

Designation: B 371/B 371M - 05

# Standard Specification for Copper-Zinc-Silicon Alloy Rod<sup>1</sup>

This standard is issued under the fixed designation B 371/B 371M; 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.

This standard has been approved for use by agencies of the Department of Defense.

#### 1. Scope\*

- 1.1 This specification establishes the requirements for copper-zinc-silicon alloy rod produced in Copper Alloy UNS Nos. C69300, C69400, C69430, C69700, and C69710.
- 1.1.1 If the purchaser does not specify the alloy to be supplied, product is permitted to be furnished in any of the alloys named in 1.1.
- 1.2 *Units*—The values stated in either inch-pound units or in SI units are to be regarded as standard. Within the text, the SI units are shown in brackets. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with the standard.
- 1.3 The following safety hazard caveat pertains only to 9.1 of this specification. 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 requirements prior to use. (Warning—Mercury is a definite health hazard in use and disposal.)

### 2. Referenced Documents

- 2.1 ASTM Standards: <sup>2</sup>
- B 154 Test Method for Mercurous Nitrate Test for Copper and Copper Alloys
- B 249/B 249M Specification for General Requirements for Wrought Copper and Copper Alloy Rod, Bar, Shapes and Forgings
- E 8 Test Methods for Tension Testing of Metallic Materials E 8M Test Methods for Tension Testing of Metallic Materials (Metric)
- E 54 Test Methods for Chemical Analysis of Special

Brasses and Bronzes<sup>3</sup>

- E 62 Test Methods for Chemical Analysis of Copper and Copper Alloys (Photometric Methods)
- E 478 Test Methods for Chemical Analysis of Copper Alloys

### 3. General Requirements

- 3.1 The following sections of Specification B 249/B 249M constitutes a part of this specification:
  - 3.1.1 Terminology,
  - 3.1.2 Workmanship, Finish, and Appearance,
  - 3.1.3 Sampling,
  - 3.1.4 Number of Tests and Retests,
  - 3.1.5 Specimen Preparation,
  - 3.1.6 Test Methods,
  - 3.1.7 Significance of Numerical Limits,
  - 3.1.8 Inspection,
  - 3.1.9 Rejection and Rehearing,
  - 3.1.10 Certification,
  - 3.1.11 Test Report,
  - 3.1.12 Packaging and Package Marking, and
  - 3.1.13 Supplementary Requirements.
- 3.2 In addition, when a section with a title identical to that referenced in 3.1 appears in this specification, it contains additional requirements which supplement those appearing in Specification B 249/B 249M.

## 4. Ordering Information

- 4.1 Orders for product under this specification shall include the following information:
  - 4.1.1 ASTM designation and year of issue,
  - 4.1.2 Copper alloy UNS No. designation,
- 4.1.3 *Form*—Cross section such as round, hexagon, and so forth,
- 4.1.4 *Dimensions*—Diameter or distance between parallel surfaces,
  - 4.1.5 Length, nominal,
- 4.1.6 *Quantity*—Total weight, footage, or number of pieces, and
- 4.1.7 When product is purchased for agencies of the U.S. government.

<sup>3</sup> Withdrawn.

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee B05 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.02 on Rod, Bar, Wire, Shapes, and Forgings.

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<sup>&</sup>lt;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.