Wool & Skin

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Skin is the body's largest organ. Our research shows that wool garments work with the layer of air between skin and garment to manage humidity (sweat) and keep wearers comfortable.

Wool fibres are the most hygroscopic of the common apparel fibres. Wool can absorb and release 50% more moisture vapour than cotton, and 30 times as much as polyester.

Prickly? It isn't what you think

We often hear people saying that wool feels "prickly".

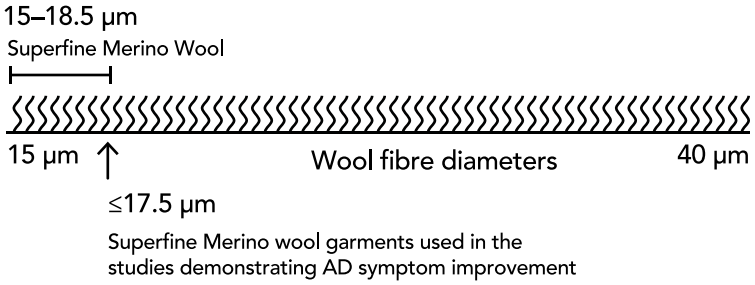
But, studies show that perceptions of prickle from clothing are not because of the type of fibre, but result from the fibre's thickness, or diameter.

Perceptions of prickle go up as the diameter increases. This may be an important factor for those with sentitive skin.

We now better understand the role of wool fibre diameters. In fact, wool garments with a mean diameter of ≤17.5 mm have shown potential benefits in studies assessing wool's impact on Atopic Dermatitis (AD) symptoms.[1-4]

Four studies have now shown that wearing superfine Merino wool garments with a mean fibre diameter ≤17.5 mm for at least 6 hours/day for 6 weeks lessens the severity and symptoms of AD.[1-4]

Patients reported significant reductions in symptoms of itchy, scratchy and painful skin[3] and that bleeding, weeping/oozing, flaking and dry or rough skin decreased.[2]



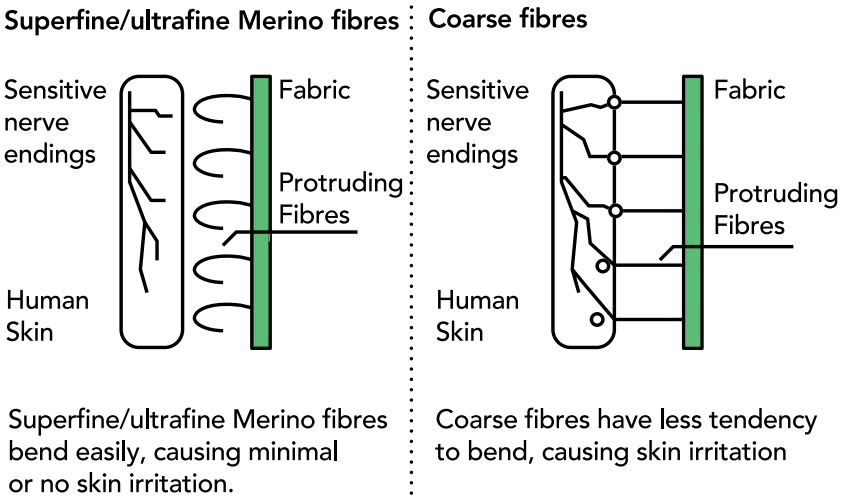
Wool Micron Grades & Uses

Micron (µ) /Grade	Use
14.5 µ and finer – Extrafine 14.6-16.5 µ – Ultrafine 16.6-18.5 µ – Superfine	Next-to-skin baselayers & garments such as shawls, scarves, hats, babywear, gloves, underclothing
18.5-20.5 µ – Fine	Next to-skin apparel and high-quality fashion; high-quality, soft-handling fabrics & knitting yarns
20.6-22.5 µ – Medium 22.6-25 µ – Broad	A variety of woven apparel cloths, knitting yarns and furnishings such as thicker sweaters, socks, blankets, rugs and industrial felts.
26-32 µ - Coarse	Rugs, upholstery and insulation
32-48 µ	Carpets

Fibre Ends and Fabric

Fabric is composed of fibres. A prickle sensation can occur when the ends of fibres within a fabric press against the skin, triggering nerve receptors. These sensations are not specific to wool fibres. Fabric made of any fibre can cause the sensation.

This graphic shows how the ends of coarser fibres trigger the nerve endings known as nociceptors. The nociceptor sends an electrical signal to the brain. If the brain receives enough of these signals from the same area of the skin, it interprets them as "prickle".



Superfine Merino Wool Can Help Improve Symptoms of Atopic Dermatitis

New studies are showing how, for people with eczema or atopic dermatitis, wearing superfine Merino wool next to the skin produces a stable microclimate which can be benefitical for symptoms. [1-7]

Despite often beng advised to avoid wool, we now understand that it is the fibre diameter in clothing that is important in this context, rather than the type of fibre. [8-10]

Atopic dermatitis (AD; also referred to as eczema) is a common chronic inflammatory skin condition that affects up to 28% of infants.[11]

AD causes intense itch, sleep deprivation and reduced quality of life.[12,13]

There is no cure for AD and current management focuses on frequent use of emollients and topical steroids along with irritant avoidance.[13]

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