



# Standard Practice for Identification of Seized Drugs<sup>1</sup>

This standard is issued under the fixed designation E2329; 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 practice describes minimum criteria for the qualitative analysis (identification) of seized drugs.

1.2 Listed are a number of analytical techniques for the identification of seized drugs. These techniques are grouped on the basis of their discriminating power. Analytical schemes based on these groupings are described.

1.3 Additional information is found in Guides E1968, E1969, E2125, and E2548 and Practices E2326, E2327, E2549, and E2764.

1.4 This standard should be used in conjunction with sound professional judgment, and cannot replace knowledge, skill, or ability acquired through appropriate education, training, and experience.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>2</sup>

E1968 Practice for Microcrystal Testing in Forensic Analysis for Cocaine

E1969 Practice for Microcrystal Testing in Forensic Analysis for Methamphetamine and Amphetamine

E2125 Practice for Microcrystal Testing in Forensic Analysis for Phencyclidine and Its Analogues

E2326 Practice for Education and Training of Seized-Drug Analysts

E2327 Practice for Quality Assurance of Laboratories Performing Seized-Drug Analysis

E2548 Guide for Sampling Seized Drugs for Qualitative and Quantitative Analysis

E2549 Practice for Validation of Seized-Drug Analytical Methods

E2764 Practice for Uncertainty Assessment in the Context of Seized-Drug Analysis (Withdrawn 2020)<sup>3</sup>

### 2.2 Other Document:

SWGDRUG Scientific Working Group for the Analysis of Seized Drugs—Recommendations for: Education and Training, Quality Assurance, Methods of Analysis<sup>4</sup>

## 3. Terminology

3.1 *Definitions*—Terms that may assist in interpreting this practice are found in the SWGDRUG Glossary of Terms and Definitions, Annex A.<sup>4</sup>

## 4. Significance and Use

4.1 These are minimum requirements applicable to the identification of seized drugs.

4.1.1 As these are minimum requirements, it should be recognized that they may not be sufficient for the identification of all drugs in all circumstances. Within these requirements, it is the responsibility of the individual laboratory's management to determine which combination of analytical techniques best satisfies the requirements of its jurisdiction.<sup>5</sup>

4.2 Correct identification of a drug or chemical depends on the competence of the analyst and the use of an analytical scheme that incorporates validated methods (see Practice E2549). It is expected that in the absence of unforeseen error, an appropriate analytical scheme effectively results in reliable and scientifically supported identifications<sup>6</sup> (see Practice E2764).

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee E30 on Forensic Sciences and is the direct responsibility of Subcommittee E30.01 on Criminalistics.

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<sup>2</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.

<sup>3</sup> The last approved version of this historical standard is referenced on www.astm.org.

<sup>4</sup> Available from the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG), <http://www.swgdrug.org/approved.htm>.

<sup>5</sup> EURACHEM, *The Fitness for Purpose of Analytical Methods – A Laboratory Guide to Method Validation and Related Topics*, 2nd ed., 2014.

<sup>6</sup> Milman, B. L., *Chemical Identification and Its Quality Assurance*, Springer-Verlag, 2011.