

Designation: E2329 - 14

# 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  $(\varepsilon)$  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 practice does not replace knowledge, skill, ability, experience, education or training and should be used in conjunction with professional judgment.
- 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 and health practices and determine the applicability of regulatory limitations prior to use.

#### 2. Referenced Documents

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

E1968 Guide for Microcrystal Testing in Forensic Analysis of Cocaine

E1969 Guide for Microcrystal Testing in Forensic Analysis of Methamphetamine and Amphetamine

E2125 Guide for Microcrystal Testing in Forensic Analysis of 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

<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. Current edition approved Dec. 1, 2014. Published December 2014. Originally approved in 2004. Last previous edition approved in 2010 as E2329 – 10. DOI:

<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.

E2549 Practice for Validation of Seized-Drug Analytical Methods

E2764 Practice for Uncertainty Assessment in the Context of Seized-Drug Analysis

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>3</sup>

#### 3. Terminology

3.1 *Definitions*—Terms that may assist in interpreting this practice are found in the SWGDRUG glossary.<sup>3</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 up to the individual laboratory's management to determine which combination of analytical techniques best satisfies the requirements of its jurisdiction.
- 1...4.2 Correct identification of a drug or chemical depends on the use of an analytical scheme based on validated methods (see Practice E2549) and the competence of the analyst. It is expected that in the absence of unforeseen error, an appropriate analytical scheme effectively results in no uncertainty in reported identifications (see Practice E2764).
- 4.3 This practice requires the use of multiple uncorrelated techniques. It does not discourage the use of any particular method within an analytical scheme. Unique requirements in different jurisdictions may dictate the actual practices followed by a particular laboratory.

### 5. Categories of Analytical Techniques

5.1 For the purpose of this practice, techniques for the analysis of drug samples are classified into three categories (see Table 1) based on their maximum potential discriminating power. However, the classification of a technique may be

<sup>&</sup>lt;sup>3</sup> Available from the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG), http://www.swgdrug.org.