



Designation: E 1732 – 96a (Reapproved 2005)

## Standard Terminology Relating to Forensic Science<sup>1</sup>

This standard is issued under the fixed designation E 1732; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This is a compilation of terms and corresponding definitions used in the forensic sciences. Legal or scientific terms that are generally understood or defined adequately in other readily available sources may not be included.

1.2 A definition is a single sentence with additional information included in notes. It is reviewed every five years, and the year of last review or revision is appended.

1.3 Definitions identical to those published by another standards organization or ASTM committee are identified with the abbreviation of the name of the organization or the identifying document and ASTM committee; for example, ASME is the American Society of Mechanical Engineering.<sup>2</sup>

1.4 Definitions of terms specific to a particular field are identified with an abbreviation.<sup>3</sup>

### 2. Referenced Documents

2.1 *ASTM Standards*:<sup>4</sup>

E 456 Terminology Relating to Quality and Statistics

E 1187 Terminology Relating to Conformity Assessment

E 1301 Guide for Proficiency Testing by Interlaboratory Comparisons.

E 1387 Test Method for Flammable or Combustible Liquid Residues in Extracts from Samples of Fire Debris By Gas Chromatography

2.2 *ISO Standards*:

ISO Guide 2, General Terms and Their Definitions Relating to Standardizing Activities

ISO Guide 30, Terms and Definitions Used in Connection with Reference Materials

ISO Guide 17025, General Requirements for the Competence of Calibration and Testing Laboratories

<sup>1</sup> This terminology is under the jurisdiction of ASTM Committee E30 on Forensic Sciences and is the direct responsibility of Subcommittee E30.92 on Terminology.

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<sup>2</sup> Any definition that is unsourced has been developed by ASTM Subcommittee E30.92.

<sup>3</sup> Abbreviations are as follows: CRIM = criminalistics, QD = questioned documents, ENGR = engineering, TOX = toxicology, PB = pathology/biology, ANTH = anthropology, and ODEN = odontology.

<sup>4</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

### 3. Significance and Use

3.1 These terms have particular application to the forensic sciences. In addition, a hierarchy of sources of definitions were used in the development of this terminology. The hierarchy is as follows: *Websters New Collegiate 7th Dictionary*; technical dictionaries; and the *Compilation of ASTM Standard Definitions*.<sup>5</sup> The subcommittee developed a suitable definition after all of the sources in the hierarchy were found wanting.

### 4. Terminology

#### 4.1 Definitions:

**accelerant**, *n*—any material used to initiate or promote the spread of a fire. The most common accelerants are flammable or combustible liquids. Whether a substance is an accelerant depends not on its chemical structure but on its use (source: IAAI Forensic Science Committee, *Glossary of Terms Related to Chemical and Instrumental Analysis of Fire Debris*)<sup>6</sup> (use: Test Method E 1387) CRIM.

**accreditation**, *n*—procedure by which an authoritative body gives formal recognition that a body or person is competent to carry out specific tasks. (ASTM E 1187, ISO guide 2)

**accrediting body**, *n*—governmental or non-governmental body that conducts and administers a laboratory accreditation system, and grants accreditation. (E 1187, ISO Guide 2)

**associative evidence**, *n*—that evidence which tends to link a person, place, or thing with another person, place, or thing.

**calibration**, *n*—the set of operations that establishes, under specified conditions, the relationship between values indicated by a measuring instrument or measuring system or values represented by a material, and the corresponding known values of measurement. (E 1187, ISO 17025)

**certification body**, *n*—a body that conducts certifications of conformity. (E 1187, ISO Guide 2)

**certification of conformity**, *n*—document issued under the rules of a certification system indicating that adequate confidence is provided that a duly identified product, process or service is in conformity with a specific standard or other normative document. (E 1187, ISO Guide 2)

<sup>5</sup> *Compilation of ASTM Standard Definitions*, 7th Ed., ASTM, Philadelphia, PA, 1990.

<sup>6</sup> Available from International Association of Arson Investigators, 5428 Del Maria Way, 201, P. O. Box 91119, Louisville, KY 40291.