CertainT® Isotope Testing



Know Your Supply Chain with Cotton Origin Verification

Do you know where your cotton comes from? Is there risk in your supply chain based on unknown cotton yarn or fabric used to make your finished product? CertainT® Isotope Testing can help answer these questions with forensic certainty.

Paper documentation related to the importation of textile goods can be easily falsified. In order to overcome these supply chain obstacles, there has been a growing need to physically verify the actual cotton product itself. One method, using stable isotopes can help determine the geographic origin for natural materials such as cotton and other fibers used in global supply chains. This includes identifying the claimed origin and confirming countries or regions of potential risk origin for supply chain authenticity.

What Are Cotton Isotopes?



Cotton is grown in different parts of the world. Two materials can appear to be identical, but they might have important differences depending on where and how the cotton is grown. Isotope testing can help to provide information about the origin and history of a product.

For cotton textile products, we conduct stable isotope testing of carbon, hydrogen and oxygen. These provide innate chemical evidence of geographic and industrial provenance. Isotope analysis can identify signatures for products or materials, which can be compared against known reference samples to verify their authenticity.

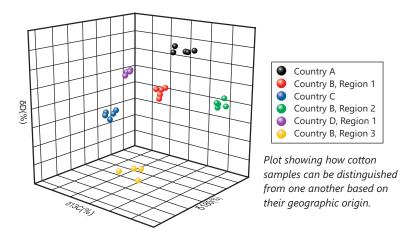






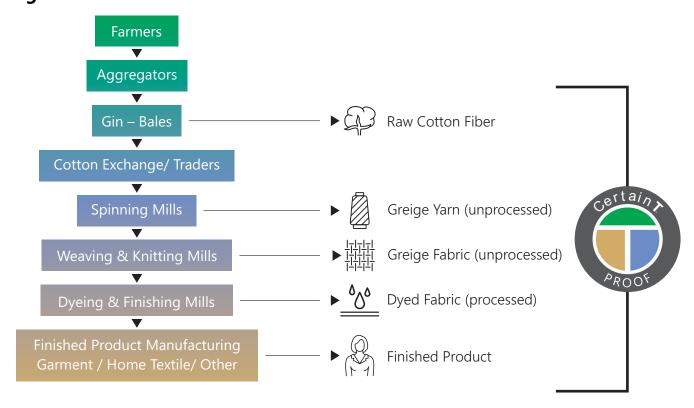
A Complete Solution with CertainT®

CertainT Isotope testing provides a forensic and secure method to establish the origin and regional profile of cotton. Isotope testing is an integral part of the CertainT platform. Analysis of stable isotopic ratios in textile goods can help detect fraud, counterfeiting and illicit trade while safeguarding consumer satisfaction and brand integrity.



The CertainT Cotton Library consists of a comprehensive database of samples from various regions of the world. Employing 3-D graphing techniques along with high-precision isotopic data, we have the tools needed to positively identify the origin/s of cotton from a variety of growing regions around the world.

Linkage of Cotton



The CertainT platform is also helpful to ascertain whether there is linkage of each of the samples to confirm if the finished product is linked to the fiber, yarn and/or fabric. Knowing this information can help you understand the risks in your cotton supply chain.

For more information, please contact us at textilesales@adnas.com.





CertainT® Isotope Testing Frequently Asked Questions

Question: Does CBP accept isotope testing reports as evidence of origin?

Yes. According to CBP, they accept any information as part of Applicability* review, to include isotope reports. For more information about Best Practices for Applicability Review visit:

https://www.cbp.gov/document/guidance/best-practices-applicability-reviews-importer-responsibilities

Question: Does CBP provide guidance on isotope testing reports?

Yes. On November 8, 2024, CPB published its guidance on isotope testing. For more information visit: https://www.cbp.gov/document/publications/isotopic-testing-guide

Question: Does CBP recommend a specific laboratory to conduct isotope testing?

No. U.S. Customs & Border Protection (CBP) cannot recommend specific isotope testing providers.

Question: Does CertainT Isotope Testing meet CBP's guidance for Isotope Testing? If so, how?

Yes. CertainT Isotope Testing meets CBP's guidance for isotope testing. Here's how:



Follows **Forensic Isotope Ratio Mass Spectrometry (FIRMS)**Network Good Practice Guide for Isotope Ratio Mass Spectrometry.



Accredited under the International Organization for Standardization/International Electrotechnical Commission

(ISO/IEC) 17025. Note as we are ISO17025, we do not require accreditation granted by a body that is a signatory to the International Laboratory Accreditation Cooperation-Mutual Recognition Arrangement (ILAC-MRA).



Participation in regular proficiency testing conducted under **ISO 17025** and **FIRMS** that is equivalent or similar to **ISO/IEC 17043** to Conformity Assessment sample provider.



Able to provide all relevant **accreditation certificates** and **proficiency testing reports** to CBP upon request.



Maintain a detailed chain of custody for any submitted sample, from receipt of the sample through disposition.