

Care  
Creations™

# Ultra Filling Spheres™

by Beauty Creations

The ultimate generation

 **BASF**  
The Chemical Company

# Ultra Filling Spheres™ : the ultimate generation of Filling Spheres

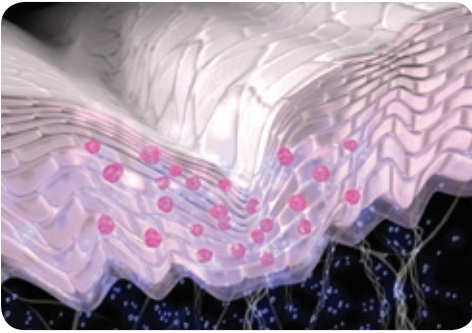
Launched a few years ago, the success of filling spheres has never wavered. Declined over the years in vegetal, marine and then hyaluronic version, Beauty Creations today unveils the 5<sup>th</sup> chapter of this advanced solution with [Ultra Filling Spheres™](#).

For this new sequel, we found inspiration in the ancient practices of Chinese medicine and discovered a plant with spectacular hygroscopic properties, [allowing us to increase the effectiveness of our already proven filling spheres.](#)

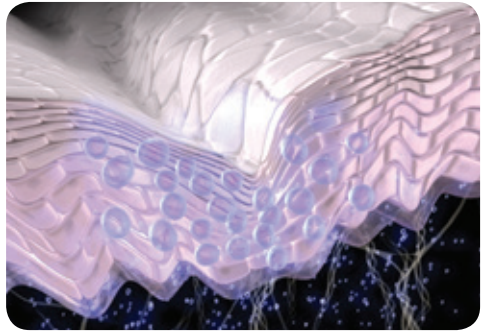


# Proprietary solution, optimized system, rapid results

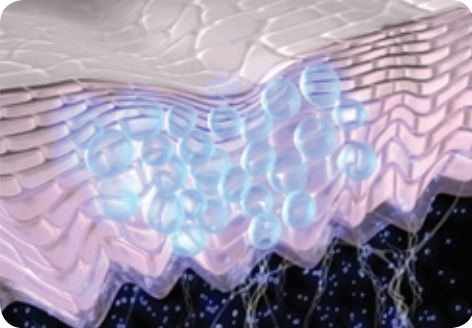
**Filling Spheres™ technology** is based on the ability of dehydrated and cross-linked spheres to penetrate the upper layers of the epidermis and to absorb the water that evaporates from the deep dermis. Thanks to their hygroscopic properties, **the volume of the spheres increases rapidly**. Thus inflated, they tighten the skin, smoothing out wrinkles and leaving an elastic skin surface with long lasting hydration.



Dehydrated Ultra Filling Spheres™ penetrating the upper layers of the epidermis.



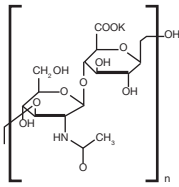
Ultra Filling Spheres™ absorbing the water from the deep dermis.



Hydrated Ultra Filling Spheres™ rapid smoothing effect.

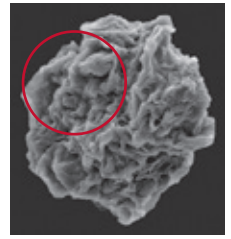
With its extensive experience in mastering this solution, **Beauty Creations** has optimized its raw materials for filling spheres and created **Ultra Filling Spheres™**.

**These new generation spheres** are composed of two biopolymers: hyaluronic acid of low molecular weight (<40 kDa) and konjac glucomannan, a polysaccharide of high molecular weight (> 200 kDa) whose cross-linking and dehydration transforms into **Ultra Filling Spheres™**.

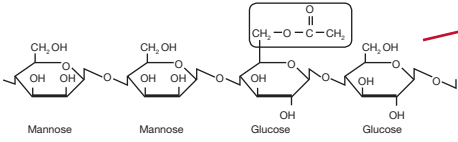


Hyaluronic Acid (< 40 kDa)

∅ 3 - 20 μm



Konjac glucomannan (> 200 kDa)



## Dual focus

### Biopolymers

- The effects of hyaluronic acid on the skin are well known. We selected a hyaluronic acid of low molecular weight for its high hygroscopy.
- Konjac glucomannan is a vegetal polysaccharide with exceptional hygroscopic properties since it is capable of absorbing up to two hundred times its weight in water.

## Konjac

### Focus on the plant

Konjac (*Amorphophallus konjac*) is a plant of the Araceae family that grows naturally in the forests of Thailand, Vietnam and southern China. It is known in traditional Chinese medicine and Asian herbology as "devil's tongue" for its detoxifying and soothing properties, and is a major ingredient in traditional cuisine. It is now widely used in slimming diets, its great capacity for absorbing water making it a very effective appetite suppressant.

## Properties

- Increased water absorption and swelling capacity
- Long-lasting moisturization
- Smoothing of fine lines and deep wrinkles

## Applications

- Anti-wrinkle treatment.
- Eye contour.
- Deep wrinkle treatment.
- Long term hydration.
- Volumizing lipsticks.



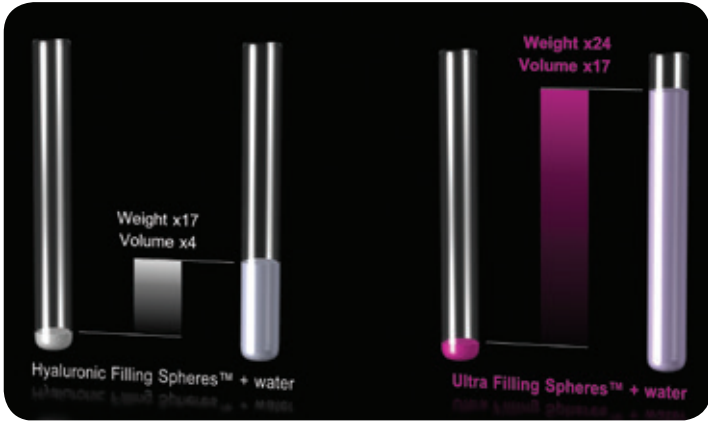


# Increased efficiency

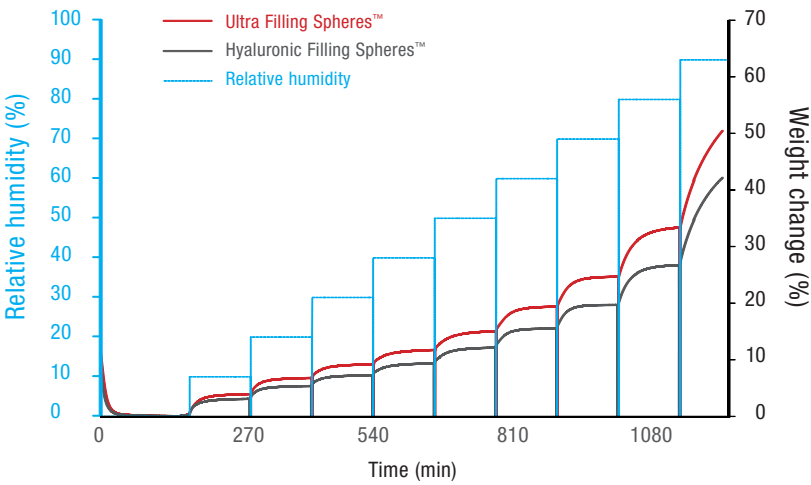
Ultra Filling Spheres™ (microspheres in dehydrated form) have a much higher capacity for water absorption and swelling than the previous generations of filling spheres.

*In vitro* results prove it.

## Water absorption capacity

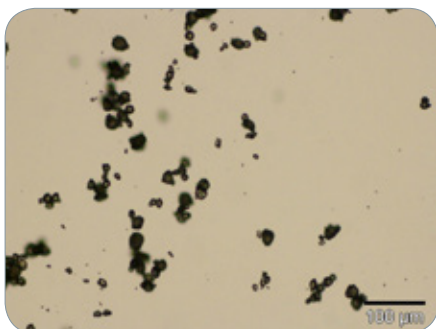


## Sorption isotherm of Ultra Filling Spheres™

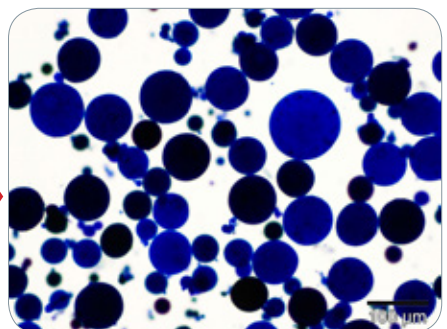


DVS (Dynamic Vapor Sorption) profile of Ultra Filling Spheres™ and Hyaluronic Filling Spheres™

**+ 20% more water retained** (compared to Hyaluronic Filling Spheres™)

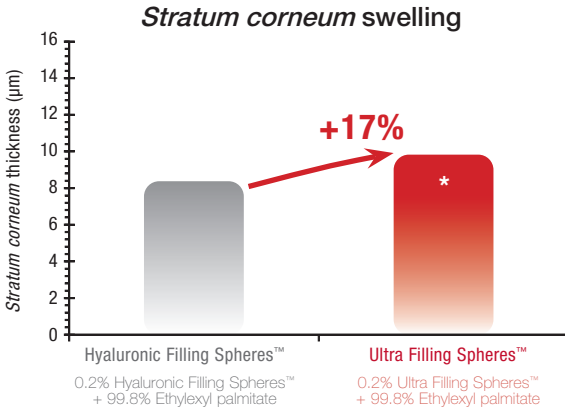


Dehydrated Ultra Filling Spheres™



Hydrated Ultra Filling Spheres™

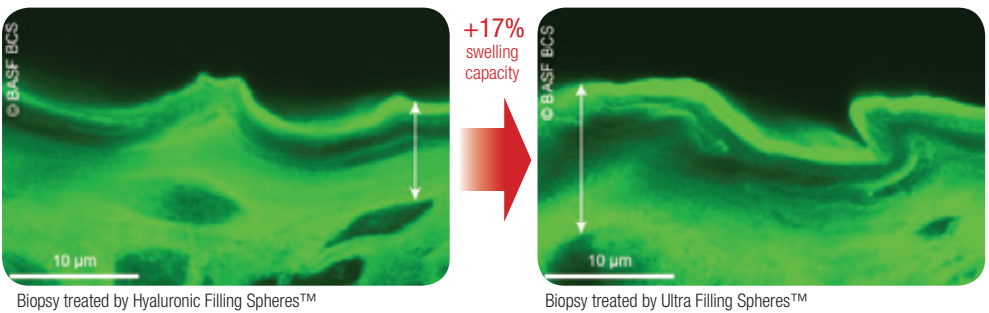
## Stratum corneum swelling (ex vivo)



\* : statistically significant compared to Hyaluronic Filling Spheres™

Ex vivo test of stratum corneum swelling capacity by the filling spheres™.  
Mean ± SD, n=10.

**Stratum corneum thickness: +17%** (compared to Hyaluronic Filling Spheres™)



Ultra Filling Spheres™, by their composition in **hyaluronic acid and konjac polysaccharides**, have a far greater capacity to absorb water and swell than the previous versions of filling spheres, **enhancing their ability to plump out deep and superficial wrinkles and to smooth the skin surface.**

# Summary

**REFERENCE** Ultra Filling Spheres™ C00487

**DESCRIPTION** Dehydrated microspheres of hyaluronic acid and konjac glucomannan, suspended in an oily medium of ethylhexyl palmitate.

**DOSE OF USE** 0.5 - 3%

## REGULATORY DATA

**INCI (US)** Ethylhexyl Palmitate, Trihydroxystearin, Sodium hyaluronate, Glucomannan

**CAS** 29806-73-3, 139-44-6, 9067-32-7, 37220-17-0

**EINECS** 249-862-1, 205-364-6, 232-678-0, 253-404-6

**China** All the raw materials comprising the INCI name of Ultra Filling Spheres™ are listed on the Inventory of Existing Cosmetic Ingredient in China (June 30 th, 2014 version), Glucomannan listed as "glycomannan"

**Preservative** None

## SPECIFICATIONS

Available upon request

## FORMULATION

Predispersion in the oily phase of the emulsion before creating the emulsion. Do not use aqueous gel or emulsions in oily phase at less than 20%.

## TOXICOLOGY

Available data upon request.

## PATENT APPLICATION

*Polymer of hyaluronate and of glucomannan.*

**Inventors** Florent Durieux ; Eric Nappi ; Isabelle Bonnet.  
FR2997406 B1 ; EP2912073 A1 (FR, IT, GB, DE, ES) ;  
CN104870479 A ; KR20150070394 A ; US2015283055 A1

**CUSTOMS CODE** 38249097

## STORAGE

Between 4 and 35°C, in its original packaging, away from moisture and light.

**SHELF LIFE** 18 months

## MANUFACTURER

BASF Beauty Care Solutions France SAS  
3, Rue de Seichamps  
54425 Pulnoy (France)



Commercial sample of Ultra Filling Spheres™ and some examples of formulas .

## **EUROPE**

### **BASF Beauty Creations**

49, avenue Georges Pompidou  
92593 Levallois-Perret Cedex  
FRANCE

Tel: +33 (0) 1.49.64.53.97

Fax: +33 (0) 1.49.64.53.85

bcs-europe@basf.com

## **AMERICAS**

### **BASF Corporation**

361 Sheep Pasture Road  
East Setauket, NY 11733  
USA

Tel: +1 (631) 380 2652

bcs-nafta@basf.com

## **JAPAN & ASIA-PACIFIC**

### **BASF Japan Ltd.**

21F Roppongi Hills Mori Tower,  
6-10-1 Roppongi, Minato-ku,  
Tokyo, 106-6121

JAPAN

Tel: +81 (0) 3-3796-9214

Fax: +81 (0) 3-3796-9299

bcs-asia@basf.com



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