



Caratfill®

*Crafting timeless beauty
Radiant like a diamond*

Caratfill[®] *Fulfilling all your beauty desires*

Precise support, effortless contouring

「 Multiple choices for different treatment areas. 」

SUB-Q Forehead

Temple

DEEP

KISS Around eyes

DEEP Cheek

Nose

SUB-Q

DEEP Periorad

Lips

KISS

Chin

SUB-Q

Product Information

Cross-linked Hyaluronic Acid with LIDOCAINE

제품명	Caratfill KISS	Caratfill DEEP	Caratfill SUB-Q
HA 함량(mg/ml) 24	24mg/ml	24mg/ml	24mg/ml
LIDOCAINE	0.3%	0.3%	0.3%
Volume creating capability	◇◇◇◇◇	◇◇◇◇◇	◇◇◇
Package	1.1ml X 1 syringe	1.1ml X 1 syringe	1.1ml X 1 syringe
Recommended needle	27G Needle x 1 30G Needle x 1	27G Needle x 1 23G Cannula x 1	27G Needle x 1 23G Cannula x 1

Sterile Manufacturing Environment

- **Filler production**



Clean Room (C-grade)



Mixing



Crosslinking



Particulation



Washing



Filling



Autoclave

NSE™ 기술

Caratfill' s Exclusive NSE™
(Naturally Safe Effective)
Patent

A next-generation sodium
hyaluronate filler engineered
for high viscoelasticity and
exceptional longevity.

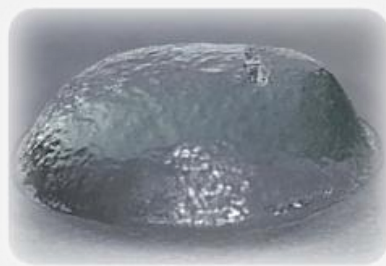
Developed under the philosophy
that safety is the highest
priority, Caratfill introduces
a new standard in hyaluronic
acid — combining advanced
performance with
uncompromising
biocompatibility.



High
viscoelasticity

Exceptional
longevity

Fulfilling
diverse
aesthetic
needs



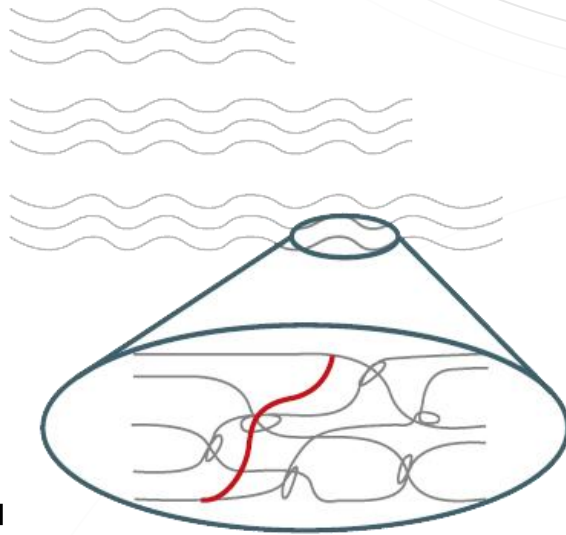
Smooth
injection

Safety

Includes
blunt-tip
cannula

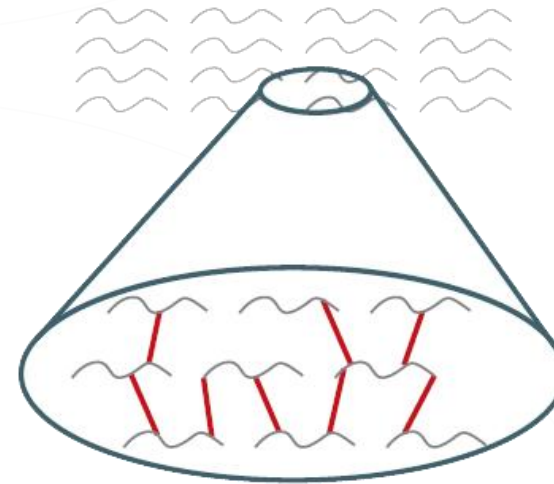
CORE TECHNOLOGY

NSE™ Technologies to natural Hyaluronic acid chain



NSE™

1. Minimizes chemical deformation to reduce potential side effects
2. Preserves the long-chain structure of hyaluronic acid to maximize longevity



Other-filler

1. Chemical deformation may lead to side effects
2. Crosslinking between short-chain HA molecules results in reduced longevity

-Although hyaluronic acid (HA) itself is a biocompatible material, safety concerns arise from the use of crosslinkers such as BDDE, which must be minimized.

-Typically, BDDE residue levels are maintained below 0.2 - 2 ppm.

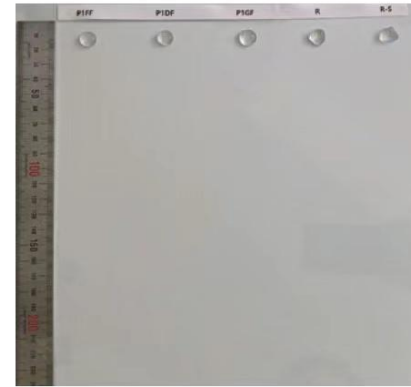
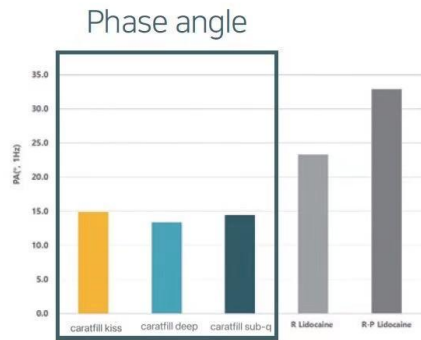
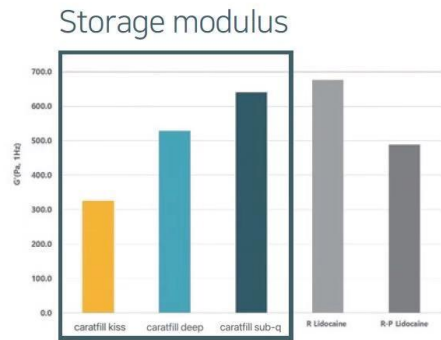
-Reducing BDDE content helps minimize the risk of adverse reactions.

-Compared to other products, Caratfill demonstrates a lower level of structural deformation, indicating a significantly lower BDDE content and improved safety profile.

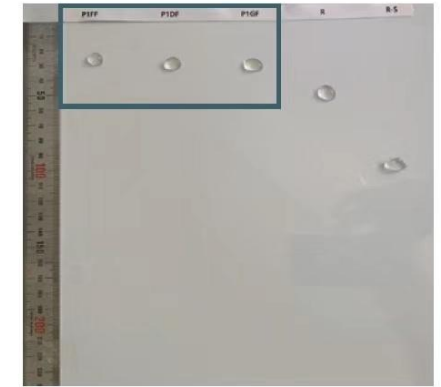
NSE™ Technologies to reduce the risks relating BDDE

		HA (mg/mL)	MOD(Degree of modification), BDDE content(mole % to HA)	Total BDDE (ppm)	Storage modulus(G') (pa, 1Hz)
Caratfill	Caratfill	24	1	121	514.1
Biphasic filler	R Product	20	1.5	176.4	524.9
	Y Product	20	2	201.6	500
Monophasic filler	E Product	24	3.25	392.1	7
	Y Product	20	4	403.2	389.7
	J Product	20	7.00	706	355.2
	N Product	20	12.25	1234.8	390
	C Product	20	14.5	1461.6	357.3

UNIQUE



0s



After 30s

Adhesion ability

Visco-Elasticity

-Caratfill' s higher storage modulus (G') and lower phase angle (°) are key physical properties contributing to superior moldability.

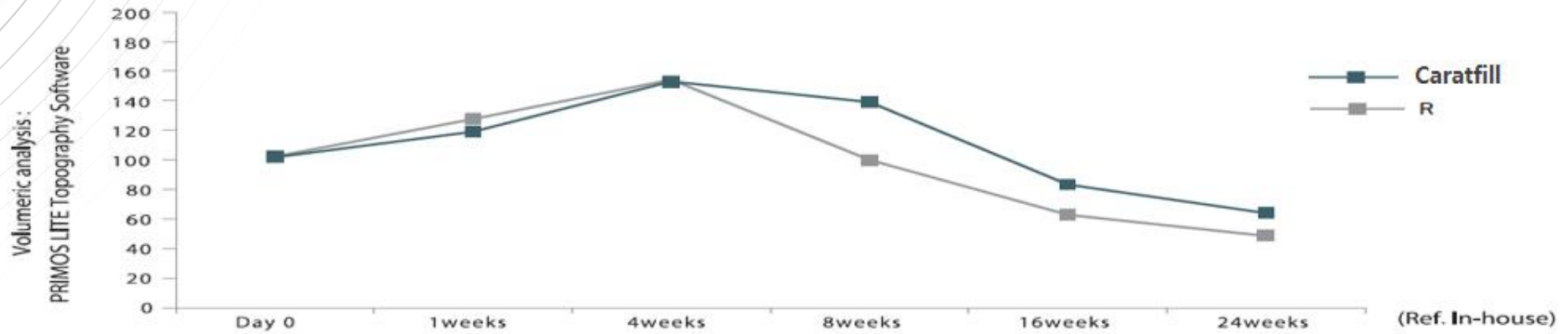
-Compared to other fillers, Caratfill exhibits a lower phase angle (°), indicating better structural integrity and shaping capability.

-When hyaluronic acid is injected into the deeper layers of the skin, displacement can occur — making strong tissue adhesion a critical factor.

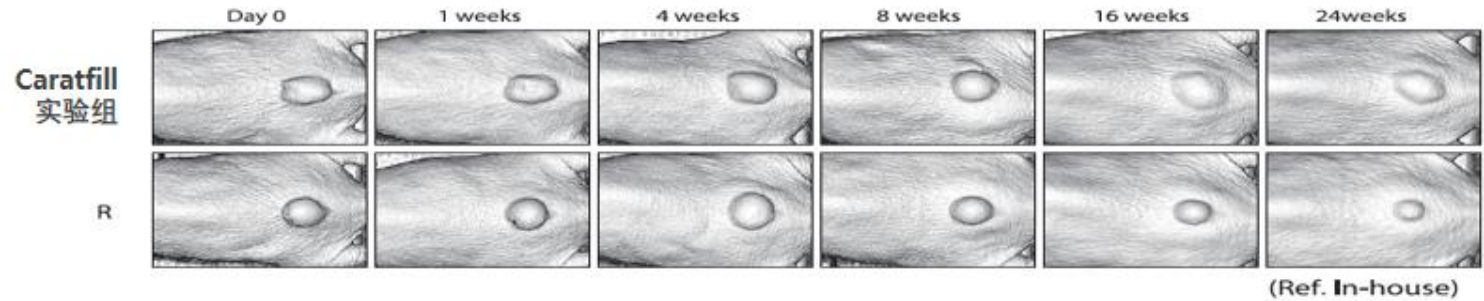
-Adhesion time testing shows that Caratfill demonstrates superior adhesion compared to other products, reducing the risk of migration and enhancing shaping stability.

UNIQUE

At both one month and two months post-injection, Caratfill demonstrated superior and more sustained shaping results compared to the control group.



BIOLOGICAL STUDY RESULTS



To evaluate the longevity of Caratfill, the product was injected into hairless mice and the injection sites were later analyzed through histological examination.

The results showed that Caratfill demonstrated significantly greater durability and more natural shaping compared to the control group.

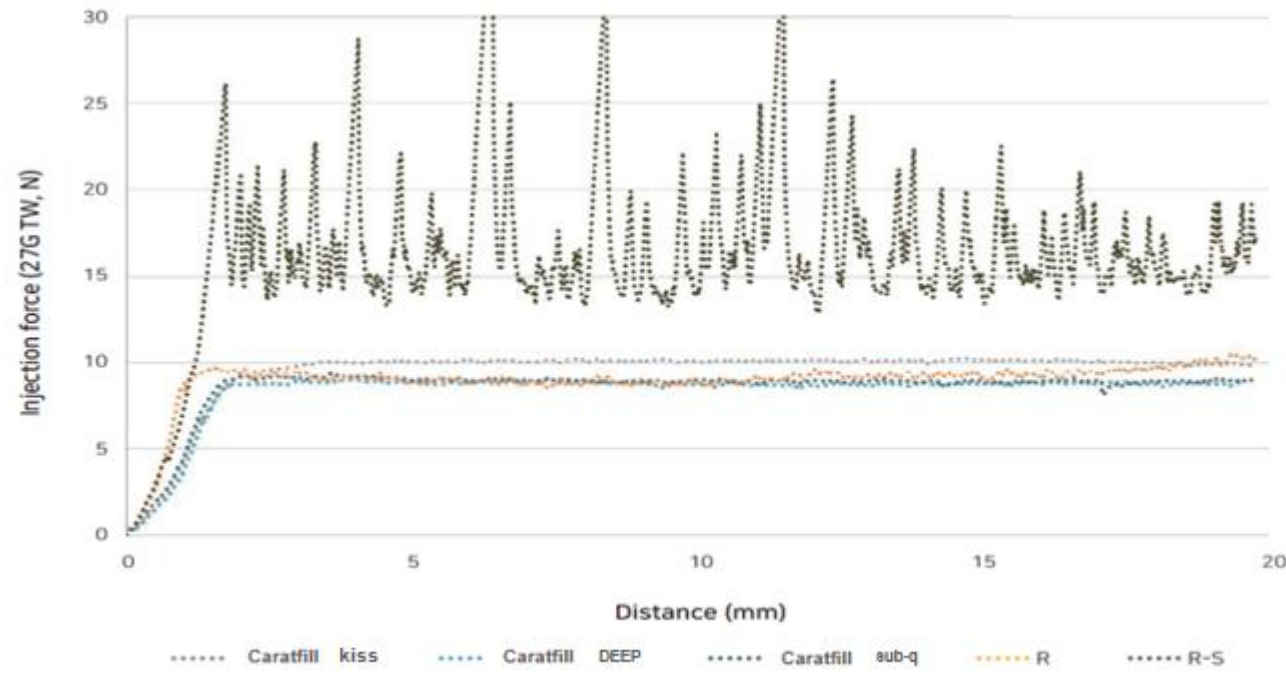
Duration

UNIQUE

● SAFETY

	Caratfill	Other Products
BDDE residue	<0.2ppm	<0.5ppm
Endotoxin Level	<0.03EU/mg	<0.5EU/mg

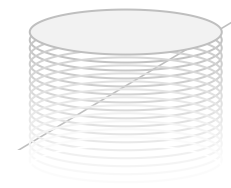
(Ref. In-house)



(Ref. In-house)

● CONVENIENCE

CLINICAL RESULTS



Clinical Comparative Study on Nasolabial Fold Improvement

Subjects: 63 participants

Method: Paired, double-blind study with 48-week observation

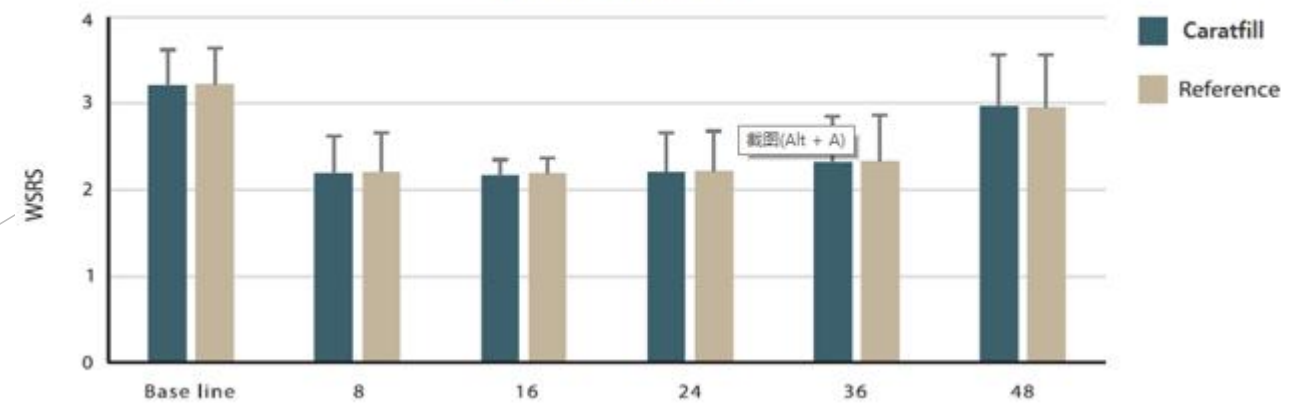
Reference: Restylane

WSRS: Wrinkle Severity Rating Scale (1 to 5)

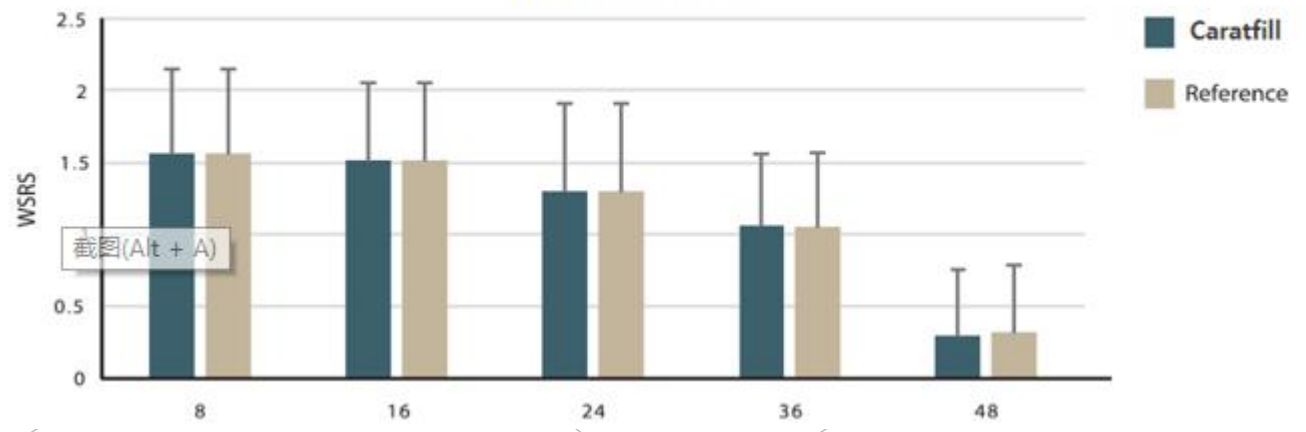
GAIS: Global Aesthetic Improvement Scale (-1 to 3)



[시험자에 의한 WSRS 평가결과]
Weeks after treatment



[시험자에 의한 GAIS 평가결과]
Weeks after treatment





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