

FAQs for Textiles and Apparel

• Is counterfeiting a serious problem?

Counterfeiting is a pervasive economic and financial crime that costs businesses around the world an estimated \$650 billion each year (CACF). Counterfeit goods also pose a threat to the health and safety of consumers. From counterfeit medical products and pharmaceuticals to food and beverage products and aircraft and automobile parts, illegally produced goods have caused innumerable injuries and even fatalities.

• How does counterfeiting affect the textiles industry?

The impact is widespread. Between 2005 and 2007, counterfeiting grew at 6.6%, more than double the pace of total apparel market growth. In almost all cases, inferior products and materials are fallaciously labeled – in some the purity or composition of materials is mislabeled; in others, brand names are misappropriated.

From a public health and safety perspective, there is the added risk that a knock-off garment may contain harmful dyes which may be allergenic or even carcinogenic. Some textile products require certain fire-retardant treatments which may not be utilized, or lesser quality textile treatments may be used, that put products such as mattresses, children's apparel and fire-fighter garments at high risk. The general public may not be aware of the consequences of purchasing and subsequently wearing counterfeit garments.

• What is DNA and how can it be used to detect and deter counterfeiting?

Deoxyribonucleic acid (DNA) is the ultimate reality check. DNA is the genetic material that contains the instructions for the development and functioning of plant and animal organisms, and it is found in all living things. The structure or "code" of DNA is unique to the organism to which it belongs and can be used as a "tag" or "unique marker" to identify materials to which it is affixed. It is effectively "nature's fingerprint."

- a. Applied DNA Sciences has developed a unique form of SigNature DNA protection by developing a proprietary, patented method to create a marker or "tag" derived from botanical DNA. SigNature DNA is a green, cost effective and safe technology that can also be incorporated in formulations of textiles and finished-goods.
- b. SigNature DNA can be applied to treat natural material (like raw cotton or wool), yarn, fabric, woven labels and finished goods. DNA cannot be copied due to its enormous variability and provides forensic evidence. The DNA tag persists on all marked items even after multiple launderings .

• How do the solutions created by Applied DNA Sciences work?

Applied DNA Sciences offers two methods of forensic protection and authentication:

Intrinsic DNA: BioMaterial GenoTyping™ is a highly effective DNA test developed by Applied DNA Sciences to authenticate the DNA present in natural materials. Applied DNA Sciences has developed highly effective DNA tests to authenticate original source material, such as the fibers used to produce finished products.

Custom DNA assays can be developed for a host of products including pharmaceuticals, personal care formulations, food ingredients, nutritional supplements and any other product containing inherent or naturally occurring DNA.

Extrinsic DNA: SigNature® DNA are unique, botanically derived markers or “tags” that cannot be copied and due to their enormous variability, provide forensic proof of identity for brand protection. SigNature DNA may be used in packaging and labels providing DNA security ink on the printed surface, DNA-marked adhesive on the back of a label, as well as protecting the serialization or barcode that is linked to a secure database. SigNature DNA is a green, cost effective and safe technology that can also be incorporated in formulations of finished-goods.

• What is unique about the solutions offered by Applied DNA Sciences?

Applied DNA Sciences is currently the only company in the world that makes use of botanical DNA in its authentication analysis. DNA is a trusted form of forensic evidence and widely accepted by Courts around the world. The potential for a false positive is on the magnitude of one in one trillion.

Moreover, there is nothing even close to BioMaterial Genotyping™ which is able to identify different species of cotton, offering a solution to protecting intellectual property for brands, quality assurance, quality controls for textile labeling, and a definitive method for governments around the world to monitor and control trade quotas.

• What’s distinguishes the solutions offered by Applied DNA Sciences from others on the market?

The “tags” or markers produced or used by other anti-counterfeiting solutions companies may themselves be counterfeited or otherwise neutralized by savvy counterfeiters.

SigNature DNA is unique and cannot be counterfeited. What’s more, the quantity of DNA required to produce a marker is so small, sometimes only a molecule that can be hidden literally in the coating of a pill or the thread used in the pin striping of a worsted woolen suit. And, as an added benefit SigNature DNA is a green, cost effective and safe technology that can help to guarantee authenticity.

• Are there other security solutions offered by Applied DNA Sciences?

APDN provides brand owners with bespoke DNA solutions that can be used to protect the integrity, quality and security of a wide range of products. DNA-marked security inks, including: intaglio, inkjet, thermal transfer, UV-curable, screen printed, flexographic and offset printed inks are now available.

The statements made by APDN may be forward-looking in nature and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements describe APDN’s future plans, projections, strategies and expectations, and are based on assumptions and involve a number of risks and uncertainties, many of which are beyond the control of APDN. Actual results could differ materially from those projected due to our short operating history, limited financial resources, limited market acceptance, market competition and various other factors detailed from time to time in APDN’s SEC reports and filings, including our Annual Report on Form 10-K, filed on December 16, 2008 and our subsequent quarterly reports on Form 10-Q. APDN undertakes no obligation to update publicly any forward-looking statements to reflect new information, events or circumstances after the date hereof to reflect the occurrence of unanticipated events.