precautions for use, indications and contra-indications, incompatibilities and potential adverse effects of the implant, as specified in the packaging insert.

Duration in months*



*Estimated duration depends of severals factors like the skin type, quantity injected and the area to be treated.

Clinical Study – VARIODERM FINE LINE, VARIODERM BASIC, VARIODERM PLUS, VARIODERM SUBDERMAL Courtesy of Doctor Aref Alsoufi, Bad Hamburg, Germany Published in *Plastische Chirurgie*, 04/2008
82 patients (13 hommes, 69 femmes)
Age: 26 - 68 ans



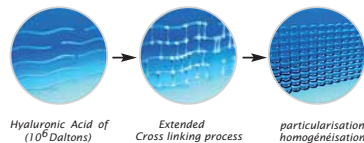
*A new generation of
Hyaluronic acid*

Security and performance

The Hylauronic Acid the most crosslinked in the market

The previous manufacturing methods generate hyaluronic acids of various qualities: more or less diluted monophasic solutions or suspension of particles. However, the traditional processes for obtaining hyaluronic acid do not achieve the optimal durability after injection in the soft tissue. This is why Adoderm GmbH has chosen to develop a new generation of hyaluronic acid with longer durability in the soft tissue

Manufactured with « Monophasic Particle Technology » (MPT)



VARIODERM® is a soft-tissue filler made of cross-linked and particularised hyaluronic acid.

Purification

Hyaluronic acid contained in VARIODERM® products is obtained by bio-fermentation. After extended cross linking process the obtained gel is purified.

Particularisation et homogénéisation

The highly concentrated and cross linked hyaluronic acid, which has a significantly higher viscosity compared to the initial mixture, is subsequently formed into particles and stabilized, without need of any dilution. This method is described as the innovative "Monophasic Particle Technology" (MPT)

Sterilisation and Final Packaging

After filling, glass syringes are sterilised and packaged into blister containers. Then, syringes, packaging insert, traceability labels and needles are enclosed into the box.

Test and Final Release

Before release, all tests (sterilisation, bacterial endotoxin, PH-value, etc.) are carried out according to European Pharmacopeia and international standards.

Comparison of durability with other HA-fillers to VARIODERM

Comparative kinetic study demonstrates the advantage of VARIODERM: up to twice more volume is observed at the same time after only one injection

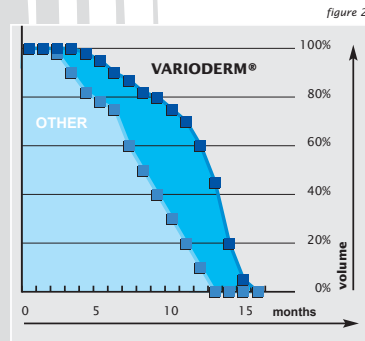


figure 2

PHYSICAL PROPERTIES OF VARIODERM® FILLERS

HA dermal fillers available on the market differ in properties such as elasticity, viscosity, and extrusion force. These physical properties determine their final clinical performance. Elasticity, viscosity and extrusion force are directly proportional to concentration, degree of cross-linking and particle size of the HA dermal filler.

A better knowledge of the physical properties of dermal fillers can therefore be very useful for physicians in choosing the appropriate HA dermal filler for facial contouring and/or a specific indication. The elasticity and viscosity of HA fillers are directly proportional to their volumizing and lifting capabilities of soft tissue. The physical properties of a hydrogel (e.g. HA dermal fillers) are described using a variety of rheological terms. The elastic modulus G' is proportional to the extent of the elastic component of the hydrogel and the viscous modulus G'' is proportional to the extent of the viscous component of the hydrogel

Figure 3 shows the rheological properties of VARIODERM® fillers. VARIODERM® fillers with greater elastic modulus G' and viscous modulus G'' have better effect and a longer duration time in the soft tissue.

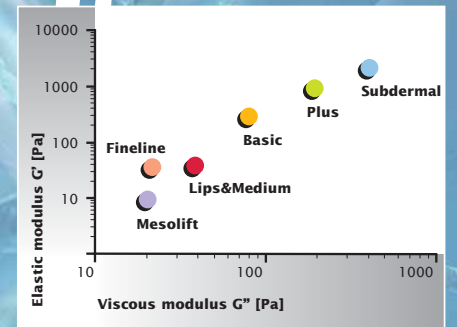


figure 3

The extrusion force of HA dermal fillers is clinically relevant, because the physician must inject the HA dermal filler through a thin needle into soft tissue. The extrusion force of prefilled syringes can be determined by means of a testing device according to DIN EN ISO 7886-1 (Annex G: Determination of forces required to operate the plunger).

Figure 4 shows significantly low force and homogeneous extrusion. The measurements of the extrusion force were performed with a 27G needle.

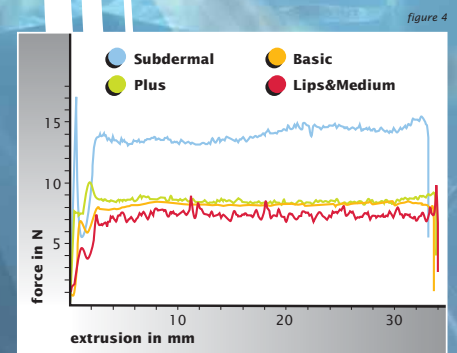


figure 4

VARIODERM® fillers have considerably better visco-elastic properties and lower extrusion forces than several on the market available HA dermal fillers. This is mainly due to the innovative monophasic particle technology (MPT) used in the production process for the VARIODERM® fillers allow for better clinical results.