

Forensic Tape Analysis Training Program



WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

This standard provides guidance to training personnel for developing, implementing, and documenting a comprehensive training program for the forensic examination of pressure-sensitive tapes and adhesives.

The goal of this practice is to facilitate the development of a well-structured training program that can enhance the knowledge, skills, and abilities of examiners responsible for conducting forensic tape analysis, ultimately leading to accurate and reliable forensic investigations.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

Tapes are relatively complex materials that necessitate using an analytical scheme that includes a variety of methods to efficiently detect their physical and chemical properties.

This practice describes the elements to build a well-designed training program that supports accurate forensic tape analysis. It also fosters consistency in the analysis of tape evidence.

The training program will help examiners develop a deeper understanding of the various methods for producing efficient investigative leads or conducting reliable comparative examinations in their casework. Report writing and testimony are also covered so examiners can learn to properly communicate their findings.



HOW IS THIS STANDARD USED, AND WHAT ARE THE KEY ELEMENTS?

This training standard practice is used to help forensic science service providers (FSSPs) develop training curriculums that include a variety of instrumental analysis methods and techniques relevant to the forensic analysis of tape, including methods for the detection of both organic and inorganic components of tape. Examples include Fourier transform infrared spectroscopy (FTIR), Raman spectroscopy, pyrolysis gas chromatography (PGC), scanning electron microscopy-energy dispersive X-ray spectroscopy (SEM/EDS), X-ray fluorescence (XRF), or X-ray diffraction (XRD).

The practice defines the responsibilities of the examiners providing the training, the trainees, and the FSSP. The FSSP is responsible for maintaining an up-to-date training program and training documentation. The suggested syllabus presented emphasizes 1) reading relevant literature, 2) instruction and observation of forensic tape examiners, 3) practical skills, and 4) final competency evaluation.

The program objectives include 1) introducing cases where tape specimens are found, 2) terminology, 3) manufacturing processes, 4) overview and use of examination methods, 5) examination of physical properties, 6) microscopical examinations, 7) examination of reinforcing materials, 8) comparison and discrimination of tape, 9) report writing and testimony, 10) final evaluations, and 11) supervised casework and peer reviews.