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Standard Practice for Identification of Seized Drugs[1]

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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.

2. Referenced Documents

2.1 *ASTM Standards:* [2]

E 1968 Guide for Microcrystal Testing in the Forensic Analysis of Cocaine

E 1969 Guide for Microcrystal Testing in the Forensic Analysis of Methamphetamine and Amphetamine

E 2326 Practice for the Education and Training of Seized-Drug Analysts

E 2327 Practice for Quality Assurance of Laboratories Performing Seized-Drug Analysis

2.2 *Other Document:*

Scientific Working Group for the Analysis of Seized Drugs Recommendations for: Education and Training, Quality Assurance, Methods of Analysis

3. Significance and Use

3.1 These are minimum standards applicable to the identification of seized drugs.

3.2 It is recognized that the correct identification of a drug or chemical depends on the use of an analytical scheme based on validated methods and the competence of the analyst.

3.3 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.

3.4 These are minimum standards for identification of commonly seized drugs. However, it should be noted that they may not be sufficient for identification of all drugs in all circumstances. Within this practice, it is up to the individual laboratory to determine which combination of analytical techniques best satisfies the requirements of its jurisdictions.

4. Categories of Analytical Techniques

4.1 For the purpose of this practice, techniques for the analysis of drug samples may be divided into three categories based on their discriminating power. Table 1 provides examples of techniques in order of decreasing discriminating power, from A to C.

5. Identification Criteria

5.1 This practice requires that the following minimum criteria be followed when making analytical identifications

5.1.1 When a validated Category A technique is incorporated into an analytical scheme, then at least one other technique (from either Category A, B or C) must be used.

5.1.1.1 This combination must identify the specific drug present and must preclude a false positive identification.

5.1.1.2 When sample size allows, the second technique should be applied on a separate sampling for quality assurance reasons. When sample size is limited, additional measures should be taken to assure that the results correspond to the correct sample.

5.1.1.3 All Category A techniques must have data that are reviewable.

5.1.2 When a Category A technique is not used, then at least three different validated methods must be employed.

5.1.2.1 These in combination must demonstrate the identity of the specific drug present and must preclude a false positive identification.

5.1.2.2 Two of the three methods must be based on uncorrelated techniques from Category B.

5.1.2.3 A minimum of two separate samplings should be used in these three tests. When sample size is limited, additional measures should be taken to assure that the results correspond to the correct sample.

5.1.2.4 All Category B techniques must have reviewable data.

5.1.3 For the use of any method to be considered of value, test results must be considered "positive." While "negative" test results provide useful information for ruling out the

[1] 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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[2] 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.