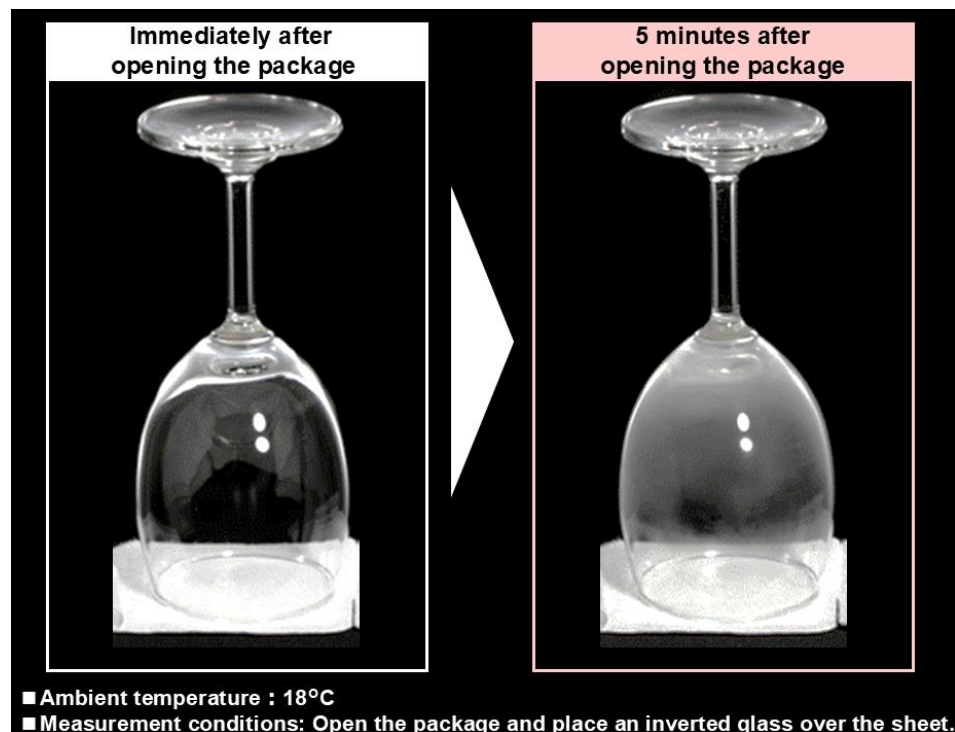


Mobile Steam Heat Technology

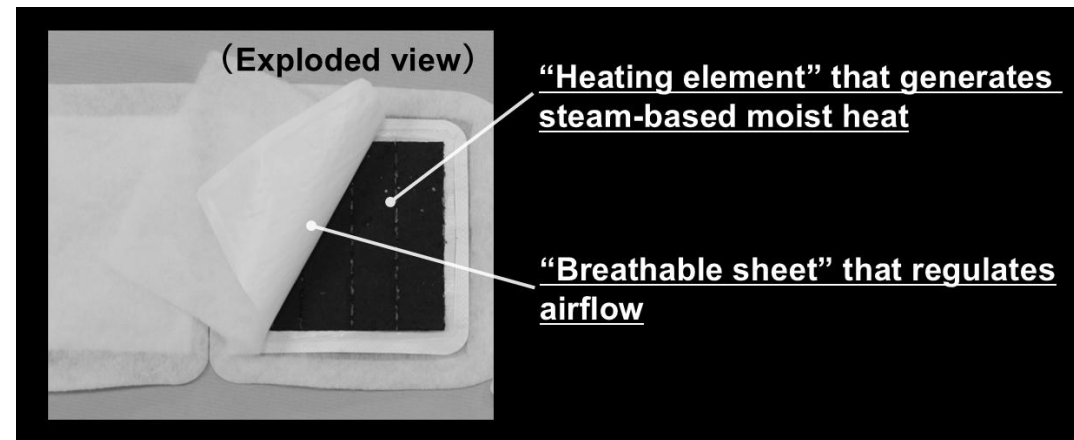
A thin, lightweight sheet technology that generates steam heat—shown to provide benefits such as relaxation when applied around the eyes—easily, anytime and anywhere. It is portable and can be used immediately whenever needed.

<Unique Points>

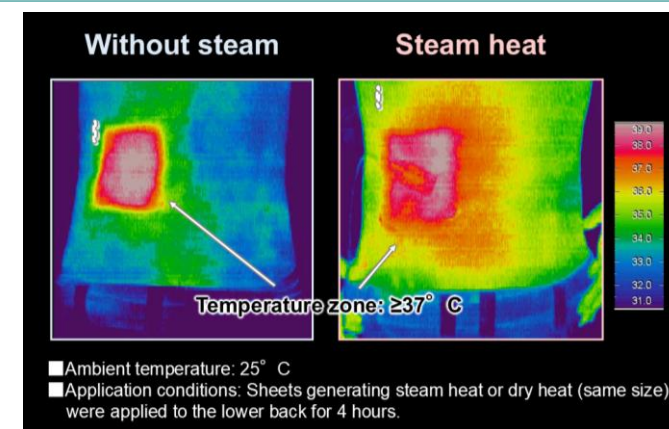
We developed a sealing technology that encapsulates iron powder and water in a thin, 2 mm sheet format. When the package is opened, the sheet encounters air (oxygen), and the heat-generating oxidation reaction of iron produces heat containing steam.



By controlling the amount of air (oxygen) that contacts the heat-generating element, as well as the element's composition and structure, the heating temperature, duration, and the amount of steam generated from the sheet can be adjusted.



Compared with dry heat alone, steam-based warmth offers superior heat transfer, allowing a wider area of skin to be warmed.



Mobile Steam Heat Technology

<Key Benefits>

- With a portable sheet, it can be conveniently applied to the area you want to warm anytime, anywhere—during breaks at work, while traveling, or before bedtime.
- Simply open the package to generate comfortable steam-based warmth at around 40°C, helping you relax and refresh.
- Helps relieve symptoms commonly experienced in daily life—dry eyes, eye fatigue, eye discomfort, and foreign body sensation in the eye (for products classified as controlled medical devices).

<Link to Other Contents>

- Research & Development News Release
Effects of periorcular skin warming on sleep initiation —Increased body heat loss confirmed—
<https://www.kao.com/global/en/newsroom/news/release/2019/20190903-001/>
- [Research Report] Warming the area around the eyes promotes sleep onset and deeper sleep —Enhanced heat dissipation from the hands and feet influences sleep— (Japanese only)
<https://www.kao.com/jp/newsroom/news/release/2021/20210205-001/>
- Kao no Kao (Kao's research and technology website)
“Mathematical Science” Behind That Mega-Hit Product!
The “Essence of Mathematics” Takes on Infinite Chemistry (1)
(Japanese only)
https://www.kao.com/jp/kaonokao/dna/4_1/

<Concerned Research Areas>

- Product Development Research:
 - Human Health Care
<https://www.kao.com/global/en/innovation/research-development/product-development/human-health-care/>
- Fundamental Research:
 - Production Technology
<https://www.kao.com/global/en/innovation/research-development/fundamental/production-technology/>
 - Biological Science
<https://www.kao.com/global/en/innovation/research-development/fundamental/biological-science/>