

Alpaca Owners and Breeders Association (AOBA)

Raw Fiber & Finished Products Committee

Raw Fiber & Finished Products Committee

Results are Here! An Overview of the AOBA Alpaca Fiber Study

What we can say about alpaca fiber:

- Alpaca is flame resistant, meeting the standards of the US Consumer Product Safety Commission's rigid testing specifications as a Class 1 fiber for use in clothing and furnishings.
- Alpaca is resistant to external water penetration like wool, but can slowly wick away perspiration because of its unique ability to act like cotton in moisture regain. These factors are what makes alpaca feel lighter than wool, but warmer than cotton in cool, damp conditions.
- Alpaca is water resistant, making spills easy to clean up before water saturates the fiber allowing stains to develop. It is also adsorbent to oils, meaning that the oils do not penetrate the fibers, but merely cling to the fiber for easy cleaning without harsh chemicals.
- Alpaca is free of lanolin, and thus can be processed without the need for high temperatures or harsh chemicals in washing.
- Alpaca is a natural renewable fiber with a wide range of applications.

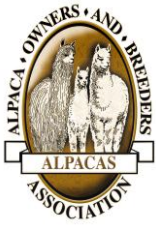
And why can we say these things?

In April 2009, the AOBA Fiber Committee began a comprehensive study to validate claims relating to the benefits of alpaca fiber. The first phase of the proposal was to a) investigate published research findings regarding alpaca fiber, and b) to have testing performed on alpaca fiber in the areas of flammability, moisture management capabilities, and thermal conductivity. The three areas of testing were perceived to be intrinsic properties of alpaca fiber.

In 2009 - 2010, tests were conducted using roving and felt from a wide variety of huacaya and suri fiber with varying microns and colors. Roving and felt were utilized due to the parameters of the individual test requirements while keeping as close to the natural state of the fiber without the need to differentiate weave or knit structure. In all the testing to date, results indicate no significant differences between huacaya and suri fiber for flammability, moisture regain, absorbency or wicking.

Tests were performed using textile industry standard methods outlined by the AATCC, ASTM, and the US Consumer Product Safety Commission.

Disclaimer: This document was created by Alpaca Owners and Breeders Association for information purposes only and contains proprietary and confidential information. You are notified that all materials contained in this document are protected and exclusive property of Alpaca Owners and Breeders Association and may not be reproduced, republished, distributed, transmitted, displayed, broadcast, or otherwise exploited in any manner without the express written permission of Alpaca Owners and Breeders Association.



Alpaca Owners and Breeders Association (AOBA)

Raw Fiber & Finished Products Committee

Findings:

- The literature review is completed. The research review was expanded to include other natural and synthetic fibers and properties so as to make comparisons with alpaca fiber study results. Published research papers specific to the intrinsic properties of alpaca fiber is very limited, although some conclusions can be extrapolated from the extensive studies done in Australia regarding the processing of alpaca fiber in woolen mills.
- Flammability testing is completed, showing that alpaca fiber is a Class I fiber, which is the safest level for flame resistance.
- Moisture regain %, absorbency, and wicking data has been generated. The moisture regain data indicates alpaca fiber is comparable to cotton and linen in that regard. The absorbency and wicking data indicates alpaca fiber is quite water resistant, and comparable to wool. Further testing was done in 2010 to investigate the absorbency qualities of alpaca fiber with oils.
- Results of the findings of the study were presented in Summer 2010 at TAFS, MOPACA, and TAA seminars.

Next steps:

- A series of white papers and presentations are in continued development. Anticipated completion dates are for summer and fall 2011, with posting on the AOBA website.
- Further testing on the thermal conductivity and moisture management capacities of alpaca fiber is needed to establish base values for comfort levels and insulating properties of alpaca. Both these aspects are heavily related to how the fiber is used in specific fabric structure. A study plan is being developed for those attributes. Funding will be required.
- The hypoallergenic properties of alpaca is an area that was identified to be studied in Phase 3. Based on investigations into that subject, the cost may be prohibitive to establish definitive claimable results.

For more information, contact Ruth Fuqua, AOBA Fiber Study Project Manager, AOBA Fiber Committee, at hickorybluffalpacas@comcast.net, and be sure to read the upcoming publications as they are released.

AOBA Fiber Committee

Disclaimer: This document was created by Alpaca Owners and Breeders Association for information purposes only and contains proprietary and confidential information. You are notified that all materials contained in this document are protected and exclusive property of Alpaca Owners and Breeders Association and may not be reproduced, republished, distributed, transmitted, displayed, broadcast, or otherwise exploited in any manner without the express written permission of Alpaca Owners and Breeders Association.