

*Introducing*



*Sugenro®*

*Clomax*



*High-Performance Insulation*



# *Awarded the ISPO TOP 10 accolade at Munich*



The ISPO Munich, a renowned international trade fair for outdoor and sports equipment held in Germany, stands as the most distinguished and authoritative exhibition in the global outdoor and sports gear industry. Inaugurated in 1970, with a history spanning over 50 years and more than 70 successful editions, ISPO Munich has firmly established itself as a key player in the realms of sports equipment and athletic fashion worldwide.

Sugenro® Clomax, having undergone meticulous scrutiny by the ISPO organizing committee, has emerged as a standout product among a myriad of contenders, earning the coveted Top 10 award. The exceptional insulation capabilities of Clomax can be attributed to its unique high-loft, high-resilience fiber structure. This structural design ensures optimal insulation performance and outstanding elasticity. Furthermore, the material offers a soft and luxurious feel, making it exceptionally gentle on the skin. Its inherent breathability and moisture permeability contribute to the creation of an ideal microclimate, while its moderate wind resistance and significant water resistance render it suitable for diverse applications.

# Product Features

- **Efficient Insulation:** Sugeno® Clomax offers exceptional insulation, keeping you warm in even the coldest conditions.
- **High Loftiness:** With its innovative fiber sublimation molding, the product achieves a cloud-like structure, resulting in high loftiness and excellent insulation properties.
- **Soft and Gentle Touch:** Clomax is made with soft materials that provide excellent wearing comfort, whether you're out on an adventure or going about your daily activities.
- **Environmentally Sustainable:** We prioritize environmental sustainability by using a blend of Sugeno® hollow polyester fibers and fine denier fibers, reducing our environmental footprint.
- **Water-Resistant:** This product can endure washing without compromising its insulation, ensuring long-lasting performance.
- **Lightweight Design:** Utilizing airflow filling and sublimation molding, Clomax achieves a lightweight design, making it easy to work with, evenly distributed, and exceptionally durable.



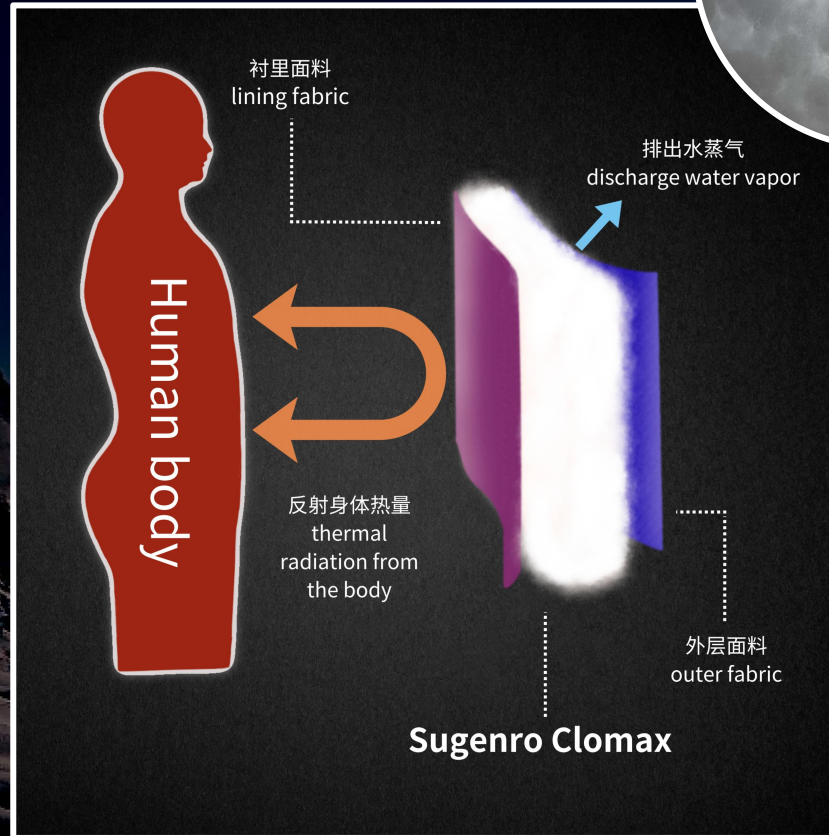
SUGENRO®



# Composition and Manufacturing Process

Sugenro® Clomax is a highly fluffy insulation material crafted from a blend of Sugeno® hollow polyester fibers and fine denier fibers.

Its unique manufacturing process involves fiber sublimation molding, which gives the product a cloud-like structure.

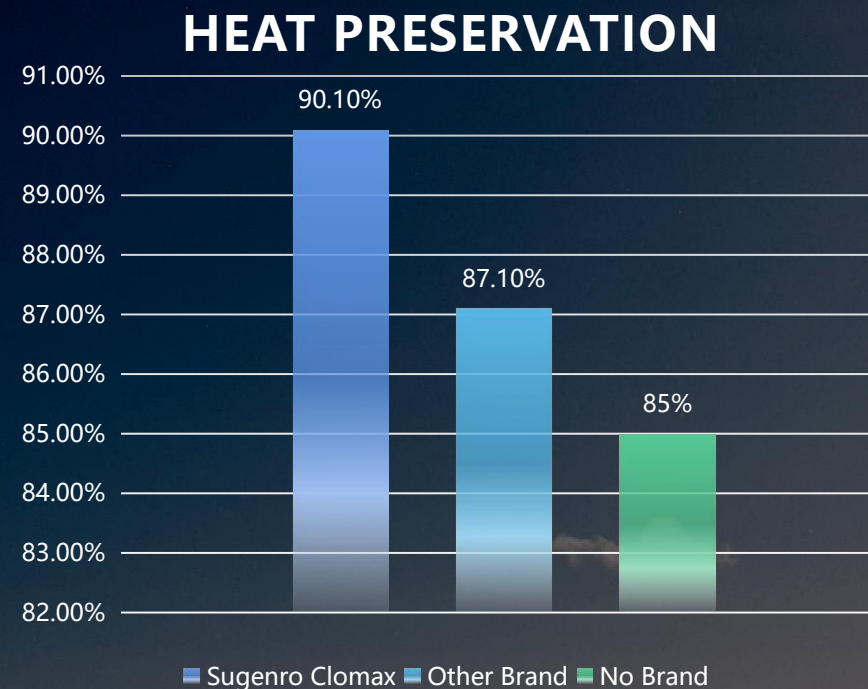
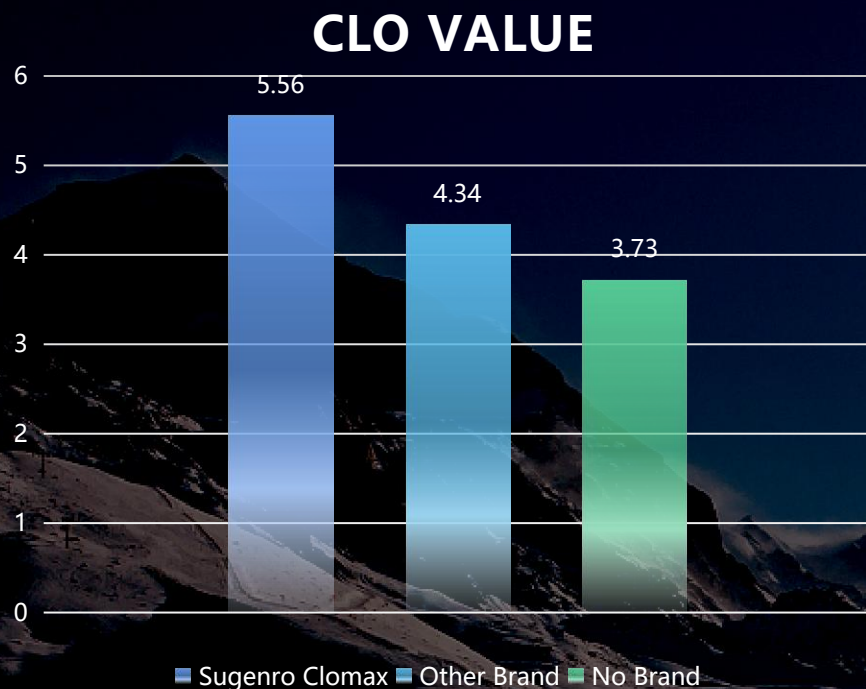


It undergoes airflow filling and breaks down into what we refer to as 'molecule-like cluster insulation.'

This innovative approach not only reduces its weight but also enhances ease of processing, ensuring even dispersion without clumping. This, in turn, contributes to its exceptional durability.

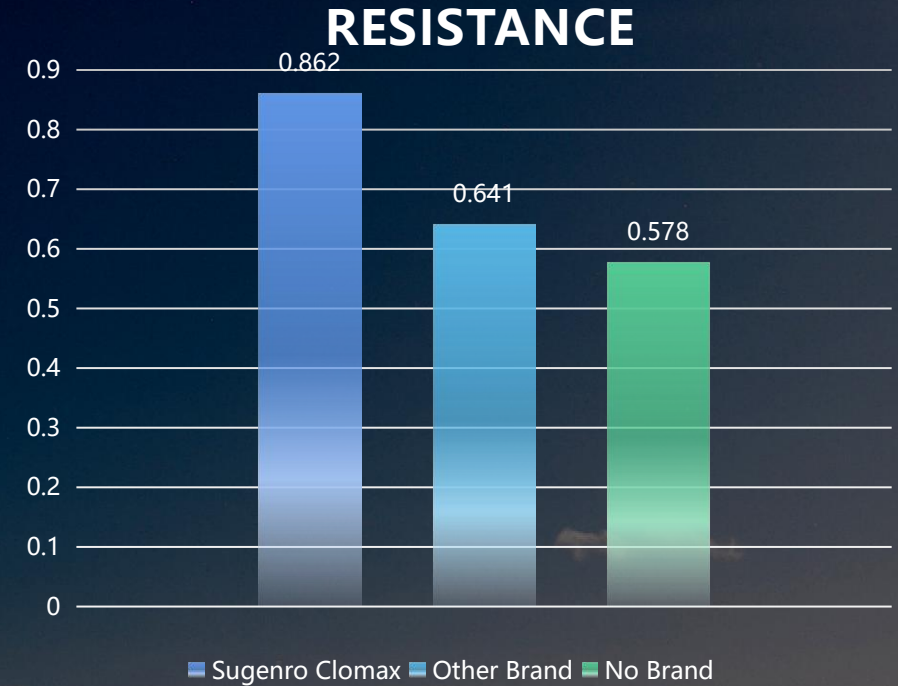
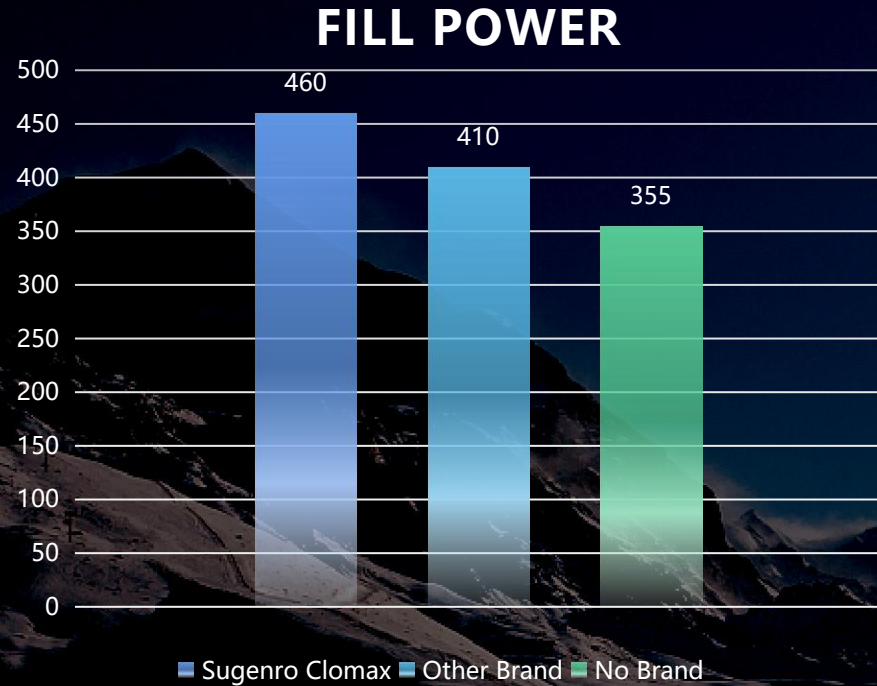
\* The product can be processed using various insulation equipment, with a recommended stitching interval of 4-8 inches for optimal performance.

# Insulation Data • 1



\* Above data represents the average results obtained through multiple tests conducted in our internal laboratory.

# Insulation Data • 2

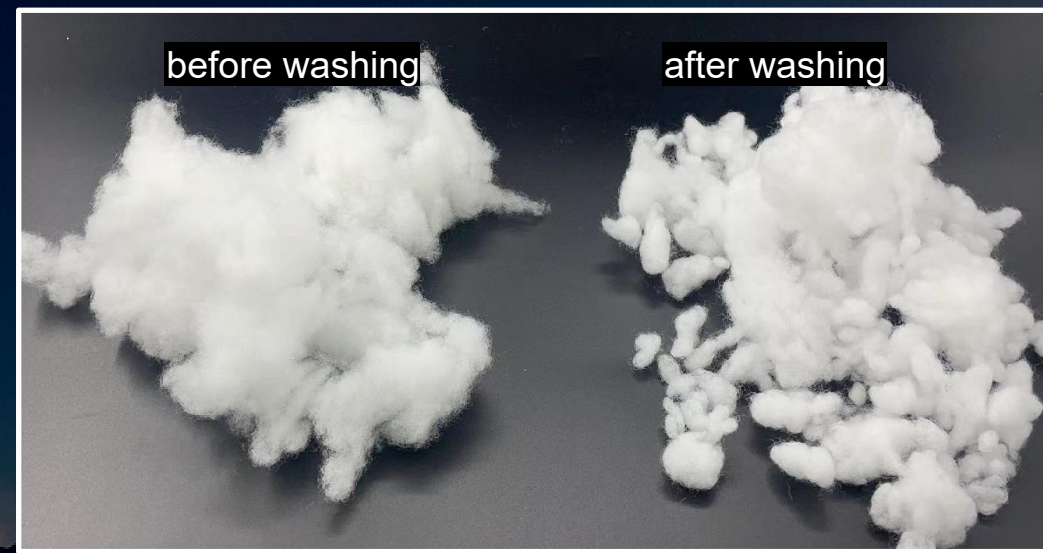
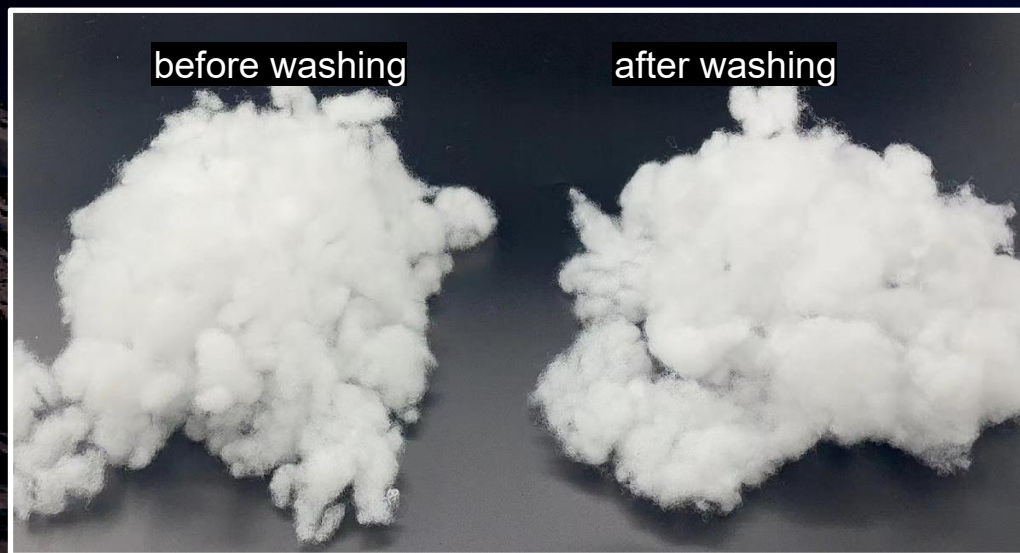


\* Above data represents the average results obtained through multiple tests conducted in our internal laboratory.

# Washing Effect • 1

Sugenro Clomax

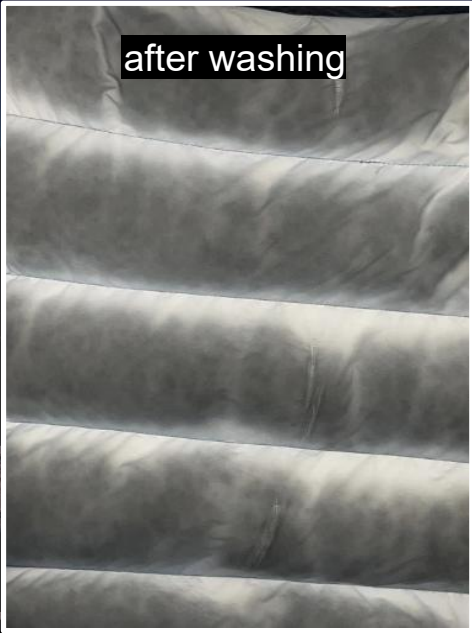
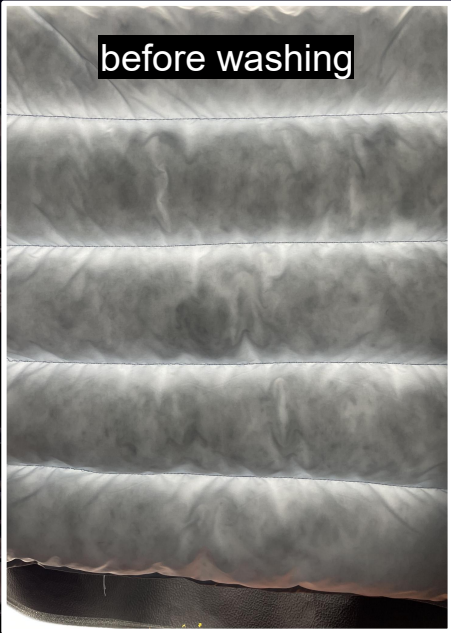
Other Brand



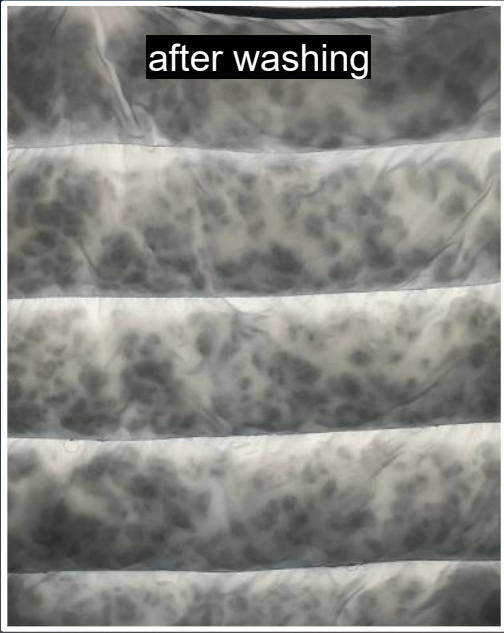
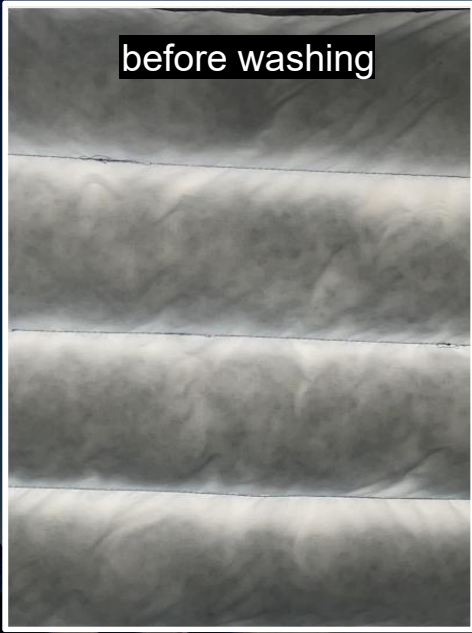
\* The water washing test described above was carried out at a temperature of 35 °C, and the image shows the result after three washes.

# Washing Effect • 2

Sugenro Clomax



Other Brand



\* The above water-wash test was conducted at a temperature of 35°C with a 200gsm fabric, featuring a 4-inch grid pattern. The results show the effect after three wash cycles.

## *Washing Effect • 3*

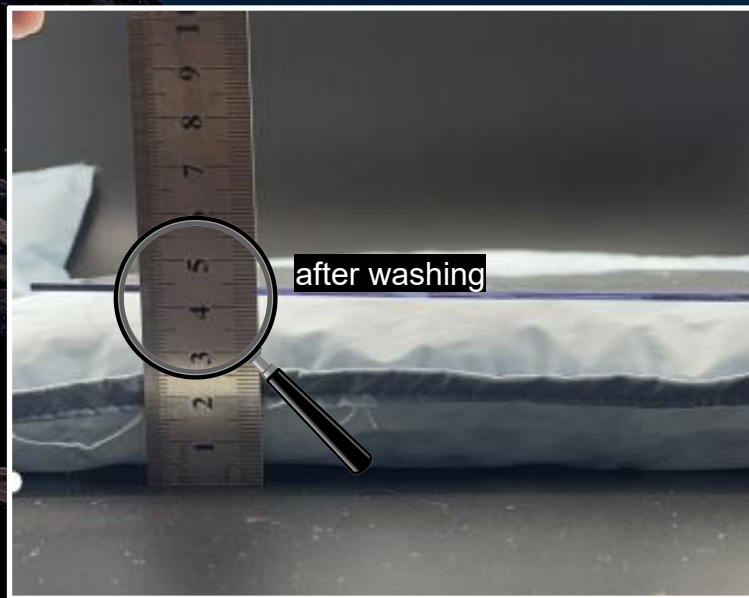
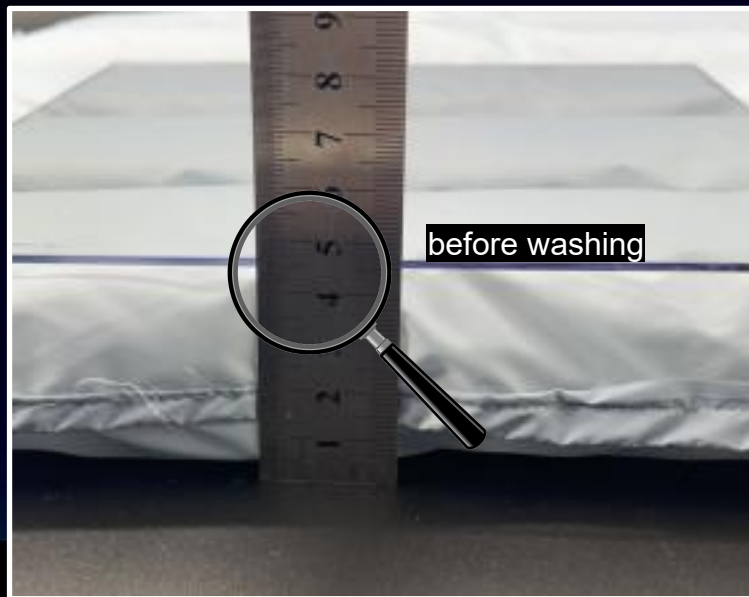
Sugenro Clomax



Other Brand



\* The above water-wash test was conducted at a temperature of 35°C with a 300gsm fabric, featuring a 6-inch grid pattern. The results show the effect after three wash cycles.

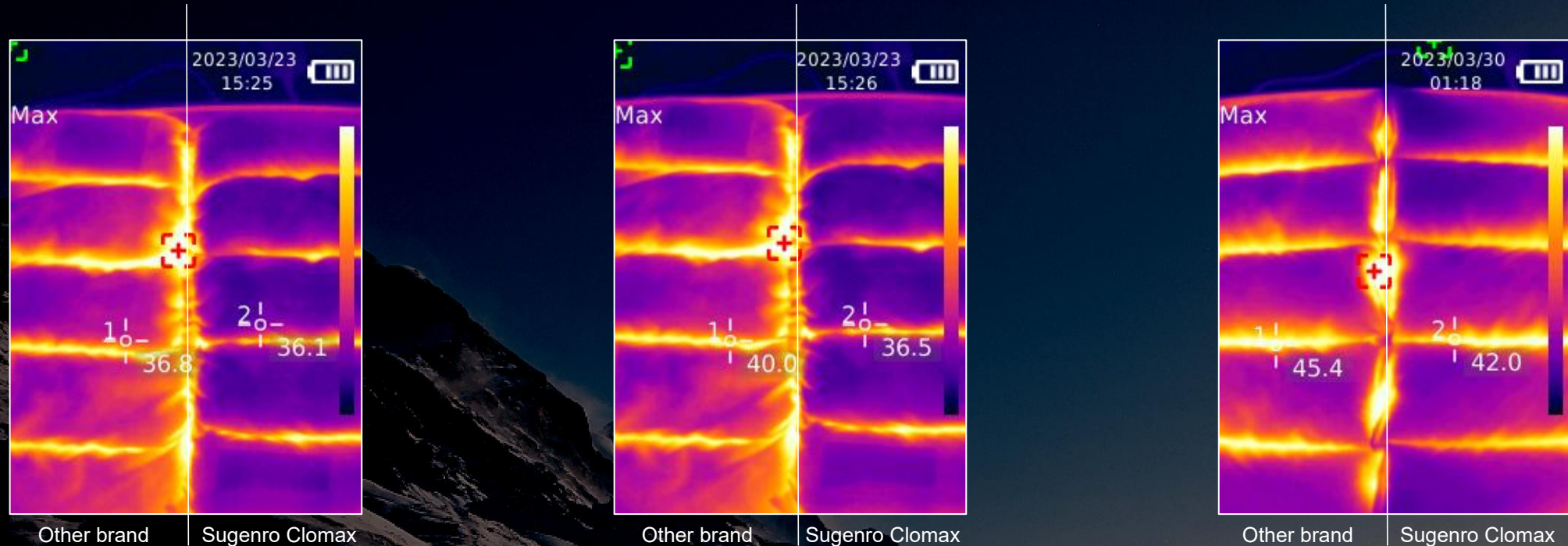


## *Fill Power after Washing*

\* Sample under test: 200gsm, 4-inch grid pattern.

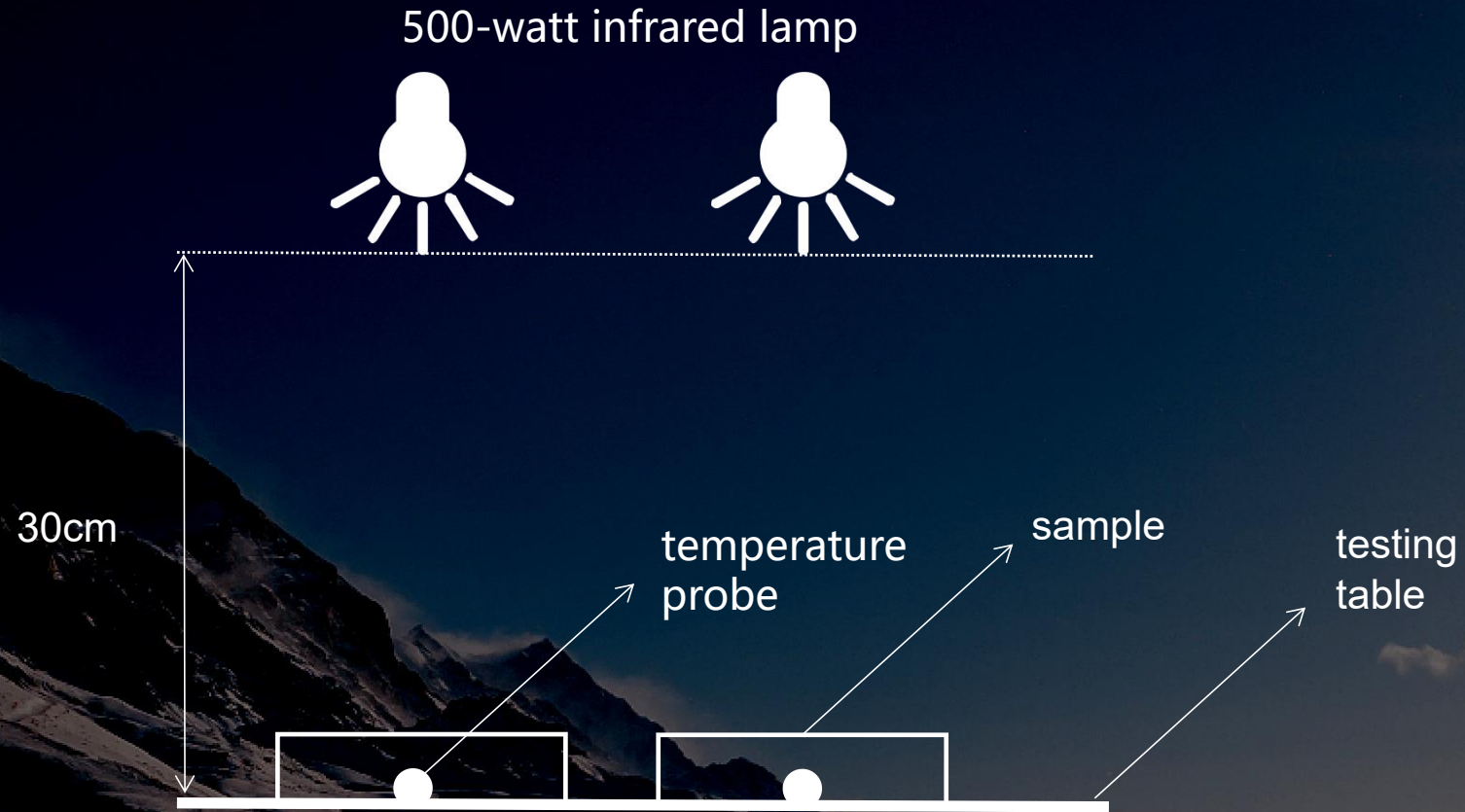
Before washing, the length was **4.5CM**, and even after undergoing 3 wash cycles, it still retains a length of approximately **4.3CM**, with a fluffiness decrease of approximately **4%**.

# Infrared Thermography



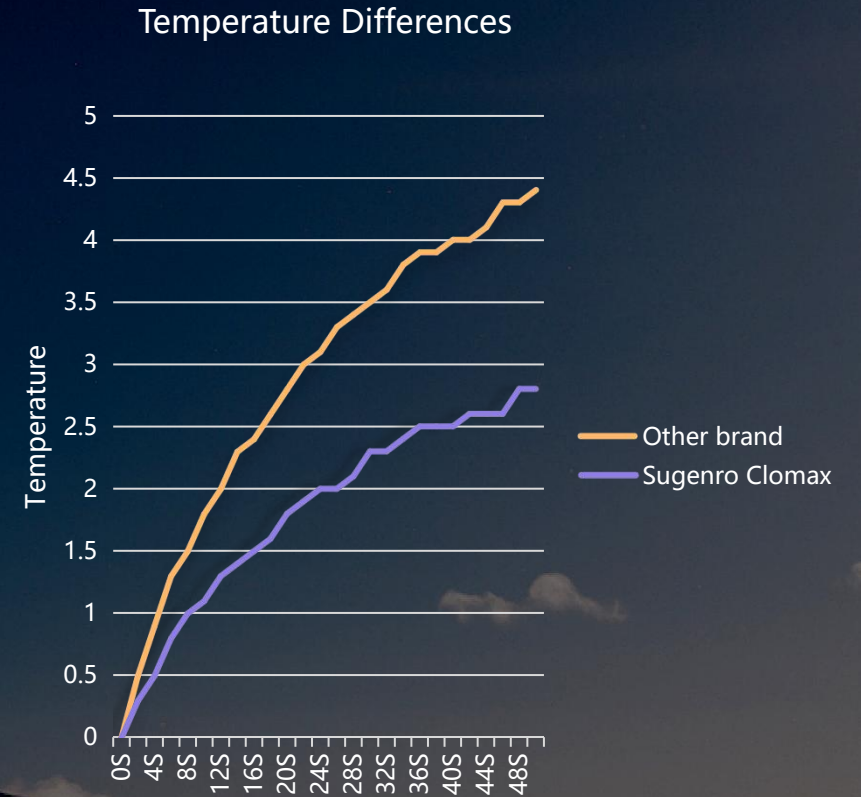
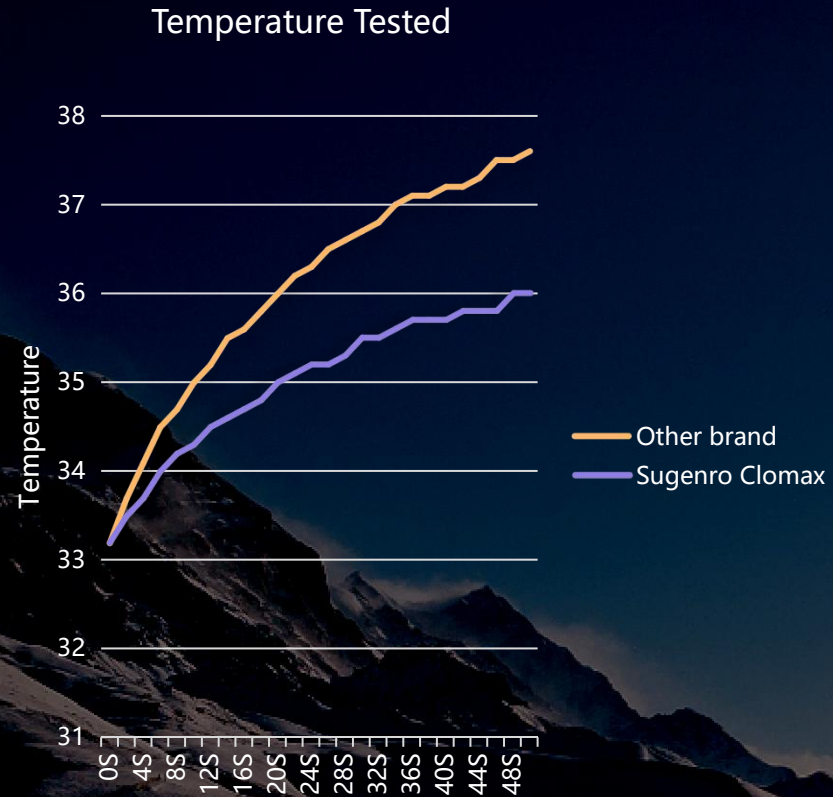
\* Infrared Thermometry: More orange-red indicates better heat transparency, faster heat dissipation, and lower insulation. Through practical testing, with the same amount of insulation, **Sugenro Clomax demonstrates superior insulation compared to other brands.**

# Heat Dissipation Experiment



Experiment Description: The experimental setup consists of a 500-watt infrared lamp, with a temperature probe placed underneath the sample. The test sample is 200gsm and is subjected to high-temperature lamp radiation to simulate the heat dissipation from the human body.

# Heat Dissipation Experiment



The experiment demonstrates that as the temperature difference increases, heat dissipation is higher, while a smaller temperature difference indicates better insulation.

# Fill Power



\* The contrast sample above is 300GSM with a 6-inch grid, where the thickness of 4 Sugeno Clomax clusters equals the thickness of 5 clusters from other brands.

1



Before applying heavy pressure: Thickness measures **6CM**.

2



Under heavy pressure: 13.5 kilograms of weight applied for 72 hours.

3



After applying heavy pressure: Thickness measures **5.6CM**.

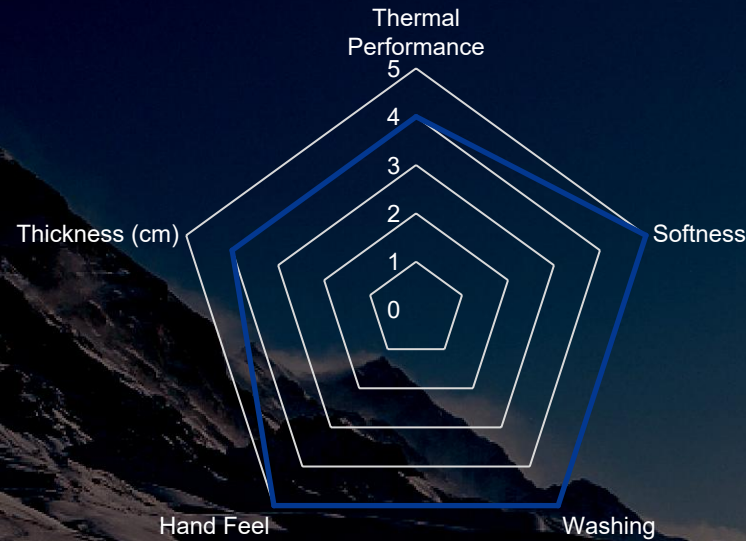
\* Test sample is 300gsm with a 6-inch grid. Before applying heavy pressure, the thickness was 6CM, and even after 72 hours of heavy pressure, it maintains a thickness of 5.6CM, with a decrease in loftiness of approximately 6.5%.

# Sugenro® Clomax

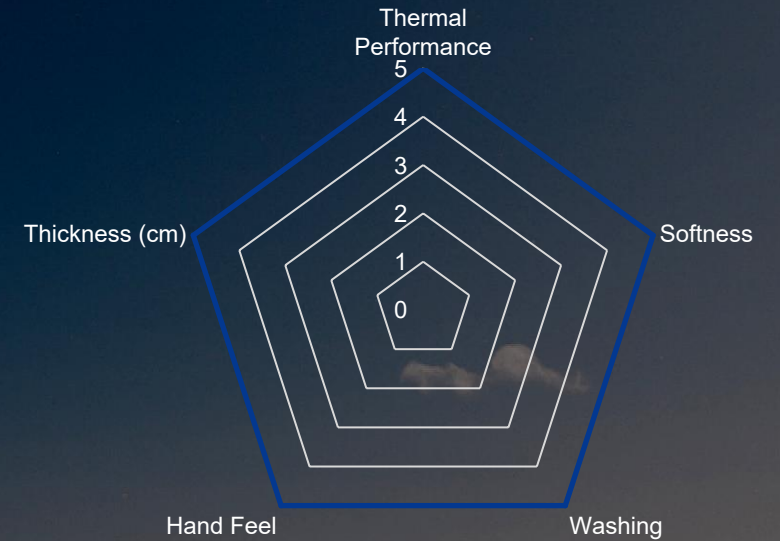
## Characteristics

- ❑ High Loftiness
- ❑ Soft and Gentle Touch
- ❑ Environmentally Sustainable
- ❑ Water-Resistant
- ❑ Lightweight

Sugenro Clomax 200gsm



Sugenro Clomax 300gsm



# *Service*

## Free Sample Garment Padding Service – Ensuring Consistency

(To prevent variations in the final garment appearance between samples manually padded, often due to the absence of padding equipment in certain clothing factories, and the finished garments processed with padding machines).



Advancing sustainability since 1999.



SUGENRÖ<sup>®</sup>

*Thank you!*

[www.sugenro.com](http://www.sugenro.com)

