



C18.3M, Part 1-2019
Revision of
ANSI C18.3M, Part 1-2013

*American National Standard for
Portable Lithium Primary
Cells and Batteries—
General and Specifications*

Secretariat:

National Electrical Manufacturers Association

Approved: June 25, 2019

American National Standards Institute

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Foreword

(This foreword is not part of American National Standard C18.3M, Part 1-2019.)

This edition of an American National Standard for Portable Lithium Primary Cells and Batteries is based in part on the previous American National Standard for Lithium Primary Cells and Batteries—General and Specifications, ANSI C18.3M, Part 1-2013, and recognizes the work of the International Electrotechnical Commission (refer to IEC Publications 60086-1 and 60086-2) in establishing world-wide Standard requirements for portable lithium primary batteries. As with the previous edition, this edition includes the following chemistries:

Lithium/carbon monofluoride;
Lithium/manganese dioxide;
Lithium/iron disulfide.

Changes in this edition include the deletion of specification sheet number 5048 and maintenance of tests, loads, and minimum average duration values for the remaining specifications.

In April 1996, the then ANSI Accredited Standards Committee C18 on Specifications for Dry Cells and Batteries established a new general format for the publication of its Standards, dividing this Standard into two parts. Part 1 of this American National Standard for Portable Lithium Primary Cells and Batteries contains two basic sections. The first section has general requirements and information, such as the scope, applicable definitions, general descriptions of battery dimensions, terminal requirements, marking requirements, general design conditions, test conditions, etc. Section 2 of Part 1 is comprised of specification sheets for various types of cells and batteries. Part 2 of the Standard, a separate document, contains safety requirements. ANSI C18.4, also another separate Standard, contains environmental requirements.

Suggestions for the improvement of this Standard are welcome. They should be sent to the National Electrical Manufacturers Association, 1300 North 17th Street, Suite 900, Rosslyn, VA 22209, Attention: Secretary ANSI ASC C18.

This Standard was processed and approved for submittal to ANSI by the American National Standards Committee C18 on Portable Cells and Batteries. Committee approval of this Standard does not necessarily imply that all committee Members voted for its approval. At the time Committee C18 approved this Standard, it had the following Members:

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Khaled Masri, Secretary

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1 General

Note: Part 1 does not include safety requirements. Safety requirements can be found in Part 2.

1.1 Scope and Purpose

1.1.1 Scope

This Standard applies to portable lithium primary cells and batteries. This edition includes the following electrochemical systems:

- a. Lithium/carbon monofluoride;
- b. Lithium/manganese dioxide, and
- c. Lithium/iron disulfide.