



Cotton traceability services

**Add value.
Inspire trust.**

Ensuring ethically sourced cotton from its origin to finished product with forensic cotton DNA and isotope testing

Your challenges

In recent years, the global textile industry has faced growing scrutiny for its environmental impact and labor practices. As a result, cotton traceability has emerged as a crucial aspect in addressing these concerns and promoting sustainable and ethical sourcing throughout the supply chain.

Despite its importance, numerous challenges persist in achieving complete cotton traceability, underscoring the need for reliable and efficient traceability services.

Each step in the cotton supply chain often involves multiple suppliers and facilities spread across different countries, making it difficult to accurately trace the cotton's origin and journey.

What is cotton traceability?

Cotton traceability is the process of tracking and determining the origin and journey of cotton from its growth stage to its manufacturing, distribution, and ultimately, the final product. It involves monitoring the processing, transportation, and production of cotton while ensuring compliance with relevant standards and regulations.

Cotton traceability enables transparency and accountability in the cotton supply chain, promoting ethical and sustainable practices.

Why is cotton traceability important for organizations?

Cotton traceability helps organizations meet their ethical, environmental, social and economic responsibilities, while ensuring legal compliance. Below are the benefits.

- 1. Ethical considerations** - Cotton traceability helps to avoid forced labor and other unethical practices in the production process.
- 2. Environmental sustainability** - Cotton traceability allows organisations to source cotton from farms that follow sustainable and environmentally compliant practices.
- 3. Social responsibility** - Comply with fair labor practices and provide safe working conditions.
- 4. Risk management** - Knowing the origin of the cotton and the conditions under which it was produced helps organizations manage potential risks related to their supply chains.
- 5. Supply chain efficiency** - Identify inefficiencies, bottle-necks, and areas for improvement to enable cost savings, better planning, and more seamless operations.

TÜV SÜD has partnered with Applied DNA Sciences (ADNAS) to provide cutting-edge cotton DNA traceability services as part of its product traceability solution.

What actions have been taken to provide cotton traceability solutions?

TÜV SÜD has collaborated with Applied DNA Sciences (ADNAS) to integrate its scientific traceability services with TÜV SÜD's existing product traceability solutions, enhancing their overall offering for cotton traceability.

The CertainT® Cotton Assurance platform from Applied DNA will be integrated with TÜV SÜD's traceability services, providing clients with an expanded range of offerings:

- Risk assessment and supply chain mapping
- Access to Product Traceability Management (PTM) platform for secure documentation, mapping and authentication
- Factory audit and inspection
- Product verification at various supply chain entities
- Cotton source verification includes isotope and DNA genotyping testing services

What cotton traceability services are available to me?

Aside from using the ADNAS's CertainT® platform, we at TÜV SÜD also provide a Product Traceability Management (PTM) platform, forensic cotton DNA traceability, isotope testing and technical expertise to help you enhance your supply chain traceability status.

Our PTM platform helps to:

- Streamline the supply chain by requiring tier-1 to tier-N suppliers to submit their own transaction records exclusively
- Create a simplified supply chain map
- Introduce and enforce measures to implement supply chain privacy protection
- Utilize smart email reminders to aid suppliers in completing traceability requirements
- Establish document review process to ensure that supply chain traceability based on factual information

Our DNA traceability solution helps to:

- Enable cotton traceability through testing at any stage in the supply chain
- Provide forensic authentication based on
 - DNA testing – based on genetic fingerprint for cotton type (e.g. Egyptian, Pima)
 - Isotope testing – based on carbon, hydrogen, oxygen fingerprint
- Provide unique DNA tags in the cotton fiber or filament itself
- Complement with our physical verification process

Why choose TÜV SÜD?

At TÜV SÜD, we understand that every organization has unique needs and challenges. Our team of experts work closely with clients to develop tailored solutions that address specific requirements, ensuring personalized attention and support throughout the process.

TÜV SÜD can help your organization confidently navigate the complexities of cotton traceability and compliance, allowing you to demonstrate your dedication to sustainability, ethical sourcing, social responsibility, and a more responsible supply chain. schemes for different industries.

Add value. Inspire trust.

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specialises in testing, certification, auditing and advisory services. Through more than 25,000 employees across over 1,000 locations, it adds value to its customers, inspiring trust in a physical and digital world.

Related services

TÜV SÜD provides the following related services

- Product performance and endurance testing
- Pre-shipment inspection
- Recycled polyester testing
- Microplastics and textile fiber fragment testing
- Chemical safety of raw materials and products
- Chemical safety of process chemicals according to Zero Discharge of Hazardous Chemicals (ZDHC)
- Biodegradability testing and certification