Designation: X XXXX-XX (Assigned by ASTM International)

# Include Ballot Rationale Here (Required for all Ballots)

Standard Test Method for The title should be concise but complete enough to identify the nature of the test, the material to which it is applicable, and distinguish from other similar titles.

This standard is issued under the fixed designation X XXXX; 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.

# Always refer to *ASTM's Form and Style Manual* for more in-depth explanations of each section.

#### 1. Scope

1.1 Include in this section information relating to the purpose of the test method(s). State if

the method is quantitative or qualitative and any known limitations.

1.2 Include in this section the system of units to be used in referee decisions.

1.3 Include in this section any caveats required by ASTM policy such as the caveats on

safety hazards and fire hazards.

1.4 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

1

<sup>&</sup>lt;sup>1</sup> This test method is under the jurisdiction of ASTM Committee and is the direct responsibility of Subcommittee

Current edition approved XXX. XX, XXXX. Published XX XXXX.

THIS DOCUMENT IS NOT AN ASTM STANDARD; IT IS UNDER CONSIDERATION WITHIN AN ASTM TECHNICAL COMMITTEE BUT HAS NOT RECEIVED ALL APPROVALS REQUIRED TO BECOME AN ASTM STANDARD. IT SHALL NOT BE REPRODUCED OR CIRCULATED OR QUOTED, IN WHOLE OR IN PART, OUTSIDE OF ASTM COMMITTEE ACTIVITIES EXCEPT WITH THE APPROVAL OF THE CHAIRMAN OF THE COMMITTEE HAVING JURISDICTION AND THE PRESIDENT OF THE SOCIETY. *COPYRIGHT ASTM, 100 BARR HARBOR DRIVE, WEST CONSHOHOCKEN, PA 19428. ALL RIGHTS RESERVED.* 

# M X XXXX

*health practices and to determine the applicability of regulatory limitations prior to use.* This is ASTM's standard caveat.)

# 2. Referenced Documents

2.1 ASTM Standards:

Only include standards for ASTM or other organizations in this section. Any other references such as books or journals should be footnotes, or References at the end of the document, or in a Bibliography.

# 2.2 Other Standards:

Include other organizations standards here.

# 3. Terminology

# 3.1 *Definitions*:

3.1.1 If a term has a meaning more specialized than its common language dictionary explanation, is used by two or more subcommittees within a committee, or appears in several standards, it is labeled a definition of a term.

# 3.2 Definitions of Terms Specific To This Standard:

3.2.1 When the term is limited in application to the standard in which it needs to be defined, it is labeled as a definition of a term specific to a standard.

# 4. Summary of Test Method

4.1 Include here a brief outline of the test method describing in a passive voice its essential features without the details of the Procedure section.

# 5. Significance and Use

5.1 Include information that explains the relevance and meaning of the test. State the practical uses for the test and how it is typically used. Do not repeat the Scope here.

#### 6. Interferences

6.1 If the successful application of the test method requires the inclusion of explanatory statements on interference effects, include it here; otherwise, omit this section.

#### 7. Apparatus

7.1 Include a brief description of the essential features of the apparatus and equipment required for the test. Do not list common laboratory apparatus such as flasks but include any specially modified forms or unusual sizes of common apparatus. See section F4 of the

Form and Style Manual for more in depth information about sole source of apparatus.

#### 8. Reagents and Materials

8.1 When more than one procedure is included in one standard, list the reagents and materials required for each procedure as a separate section under each subdivision. Where applicable, included specific wording on Purity of Reagents and Purity of Water given in the ASTM Form and Style Manual in Section A12.

#### 9. Hazards

9.1 Specific warning statements identifying a specific hazard and providing information for avoiding or minimizing a particular hazard providing recommendations for treating a situation resulting from an unsuccessfully controlled hazard associated with the use of a standard are listed in this section.

3

#### 10. Sampling, Test Specimens, and Test Units

10.1 Give necessary special directions, in the imperative mood, for physically obtaining sample test units. Give necessary special directions for storage, preservation, and preparation of specimens for the test.

#### 11. Preparation of Apparatus

11.1 Use this section only when detailed instructions are required for the initial assembly, conditioning, or preparation of the apparatus. Give necessary special directions for storage, preservation, and preparation of specimens for the test.

#### 12. Calibration and Standardization

12.1 For apparatus, give detailed instructions in the imperative mood for calibration and adjustment.

12.2 Give detailed instructions for the standardization and use of reference standards and blanks used in the test method.

12.3 Give detailed instructions for the preparation and use of calibration curves or tables.

#### 13. Conditioning

13.1 Specify in the imperative mood the conditioning atmosphere to be used and the time of exposure to the atmosphere, as well as the atmosphere required during the test, where necessary.

#### 14. Procedure

14.1 Include in proper sequence detailed directions for performing the test using the imperative mood with the present tense.

#### 15. Calculation or Interpretation of Results

15.1 For *Calculation*, state the directions in the imperative mood for calculating the results of the tests including any equations and any required significant figures.

15.2 Use *Interpretation of Results* in place of *Calculation* when the results of the test are expressed in descriptive form, relative terms, or abstract values.

## 16. Report

16.1 State here the detailed information required in reporting the results of the test.

#### 17. Precision and Bias

17.1 *Precision*—Precision is the closeness of agreement between test results obtained under prescribed conditions. Every test method shall contain a statement regarding precision of test results obtained in the same laboratory (repeatability) and obtained in different laboratories (reproducibility).

17.2 *Bias*—Bias is a systematic error that contributes to the difference between the mean of large number of test results and an accepted reference value. The bias statement shall describe the bias and methods used to provide corrected test results.

#### 18. Keywords

18.1 Select words, terms, or phrases from the title and body of the standard that best represent the technical information presented in the standard.

## ANNEX

## (Mandatory Information)

## A1. TITLE OF ANNEX

**A1.1** Include in an annex any detailed information that is mandatory but too lengthy for inclusion in the main text.

## APPENDIX

## (Nonmandatory Information)

# **X1. TITLE OF APPENDIX**

**X1.1** This section is informative only and not mandatory.

#### REFERENCES

(1) Only have a Reference section if there are five or more literature references cited within the standard. For four or less references, list them as footnotes.

(2) Use a Bibliography section, if there are references not cited specifically in the standard.

#### Insert tables and Figures here at the end of the template.

# A XXXX

# ASTM Template Toolbar and Keyboard Reference

🗄 🔤 🚾 🏪 🛰 🗴 🗚 💁 🖸 📾 Save As... 🛛 ASTM Standards Units 🗸

This button will insert electronic figures at the end of the draft from your computer. Figures should follow Tables, and should be inserted after all tables have been created, when possible. This button takes you to the bottom of the template; it will then prompt you to locate the appropriate image file on your computer.

This is the Auto Update button. This button initiates an "ASTM Standard Properties" pop-up window that prompts you for the Draft Title, Main Committee Jurisdiction, and Subcommittee Jurisdiction. After you complete this step, the information you entered will automatically appear in the Title and Footnote 1 of the draft. The information in this pop-up window may be updated at any time by clicking the Update Button.

This button will create a table in ASTM's style, based on your specifications, and insert it at the end of the draft. If table data has already been completed in another file, the table may be manually inserted or pasted at the end of the draft without using this button.

This button will create an in-text table, in ASTM's style, based on your specifications, and insert it directly after the text that introduces it. This table will NOT have a title or a border. For example, this type of table may be used in the Precision and Bias section.

 $\times_{3} \times^{3}$  These are the Subscript and Superscript buttons, and they are usually used in equations. You would not use these for footnotes.

<sup>AB<sup>1</sup></sup> This is the footnote button. Just click this and the superscript footnote reference will be placed in the text, and you will be directed to the bottom of the page to fill in the appropriate information for the footnote.

This is the Insert Symbol button, which will enable you to add Greek letters and mathematical symbols into equations and text.

This is the Insert Equation button, which will prompt you to insert an equation and number it correctly for you.

ASTM Standards Units This is the ASTM Standard Units button, which will enable you to place the correct Form and Style Units statement into your standard. Place your cursor in section 1.2 and then click on the button and select the statement you require from the drop down menu. The units statement will overwrite the explanatory statement.

# **Keyboard Reference**

Enter₊J	When typing in a subsection, hit Enter to create a new subsection. For instance, if
	you finished typing section 1.1, when you press Enter, it will create 1.2.

TabUse the Tab key to create subsection of a subsection. For instance, if you want 1.1.1hit Enter, and then the Tab key. Tab can also be used to navigate through tables.

Shiftûtab≒

Use this combination when you want to return to a previous section. For instance if you added 1.1.1 but intended it to be 1.2, use this combination to correct it.

To create a new section in addition to the ones provided for you, place your cursor after the bold heading provided and hit Enter. This should create new section, which you may name appropriately.

# **Saving Your Draft Document**

Use the "Save As" button to save the draft as an MS Word document (.doc file). This will leave the Template file as is and undisturbed for future use. Once you have saved your template correctly, all of the template's features will continue to work each time you open it, as long as your macros are enabled.