



WWW.GSDISTRIBUTOR.COM

Replengen™

Hyaluronic Acid Dermal Filler

리플랜젠™ 히알루론산 더말 필러

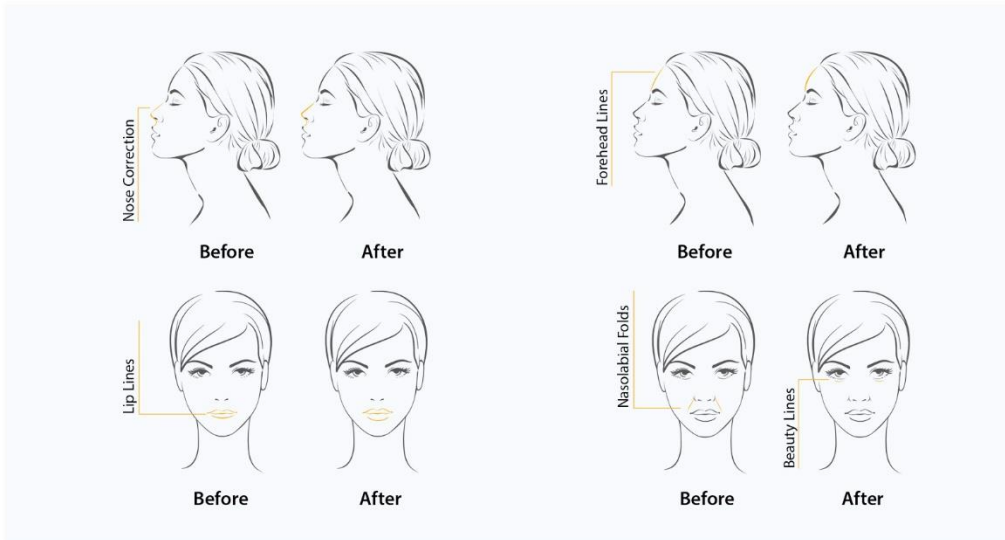


GS Distribuidor

1. HA Filler?

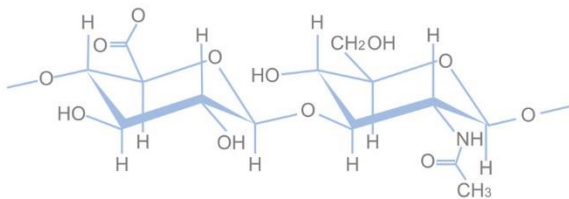
Hyaluronic Acid Filler

- Hyaluronic acid filler is syringe-type medical device injected into the body and used to restore the volume of face.
- It is slowly decomposed and remains about 6 ~ 12 months after filling in the depressions of skin unlike Botox.
- Dermal fillers are commonly used in nasolabial and beauty lines as well as in wrinkles by repeated facial expressions.



Hyaluronic Acid

- Hyaluronic acid (HA), a naturally occurring linear polysaccharide is composed of repeating disaccharide units of D-Glucuronic acid and N-acetyl-D-glucosamine.
- HA help maintain joint mobility, skin elasticity and excellent moisturizing effect.
- In addition, it is not only harmless to human body but no side effect.



2. Replengen™ Product Features

Excellent Persistence

- HBCT(Hexagonal Block Crosslinking Technology) application
- Delay biodegradable of filler in body
- Improved filler duration

PrecisionProcess

- MGIT (Micro Grinding Irregular Technology) Method
- Constant extrusion force
- Soft injection technique
- Stable procedure

Excellent Persistence

Precision Process

High Quality

High Safety



High Quality

- New manufacturing equipment & analysis equipment
- Strict quality control and assurance system (GMP, ISO)
- Anti-wrinkle and volume maximizing effect

High Safety

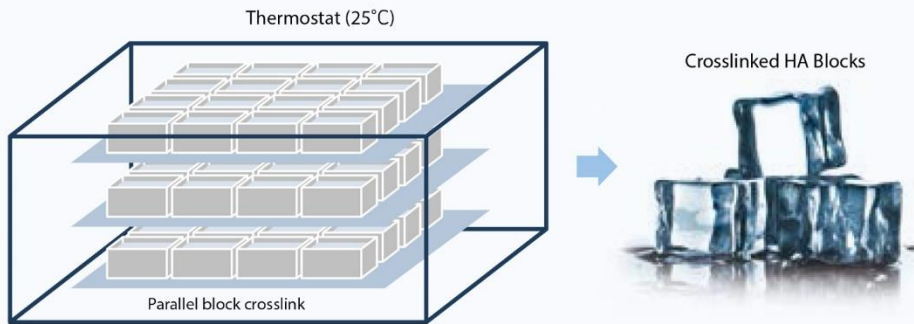
- Dialysis purification process for 2 weeks/twice
- Perfect removal of harmful substances
- Complete biosafety test

3. Differentiation of Replengen™

Precision porous micro particle structure with unique characteristics of Replengen™

Replengen™ has a compact hexagonal structure using HBCT (Hexagonal Block Crosslinking Technology) developed by Reanzen co., Ltd. which delays the decomposition rate in the body and improved the duration.

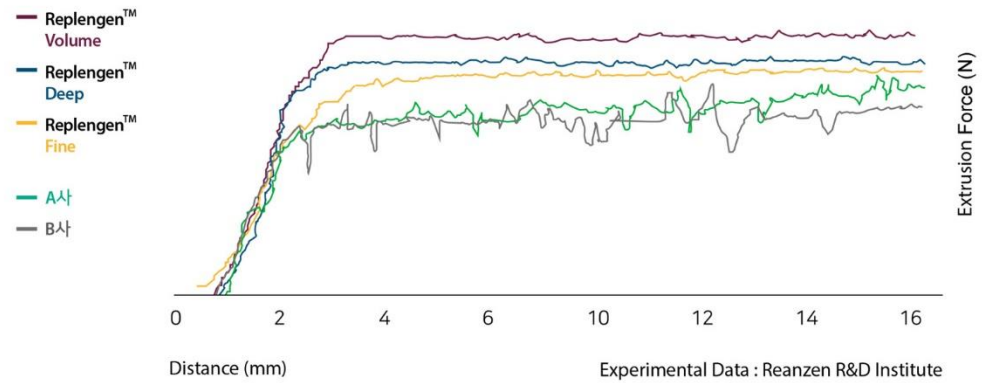
HBCT (Hexagonal Block Crosslinking Technology)



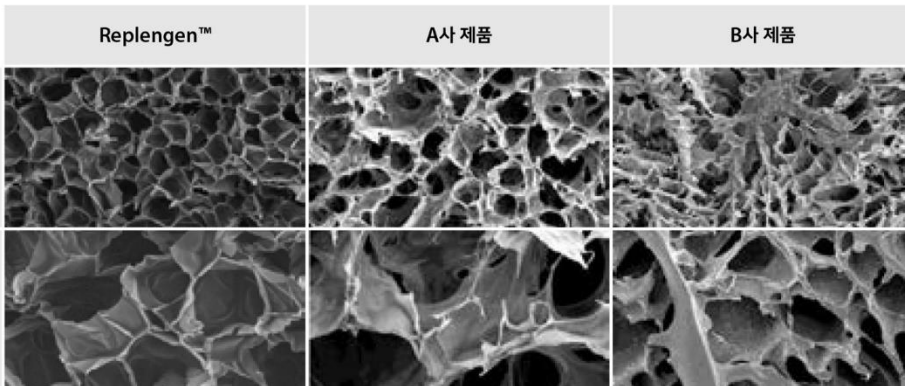
Fine-regulated mono-phasic filler particles for precise treatment

Replengen™ has soft injection and stable treatment because of fine-regulated gel by Reanzen's MIGT (Micro Irregular Grinding Technology)

Deviation of Extrusion Force



구분	Replengen™ Volume	A사 제품	B사 제품
HA gel conc.	24 mg/mL	24 mg/ml	20 mg/ml
G' modulus (저장탄성률)	260 ~ 300 Pa	113.4 Pa	316.7 Pa
G'' modulus (손실탄성률)	23.7 Pa	22.7 Pa	61.1 Pa
% Elasticity	83.4 %	83.3 %	84.1 %
Needle size	25 G	27 G	30 G



4. Product type of Replengen™

Replengen™ Fine With Lidocaine

Used to treat shallow wrinkles such as eye wrinkles, neck wrinkles and fine wrinkles.

Replengen™ Deep With Lidocaine

Used to treat moderate and deep wrinkles such as nasolabial fold, enlargement of the face, chin and lips.

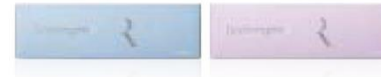
Replengen™ Volume With Lidocaine

Excellent for creating and maintaining structures because of high viscoelasticity and used to improve deep wrinkles and facial contours.

Replengen™ Implant S With Lidocaine

It is used for improving deep wrinkles such as nasolabial fold, and enlargement procedure of face, chin, lips and improve the volume (Contours) of the body (Breast, Buttock, Penis etc) as well

Product Name	Replengen™ Fine With Lidocaine	Replengen™ Deep With Lidocaine	Replengen™ Volume With Lidocaine	Replengen™ Implant S With Lidocaine
Type	Monophasic			
Crosslinked HA	24 mg/mL			
Lidocaine HCl	3 mg/mL			
Viscoelasticity	60 ~ 100 Pa	160 ~ 200 Pa	260 ~ 300 Pa	260~360 Pa
Extrusion force	10 ~ 25 N			
Needle size	30 G	27 G	25 G	
		T.S.K Premium Needle (Made in Japan)		
Volume	1.1 mL			
Duration	6 ~ 12 months	12 ~ 18 months		
Crosslinking agent	BDDE (1,4-Butanediol Diglycidyl Ether)			
Injection area	Shallow wrinkles	Deep wrinkles	Facial contouring	Depressed areas
Injection depth	Dermis	subcutaneous	Deep subcutaneous	
Packing (Carton)	1 Syringe, 2 Needle	1 Syringe, 1 Needle, 1 Cannula		



Replengen™ 20 & Replengen™ 20 Plus With Lidocaine

Used to improve the volume (contours) of the body (Breast, Buttock etc.)



Replengen™ 40 & Replengen™ 40 Plus With Lidocaine

Used to improve the body's deep wrinkles and body contouring.

Product Name	Replengen™ 20	Replengen™ 20 Plus With Lidocaine	Replengen™ 40	Replengen™ 40 Plus With Lidocaine
Gel type	Monophasic			
Crosslinked HA	20 mg/mL	24 mg/mL	20 mg/mL	24 mg/mL
Lidocaine HCl	-	3 mg/mL	-	3 mg/mL
Volume	10.0 mL			
Viscoelasticity	260 ~ 320 Pa	260 ~ 300 Pa	380 ~ 450 Pa	380 ~ 420 Pa
Volume	10.0 mL			
Duration	12 ~ 18 months			
Crosslinking agent	BDDE (1,4-Butanediol Diglycidyl Ether)			
Injection area	Body contouring			
Injection depth	Deep subcutaneous			
Packing (Carton)	1 Syringe			

Replengen™ Vital With Lidocaine



Product Name	Replengen™ Vital With Lidocaine
Gel type	Monophasic
Crosslinked HA	20 mg/mL
Lidocaine HCl	3 mg/mL
Viscoelasticity	10 ~ 30 Pa
Volume	2.5 mL
Packing	2 syringe/carton
Duration	0 ~ 6 months
Crosslinking agent	BDDE (1,4-Butanediol Diglycidyl Ether)
Injection area	Shallow wrinkles
Injection depth	Epidermis
Storage	2 ~ 25 °C
Expiry date	24 months

Replengen™ Smart Portable Injector



제품특징

- 3 Types derma solution selectable
- 1 ml ~ 3 ml Syringe applicable
- 9 - Pin exclusivemulti needle for single-use
- User friendly design

5. Replengen™ specification

Certificate of Analysis

Test item (with Lidocaine)	Criteria			Result		
	1.1 mL	10.0 mL	Vital	1.1 mL	10.0 mL	Vital
Appearance	Colorless transparent, Viscous liquid with no foreign material			Conformity		
Actual capacity	More than 1.1 mL	More than 10.0 mL	More than 2.5 mL	1.1 mL	10.0 mL	2.5 mL
pH	6.8 ~ 7.5			7.01		
BDDE residue	< 2.0 ppm			0 ppm		
Heavy metal	< 10.0 ppm			0 ppm		
Osmotic pressure	200 ~ 400 mOsm/kg			Pass		
Extrusion force	10 ~ 25 N	60 N	10 ~ 25 N	Pass		
Endotoxin	< 12.5 EU/mL			< 0.05 EU/mL		
Sterility test	sterile			Conformity		
Assay	Sodium Hyaluronate		Sodium Hyaluronate 90.0 ~ 110.0 %	101.1 %		
	Lidocaine HCl		Lidocaine HCl 0.27 ~ 0.33 %	0.31 %		
Viscoelasticity	60 ~ 300 Pa	260 ~ 450 Pa	10 ~ 30 Pa	Pass		

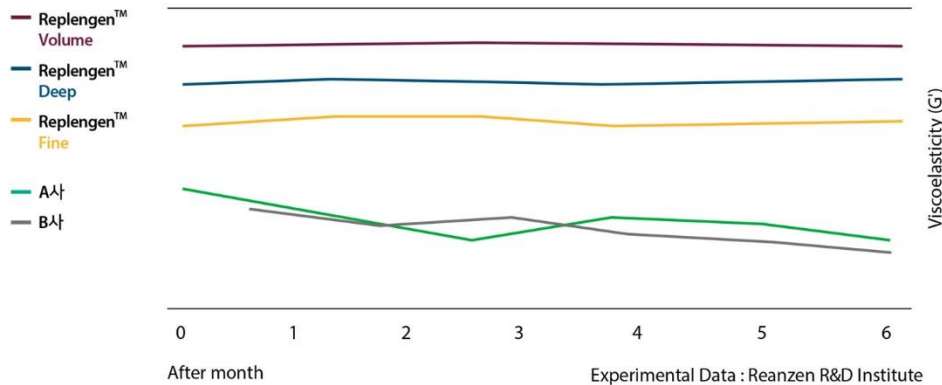
Storage & Expiration date

Storage	2 ~ 25 °C
Extrusion date	24 months from the date of manufacture

High-quality filler products with excellent persistence

Replengen™ Filler with high-technology created by Reanzen's best R&D experts is top-quality filler for anti-wrinkle and skin volume recovery because able to maintain viscoelasticity for a long time to other products.

Viscoelasticity Stability



Test item	BDDE residue	Heavy metal	
Criteria	1.1 mL	< 2.0 ppm	< 10.0 ppm
	10.0 mL		
	2.5 ml		
Result	1.1 mL	0 ppm	0 ppm
	10.0 mL		
	2.5 ml		

