

# A Surilox Alpacas Information Sheet

Downloaded from [www.surilox.com](http://www.surilox.com) written by Karine Raiz

## Alpacas & Alpaca Fleece

Alpacas are native to the South American continent. They are found predominantly in Peru, Chile and southern Bolivia, and are one of the 4 South American Camelids.



All of the South American Camelids can be found in the wild. Llama were domesticated and were used as pack animals. The Alpaca were domesticated and used as fleece animals. The Guanaco and Vicuna are found in the wild. Of these 4 Camelids only the Vicuna cannot be domesticated, having a wild and untameable nature.

### Alpacas

They were kept for their fleece and not as a source of food. The Inca, Moche and Quechua and pre-Inca believed that when a person died their soul was reborn into the next newborn alpaca. So a herd of Alpaca would be made up of the souls of friends and relatives. To eat an alpaca would have been an abomination.

Australia has the largest Alpaca herd in the world outside of South America.

According to the United Nations Australia is on the brink of becoming the largest producer of commercial grade fleece in the world.

Alpacas are ideally suited to the Australian environment. They are extremely light on the land. According to the CSIRO Alpacas do less damage to the environment and soils than kangaroos.

Alpacas are artiodactyl – they have soft padded feet with 2 toes that have long toe nails. They impact very lightly on Australia's fragile friable soils. Additionally alpacas do not tend to graze down to the roots of pasture grasses, so they do not denude pasturelands. They eat both introduced and native grasses, and browse many different bush and tree leaves. Alpacas like eucalypts, wattles, river oak and will happily munch on the leaves when they can get them.

They have a high mineral requirement and should be supplemented on a regular basis.

### Types of Alpaca

Alpacas come in 2 different types: Suri and Huacaya. The fleece is known as "Fibre of the Gods."

The Suri has fleece that falls in soft, silky ringlets, and they make up around 5-8% of the world's alpaca herd. Alpaca fleece is the elite of the elite fleece. It is highly soft and lustrous, and can be compared to silk. The Inca reserved it for use by the Royal family alone, and the Inca probably used it as a form of currency. Today Suri fleece is used by designers such as Armani and Versace for high end suiting material.

The Huacaya has crimped fleece, much like an merino sheep but so much softer! It is used for all manner of woven, knitted and felted goods.

The fleece is widely acknowledged as one of the most luxurious natural fibres. The fibre is resilient, soft, warm and extremely light weight.

In linear tensile strength Alpaca fleece is almost as strong as Silk, but unlike silk is also strong in cross-section. This means that unlike silk, alpaca can be used in long-wearing and resilient textile such as carpets.

An individual shaft of alpaca fibre has scales that lie almost parallel to the shaft of the fibre itself. This makes alpaca a comfortable fibre to wear, with a very high comfort factor. So unlike sheep wool, alpaca will rarely itch. It also has the advantage of being hypoallergenic.

Additionally Alpaca is flame resistant and will not burn unless it comes in direct and sustained contact with a naked flame.

It tends to have low levels of absorption of ambient humidity

Spinners, Weavers and knitters delight in using alpaca. Alpaca slivers and yarns, when made from good quality fleece have a glossy lustre, and a cool slippery feel.

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Alpaca comes in all natural colours. It is not unusual to see alpaca herds with many different coloured alpacas grazing the paddocks.

Traditionally Alpaca fibre is classed as follows:

Royal Alpaca

is fibre that is under 19 microns

Baby Alpaca is 20 to 25 microns

Alpaca is 25 microns to 29 microns

A Micron is 1 millionth of a metre.

For comparison

Human Hair is around 50 microns

Cashmere 15 - 19 microns

Kid mohair 24 - 26 microns

Mohair 24 - 36 microns

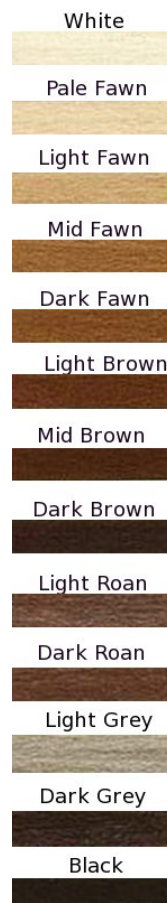
Merino 14 – 22+ microns

Camel 18 - 26 microns

Silk 11 - 20 microns

Linen 15 - 18 microns

Cotton 15-20 microns



## Fibre Testing and Analysis

### Fibre Testing & What it means

There are several fibre testing facilities in Australia. Generally a sample will be taken during shearing, from the mid-side of an alpaca. Many alpaca breeders take their samples from several points on the mid side to get as accurate an analysis as possible.

A Fibre Analysis will be returned with the following information:

#### Micron

A micron is the measurement of the diameter of the fibre. A micron is a millionth of a metre or, if you like, a thousandth of a millimetre. The lower the micron the finer the fibre. It is represented by the greek letter Mu -  $\mu$  or u.

### Comfort Factor

is the measurement of softness and t. Technically, the measurement is the percentage of fibre below 30 microns.

This is generally a measure of the angle of the scales on a shaft of fibre. A comfort factor of 100% tells us that the fibres scales lie parallel to the shaft of the fibre. There will be no scratchiness or itching in this fibre.

CF is also a count of those scales or barbs. All fleece has small barbs along the shaft of the fibre. The more barbs the lower the comfort factor & the more likely wool is to scratch your skin. Sheep wool has many barbs which is why it is often uncomfortable to wear next to the skin.

Alpaca has almost no barbs.

If you are buying alpaca to spin for garments always choose a high comfort factor.

### Standard Deviation of Micron or SD

The fibre tests are done on around 2000 or so fibres. There is always some variation of micron in the fibre sample. The standard deviation tells you +/- how many microns the deviation in diameter can be. eg micron 20 SD 2.1

The average diameter is 20 microns but there are some fibres with a diameter of as little as 17.9 microns & some with as much as 22.1 u.

A micron is an incredibly small measurement & an SD of 5 or less can hardly be felt & makes really very little difference to the quality of the fibre.

### CV or Coefficient of Variance

This is also known as diameter distribution. It is a measurement that tells you about the micron consistency in the fleece ie 18% of the fibres in the sample were more or less than the average Micron

### Fibre curvature (degrees/mm)

Fibre curvature is a primary measure of the frequency of the crimp of the fibres within a Huacaya fleece and the spiral of the lock in the Suri