

### \*\*\* Presentation of new fabric, FILAGEN & GRAPHENE \*\*\*

Hoping to inspire a new story in your valuable collection...

The Graphene and Collagen are a new material in sustainable, healthy as well as excellent function but still on the way of development for textile industry.

We'd like to give you a few sentences as below and your more beautiful copy wright would be appreciated.

#### 1. Collagen fabric- FILAGEN - globally registered brand.

The "Filagen" is a fiber-contained marine collagen, which has various functions such as skin-moisturizing, UV protect, breathability, deodorization and anti-bacterial effects.

It is regenerated from the nature component of marine collagen and is an eco-friendly sustainable material.

In the new normal era post-COVID pandemic, the awareness of environmental pollution around the world has been rising up.

Peopole are much more aware of well-being such as skin aging prevention and antibacterial material has been increasing along with the change.

Meantime, it is an absolute sustainable material-

A lot of fishes (scale, skin) are thrown away for food what have the richest and most useful collagen.

In usual, such a wastage is decayable and may affect an environmental pollution. we developed the technical process how to extract a collagen from the fish scale/skin and compounds with a viscose yarn.

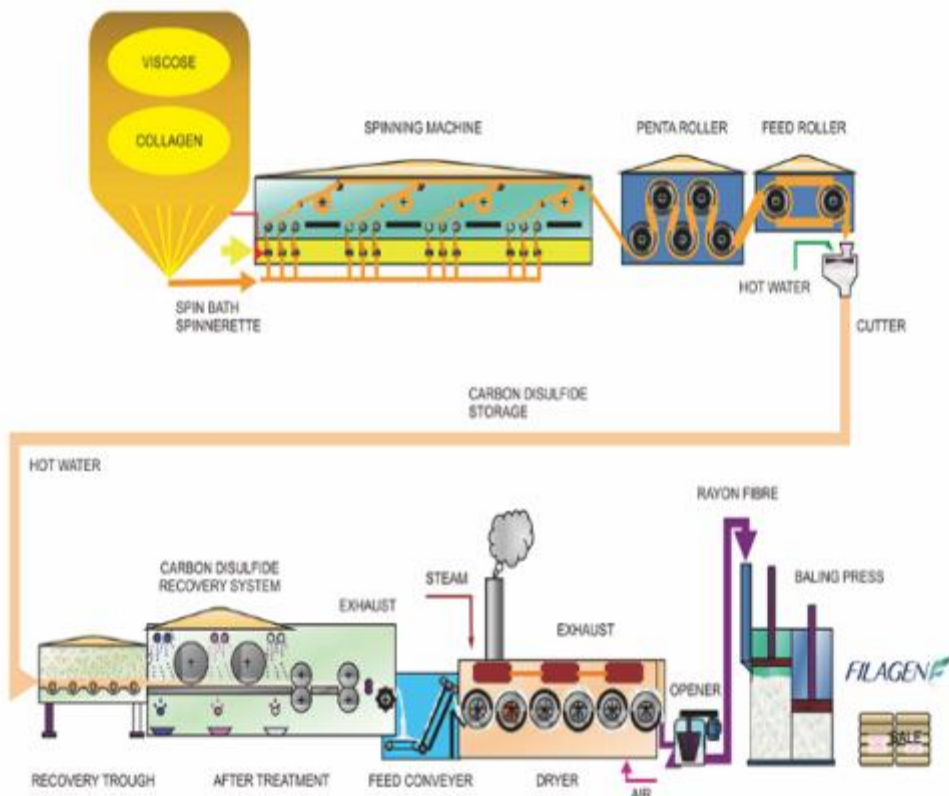
The more filagen used, the more we collect the wastage-oriented fish skin and contribute to the eco-friendly planet.

The fish collagen is not to kill a nature/fish but to rescue the environment.

Pls refer the production flow and effect of Filagen as below,



## Production flow chart





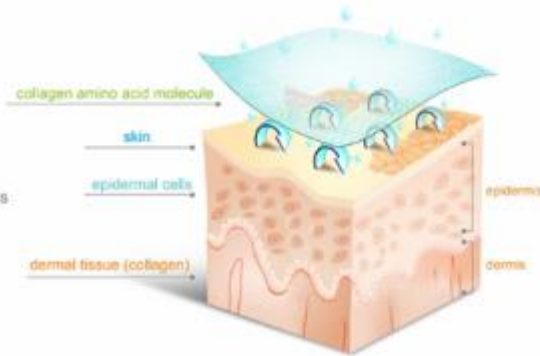
## Powerful skin moisturizing effect

Up to 13 times more moisturizing effect than cotton fabric

Marine bio-collagen fiber retains skin moisture form a natural protective film to effectively lock the skin moisture and keep the human skin moist.

### Moisturizing schematic

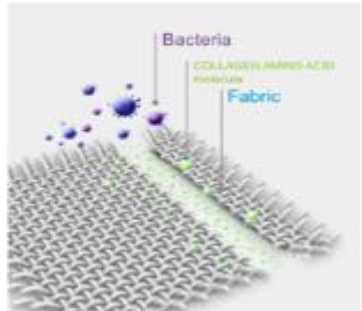
Second layer of skin to protect water loss



## NATURAL DEODORIZING AND ANTIBACTERIAL EFFECT

It has a natural deodorizing function, which can suppress the odor caused by sweating in the underarms, back and intimate places, and the function is maintained even after washing.

The nano-technology incorporates collagen amino acid molecules into the fiber yarn, giving the fabric a natural antibacterial function, especially for the private parts.

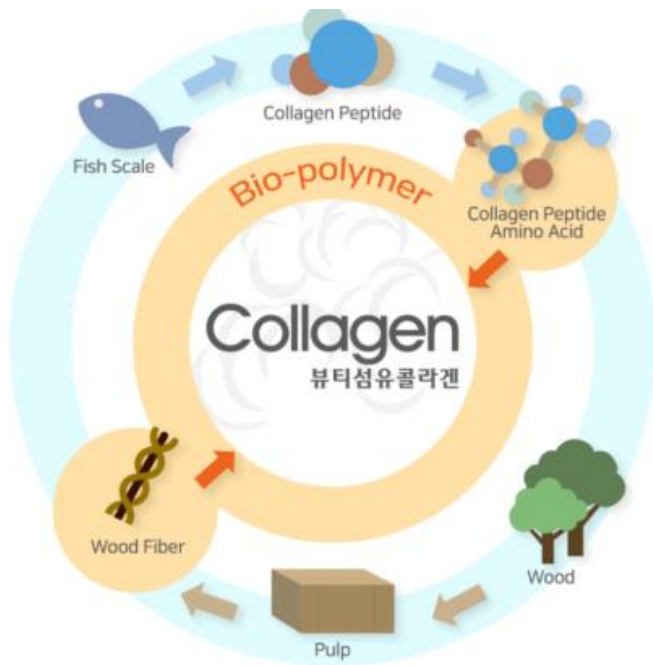


### CoreTechnology

The core technology of antibacterial deodorization is to incorporate the antibacterial deodorizing peptide amino acid molecules (abbreviated as antibacterial peptides) in collagen into the fibers and form a stable physical structure.

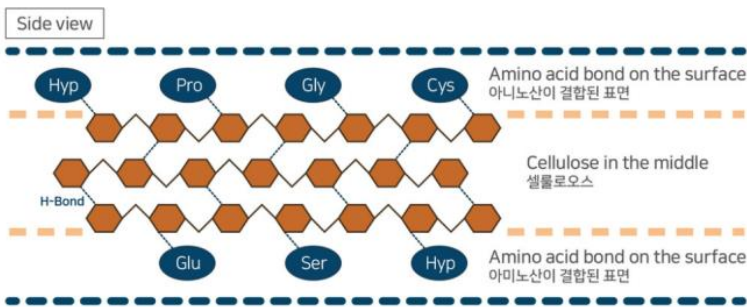
### Antibacterialdeodorizationprinciple

The antibacterial principle is that the antibacterial peptide molecules of the helical structure usually exhibit a positive charge, and the phospholipid molecules of the bacterial cell membrane usually exhibit a negative charge. When the bacteria and the antibacterial peptide are in surface contact due to electrostatic attraction, the surface of the bacterial cell membrane is short-circuited and irreversible. Damage, resulting in cytoplasm leakage, eventually leading to bacterial death.



ENJOY THE <sup>Resistant to</sup> **50+(A) uv**  
SUMMER SUNSHINE

The physical properties of collagen can separate UV-A and UV-B ultraviolet rays, and the fabric made can achieve the effect of UPF50+, effectively protecting the skin from ultraviolet rays.



" Collagen® Viscose는



## 2. Graphene fabrics-

As graphene fibers will have an antibacterial, antifungal, and antiviral function, and the far infrared ray emission and antistatic function are semi-permanent without any special processing, it could have an infinite range of applicability. In the antibacterial test, the death rate of Staphylococcus aureus and pneumococcus was 99.9 % before and after washing demonstrating how graphene fiber is highly antibacterial. In the anti-viral test, Influenza A virus was reduced by 99.85 %, and the material's UV blocking rate and far infrared emissivity were also excellent above the standard.

**PROPERTIES OF GRAPHENE**

- Bacteriostatic
- Deodorizing
- Anti-Mosquito / Anti-Mite
- Heat Dissipation / Far Infrared
- UV Absorption
- Therapeutic Benefits
- Body Thermal Regulation
- Mechanical Strength
- Washability
- Eco-Friendly

**Inherent Properties: Odor neutralizing, thermal regulation, mite repellency, washable & eco-friendly**

It is no doubt that the filagen and graphene are the new sustainable materials and have a lot of useful function in fabrics.

It is an introducing stage in fashion and would like to go further in this business together with you.



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