The properties of wool

**Soft, comfortable and easy care**

The secret to Australian Merino wool’s softness is its exceptionally fine fibres.

- **Soft** — Merino wool fibres are extremely fine, enabling them to bend far more than traditional, broader wool fibres. This makes Merino wool feel soft and gentle next to your skin.

- **Elastic** — natural elasticity helps wool garments stretch with your body, yet return to their original shape. So fine wool clothing is ideal to wear when exercising.

- **Breathable** — wool fibres can absorb large quantities of moisture vapour then move it away to evaporate into the air. Wool clothing is extremely breathable and less prone to clamminess.

- **Odour resistant** — in contrast to synthetics, Merino wool can absorb moisture vapour, which means less sweat on your body. Merino even absorbs and locks away the odours from sweat, which are then released during washing.

- **Warm and cool** — in contrast to synthetics, wool is an active fibre that reacts to changes in body temperature. So it helps you stay warm when the weather is cold, and cool when the weather is hot.

- **Anti-static** — because wool can absorb moisture vapour, it tends not to create static electricity, so it is less likely to cling uncomfortably to your body than other fabrics.

- **Stain resistant** — wool fibres have a natural protective outer layer that prevents stains from being absorbed. And because Merino tends not to generate static, it attracts less dust and lint.

- **Anti-wrinkle** — at a microscopic level, each wool fibre is like a coiled spring that returns to its natural shape after being bent. This gives wool garments a natural wrinkle resistance.

**Fast facts**

- Wool draws moisture away from the body so is ideal to wear when playing sport.

- Many wool garments can be machine-washed and tumble dried.

- Wool sleepwear and bedding can improve sleep.

**Sweet smell**: Wool’s natural moisture management qualities means less sweat remains on your skin during exercise.

**Unique properties**: Australian Merino wool is rich in natural properties that make it great to wear and easy to care for.

**Moisture management**

- **Efficient dispersal**
  - Moisture vapour contained in the side chain reservoirs within wool fibres (before being released into the atmosphere), thus keeping fabric dry.
  - Chemical attraction quickly draws vapour molecules through fabric, thus reducing possibility of condensation.
  - Heat transfer occurs via mass transfer of vapour.
  - Moisture vapour drawn through MerinoPerfor™ fabric.
  - Rain repelling.
  - Efficient dispersal into atmosphere.
  - Microclimate, chemical attraction, mass transfer, heat transfer, moisture vapour, rain, dispersion, atmosphere, MerinoPerfor™ fabric.
Safe and natural

Australian Merino is a natural and renewable fibre that is safe for everyone to wear.

Fire resistant — wool is flame retardant, doesn’t melt and stick to the skin, and even self-extinguishes when the source of flame is removed.

Sun-safe — wool is much better at protecting skin against UV radiation than most synthetics and cotton. So the whole family will be safer wearing wool on sunny days.

Nature’s fibre — Wool is grown year-round by Australia’s 70 million sheep, from a simple blend of water, air, sunshine and grass.

Biodegradable — When wool is disposed of, it will naturally decompose in soil in a matter of months to years, releasing valuable nutrients back into the earth.

Renewable — every year Australian sheep produce a new fleece, making wool a completely renewable fibre source.

Comfortable and safe: Wool is safe for babies and can help them sleep at night.

Glossary

Decompose — to break up or separate into simple parts.

Natural fibre — a fibre derived from an animal or plant such as wool, cotton, hemp or linen.

Renewable fibre — a fibre that comes from a source that can be replaced or regrown, such as animals (sheep, goats, rabbits) or plants (cotton, trees and flax).

Synthetics — fabrics that have usually been manufactured using petrochemicals, such as nylon and polyester.

Designers love wool

Designers love working with Australian Merino wool for a wide variety of reasons.

Sleek and elegant — Merino wool benefits from what designers call excellent ‘handle and drape’. To the wearer this means clothes that follow the form of the body.

Colourful — when Merino wool clothing is dyed it is colourfast; and newly-developed colouring techniques give designers full scope for their creativity.

Fashionable — Australian Merino wool is lively and flexible, coming in a wide choice of textures, weaves and weights. It can be woven or knitted and worn in every season.

Easy to tailor — Merino wool is a delight to work with. It cuts cleanly, doesn’t fray and isn’t marked by pins. It also responds instantly to ironing and won’t crush with handling.

Permanent press — Merino wool fabric can be permanently set by the use of temperature and moisture, giving designers the freedom to create a wide range of shapes and styles.

Innovative — clothing designers can choose from a range of innovative treatments that allow them to create unique textures and finishes on Merino garments.

More information

For more information about wool, go to:
- learnaboutwool.com
- Beyond the Bale: beyondthebale.wool.com

Wool magazine:
- merino.com/wool-magazine/
- merino.com/wool/the-fibre/
- The fibre, yarn and fabric samples that came with the Learn About Wool Designers love working with wool.

Favourite fibre: Fashion designers love working with wool.