

Raw materials | Derived from cotton linter

Born from cotton linter

Bemberg™ is Asahi Kasei's brand of cupro, a regenerated cellulose fiber derived from cotton linter.

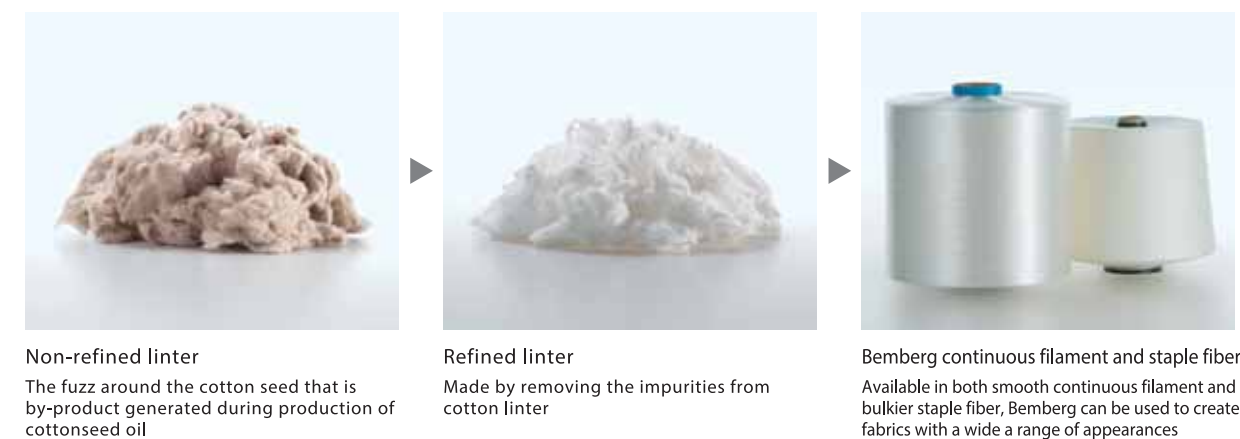
Made from cotton linter – the fuzz around the cotton seed

Asahi Kasei uses its proprietary technologies to refine and dissolve the linter that is pre-consumer material, transforming it into pure regenerated fiber.



Using the power of science for superior comfort

Bemberg does not have the non-uniformity of thickness found with natural fiber, and is very fine and almost round in cross section. Asahi Kasei uses the power of science and technology for superior comfort.



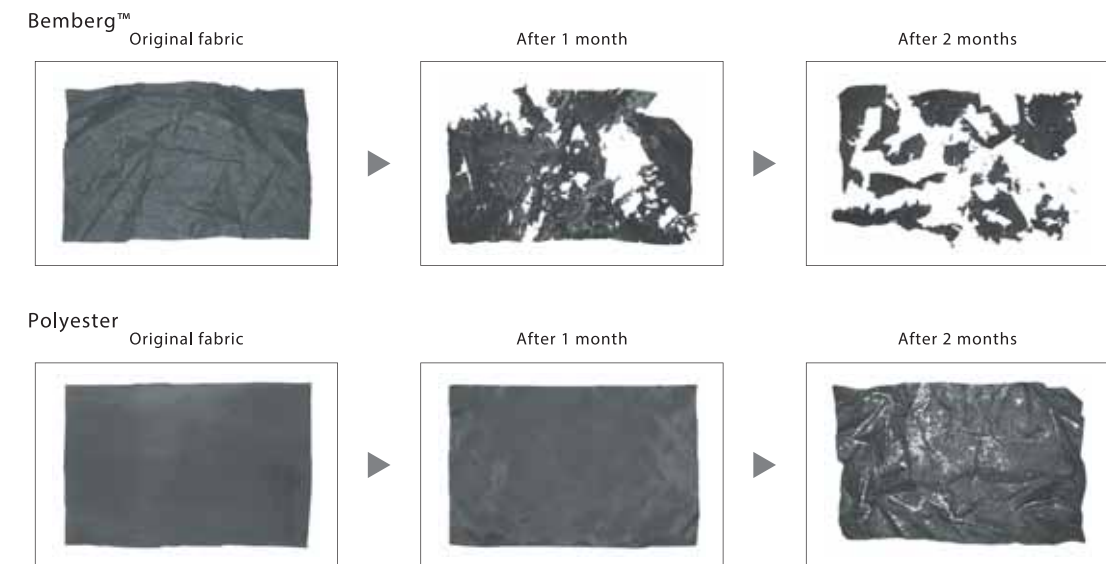
Raw materials | Eco-friendly

Born from nature, returned to nature

Made from a natural material, Bemberg is a biodegradable and compostable fiber that breaks down naturally after disposal.

Returned to the soil after use

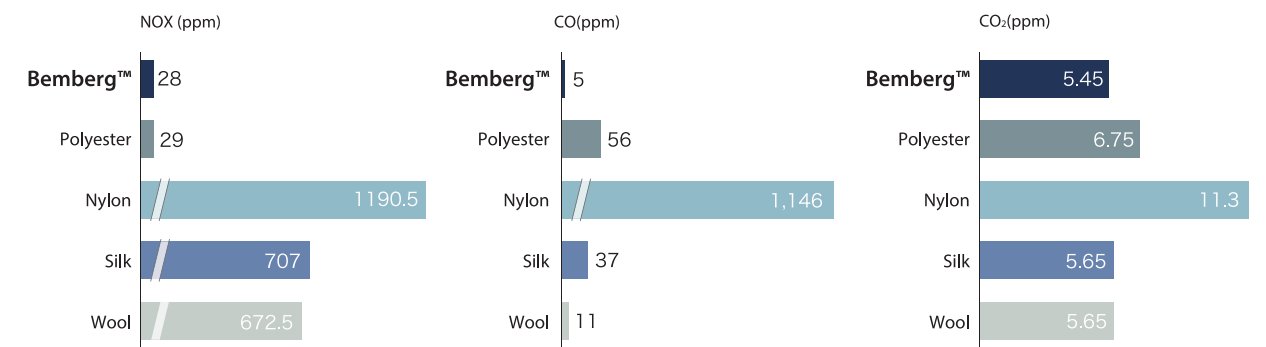
Bemberg is biodegradable and compostable when buried. For example, under summer conditions (temperature of 35°C and humidity of 80%), the mass of the fabric is halved in around two months.



Low environmental impact even when burned

Even when burned, Bemberg produces virtually no toxic substances.

Gases released by the combustion of fibers



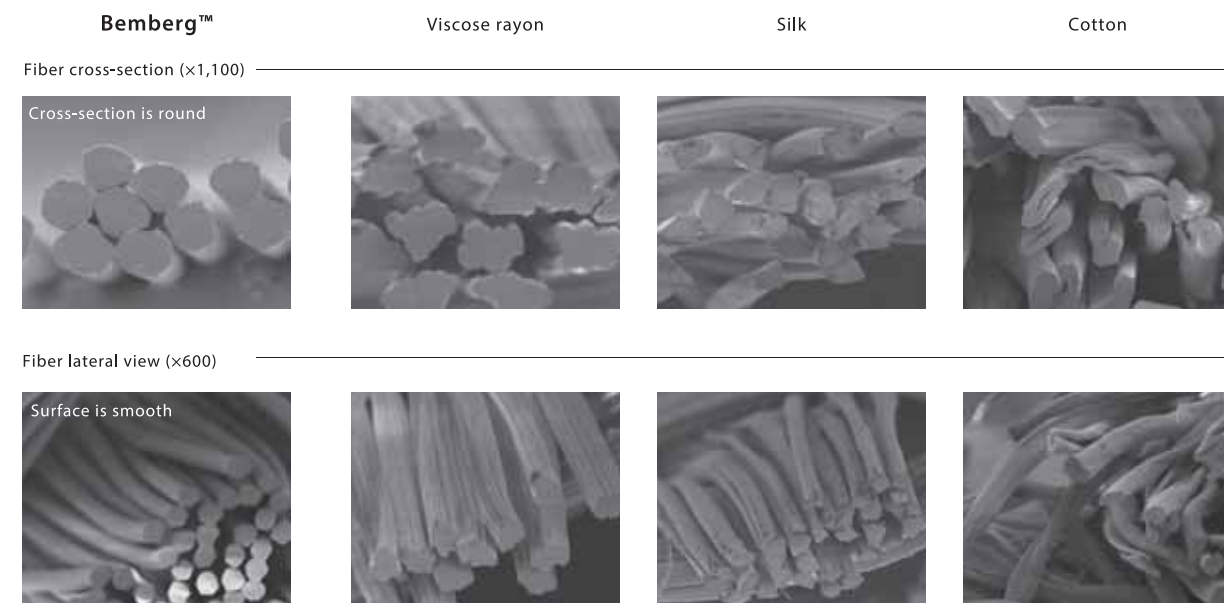
Features | Kind to the skin

Gentle on the skin from start to finish

Feels silky smooth against the skin.

Gentle texture that does not irritate the skin

Made of fibers with an almost perfectly round cross-section, Bemberg yarn has a smooth surface. This means it irritates the skin less than other materials and is unlikely to harm delicate skin.

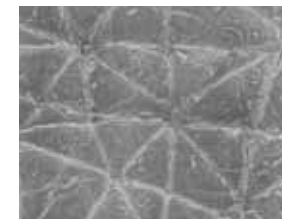


Skin abrasion test

The skin replica method (Asahi Kasei's own method) was used to observe the texture of the skin before and after abrasion of the skin with material.



After abrasion with Bemberg



Skin replica



After abrasion with cotton



Skin replica

The results show that Bemberg causes minimal damage to the skin.

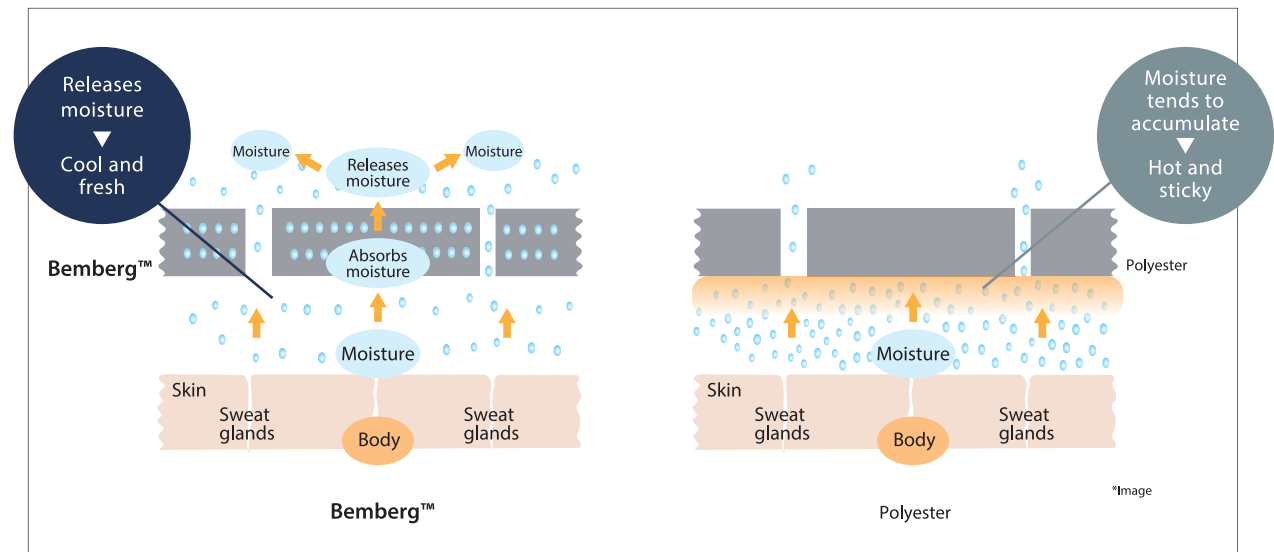
Features | Moisture-regulating

Breathes with the skin

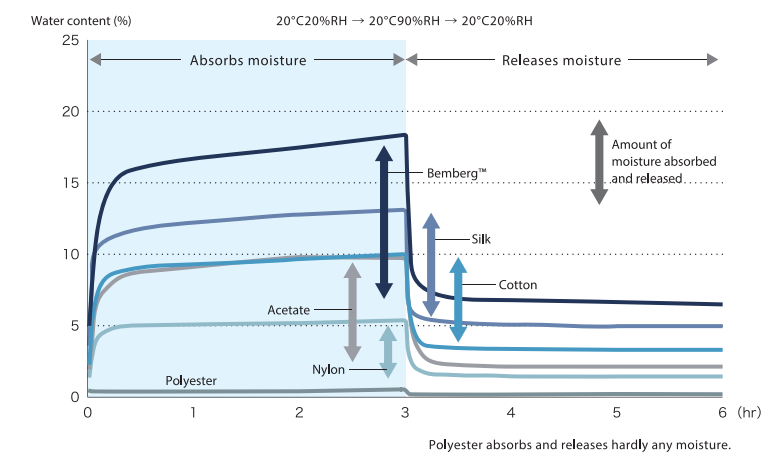
Bemberg is a fiber that controls moisture.

Absorbs and releases moisture

Bemberg quickly absorbs and releases moisture through very small waterways that are invisible to the naked eye. It keeps the wearer cool, fresh and comfortable.



Moisture absorption and release according to changes in humidity



On an average day, the human body releases some 600cc, or four cups of water vapor via perspiration. Bemberg has excellent moisture absorbing and releasing properties, absorbing and releasing this perspiration.

Crystalline structure of a Bemberg™ fiber



*There is a difference in the density of the crystalline structure.

Crystalline structure of a cotton fiber



Non-crystalline regions (light blue) Crystalline regions (dark blue)

Having many non-crystalline regions which tend to absorb and release moisture, Bemberg releases excess moisture, keeping the wearer comfortable.

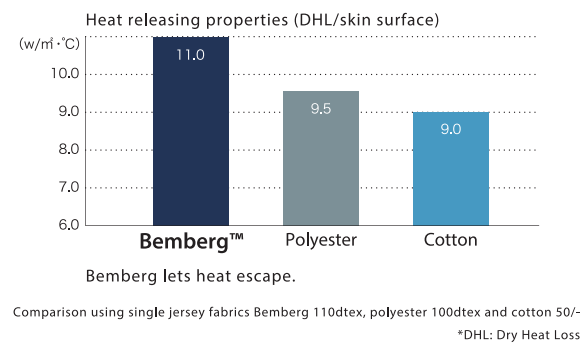
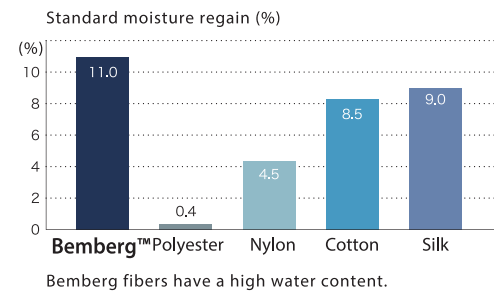
Features | Comfortable all year round

Comfort guaranteed, whatever the season

With the high moisture content of its fibers, Bemberg has in-built air-conditioning, keeping the wearer comfortable whatever the season.

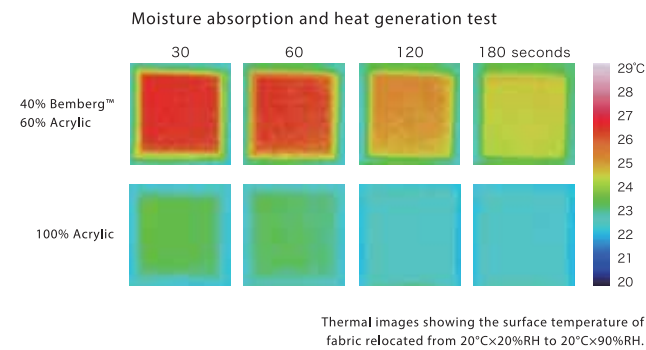
Pleasantly cool in summer

Thanks to the high moisture content of the non-crystalline regions of its fibers, Bemberg lets heat on the surface of the skin escape, keeping the wearer feeling pleasantly cool in the hot and humid summer.



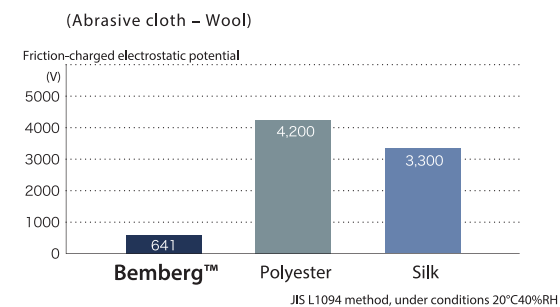
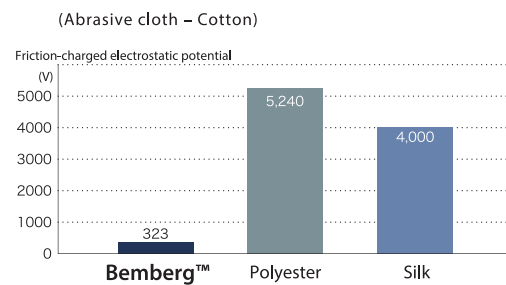
Warm in winter

When absorbing moisture from the body, Bemberg generates thermal energy, which, when combined with a material that does not let such heat escape, produces warmth.



Allows static electricity to escape

Another feature of Bemberg is that, due to its high water content, it discharges static electricity in the winter.



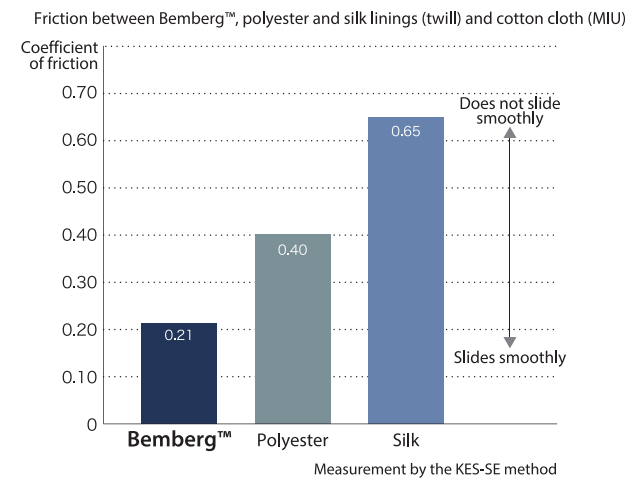
Properties | Slides on smoothly and looks beautiful

Colorful lustrous fabric that glides smoothly into place

Made from fibers with a smooth surface, Bemberg is a low abrasion material that allows smooth movement. With its beautiful lustrous colors and unique textures, Bemberg creates a sense of presence.

Comfortable fabric that slides smoothly

With an almost perfectly round cross-section, Bemberg has a low coefficient of friction, sliding smoothly for a light, comfortable fit.



Fibrillated "Peach-Skin" finishing unique to Bemberg

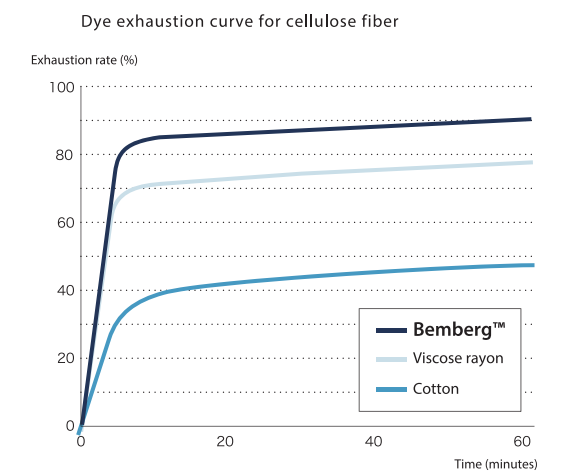
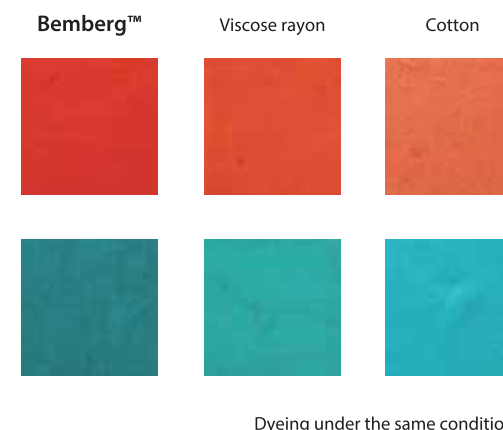
Special finish creates the impression of fine surface for a unique texture and appearance.



Beauty with color depth

Bemberg's beautiful luster and rich dye colors add to the diverse appearance of the fabrics.

Bemberg fibers have many extremely small waterways and non-crystalline regions, making them quick to absorb dye. Bemberg fabric can therefore be dyed a deep color in a short space of time.



All the measurement data above was measured at the Asahi Kasei Corporation, Center for Advanced Technology of Fibers and Textiles

Working with society

Contribute to life and living for people around the world

The aim of the Bemberg business is not simply to develop business but rather to develop a sustainable society based on consideration of the nature of “business and people’s lifestyles” and “corporations and local communities”.

Supporting the creation of business models in India

For more than 40 years, Asahi Kasei has been developing and proposing technologies, to make Bemberg, which is popular as a fabric for traditional costumers, even more comfortable and even more beautiful. Asahi Kasei provides support at production sites to ensure that local people are actively involved at all stages of the value chain, from the procurement of the raw material (cotton linter) to the distribution of the final product. The company is also

working to improve technologies, create employment and secure stable income. Since 2016, Asahi Kasei has also participated in the Business Call to Action (BCtA)* led by the United Nations Development Programme. Asahi Kasei also focuses on fostering young talent that will lead the future of India’s fiber fashion industry through support for their university education, and supports the improvement of productivity at small and mid-sized plants.



* Business Call to Action (BCtA): BCtA is an initiative led by six development agencies and governments, including the United Nations Development Programme, to explore and promote business models that will enable simultaneous achievement of commercial and development goals from a long-term perspective.



Sustainability

Eco-friendly manufacturing

To enrich people’s hearts and lifestyles, Bemberg uses the blessings of nature and chemical technologies to promote eco-friendly manufacturing, from production to disposal.

LCA

Life Cycle Assessment
acquired in 2016

LCA(Life Cycle Assessment)
Life cycle assessment involves examining and assessing the development and design of products with a low environmental impact. Asahi Kasei is working to further reduce the environmental impact of Bemberg based on this assessment.

INNOVHUB-SSI
biodegradability
tested

*Tested by INNOVHUB-SSI, EN 14046:2003,
Accreditation UNI CEI ISO/IEC 17025:2005
(Certificate number: ACCREDA n° 82)

Biodegradable (certified by INNOVHUB)
Certified as biodegradable and compostable.



Global Recycled Standard
Certified by CUC
CU848689

GRS (Global Recycled Standard)
The Global Recycled Standard (GRS) is a track and trace certification program applied to companies that produce products that include recycled material. Products certified to the GRS are textiles that are made by recycling pre-consumer waste and that have product traceability from raw material used to finished products shipped.



ISO-14001
CERTIFIED
ENVIRONMENTAL
SYSTEM
JQA-EM0561

ISO14001 certification
Asahi Kasei obtained ISO14001, the international standard for environment management systems, in recognition of the establishment of systems to continuously reduce and prevent the environmental impacts of its corporate activities, products and services.

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