



fact sheet



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what's so special about Merino?

The Merino Fibre

New Zealand Merino wool, or fibre, is internationally sought after due to its natural attributes – that keep us looking good while still being comfortable – warm in winter and cool in summer.

Micron

Wool fibre diameter is measured in microns, with one micron equal to one millionth of a metre. The micron measurement of the wool will influence its end-use as the smaller the micron, the finer the wool. Finer wool – such as Merino – is generally reserved for apparel and fine suiting, while coarser wool (sometimes described as 'strong' wool) typically goes into carpet, upholstery and chunkier knits/textiles.



Colour

New Zealand grown Merino fibre outcores Merino from other countries when tested for brightness and whiteness. This increases the potential colour choices for Merino textiles and improves the garments ability to retain colour without fading.

Long-lasting

New Zealand Merino fibre is long and strong, which increases a garment's durability and ability to remain smooth and soft. The longer fibre also means it is less likely to pill. Merino fibre, like human skin and hair, is largely made from keratin - a natural protein, which is very resilient.

Renewable, Natural, Ethical

New Zealand Merino is a renewable, natural product. It is hard-wearing, yet biodegradable. It is produced in New Zealand's high

country, where sheep roam freely. Merino farming systems have evolved to protect the welfare of the animal, preserve the environment for future generations and produce the highest quality fine white fibre.

The average sheep produces seven fleeces in its lifetime – that's enough for about 35 garments!

Moisture Management

Merino fibres have a complex structure with a hydrophilic (water holding) interior, known as the cortex, and a hydrophobic (water-repelling) exterior, known as the cuticle. As a result, Merino fibres have the unique ability to both absorb and repel moisture.

This means that Merino garments can offer shower/rain resistance - a Merino garment can hold up to 30% of its own weight in water without feeling damp. It also means that a Merino garment will absorb vapour from your skin when you sweat, increasing the time before the sweat condenses to a liquid form and avoiding the uncomfortable clammy feeling often associated with wearing synthetic fabrics on a warm day, or when you are exercising.

Softness/Comfort

Prickle and itch associated with traditional wool is the result of coarse fibres pushing into the skin, irritating nerves close to the skin's surface; this does not occur with high quality New Zealand Merino – the ultra fine fibres simply bend when pressed into the skin.



Thermal Control/Natural Aircon

Merino buffers the body's microclimate in changing conditions to maintain comfort through natural air conditioning. Merino is



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constantly seeking to achieve equilibrium between the external environment or climatic conditions, and the internal environment adjacent to the wearer by absorbing and releasing moisture.

As Merino absorbs moisture, the fibres release a small but perceptible amount of heat. This heat is known as 'heat of sorption' and is generated through a chemical reaction that occurs when the water vapour interacts with the chemical structure of the Merino fibre. This acts to prevent the chilling of the wearer in wet, cool conditions.

Insulation

Air is a poor conductor of heat. The more air that is trapped in a fabric structure, the more warmth it will offer to the wearer. The natural crimp (wave) and resilience of Merino fibres make Merino garments warm and comfortable to wear.

Fire Safety

Wool is naturally flame-retardant and self-extinguishing, that is, it puts itself out. This is why wool is used in many areas where flammability is a safety issue, for example, aircraft upholstery and carpets. Additionally, it does not melt as many synthetic fibres do when they catch alight.

Odour Control

New Zealand Merino garments are ideal for active sportspeople due to their ability to minimise build-up of odour in comparison to synthetic fabrics.

Easy Care

Merino's moisture absorbing characteristics provide excellent wrinkle recovery, especially through the application of steam, an excellent easy care feature when travelling. Merino's natural resilience (it can be bent 30,000 times without danger of breaking or damage) gives it outstanding wrinkle recovery.

New Zealand Merino is also shrink resistant, which means you can wash your Merino garments alongside your other washing – a definite plus for active people.

