

Designation: B371/B371M - 08(Reapproved 2013)

Standard Specification for Copper-Zinc-Silicon Alloy Rod¹

This standard is issued under the fixed designation B371/B371M; 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 (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. 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 SI units or inchpound units are to be regarded separately as standard. 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 the test methods described in 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.
- 1.4 Warning—Mercury has been designated by EPA and many state agencies as a hazardous material that can cause central nervous system, kidney, and liver damage. Mercury, or its vapor, may be hazardous to health and corrosive to materials. Caution should be taken when handling mercury and mercury-containing products. See the applicable product Material Safety Data Sheet (MSDS) for details and EPA's website (http://www.epa.gov/mercury/faq.htm) for additional information. Users should be aware that selling mercury or mercury-containing products, or both, in your state may be prohibited by state law.

2. Referenced Documents

- 2.1 ASTM Standards:²
- B154 Test Method for Mercurous Nitrate Test for Copper Alloys
- B249/B249M Specification for General Requirements for Wrought Copper and Copper-Alloy Rod, Bar, Shapes and Forgings
- B858 Test Method for Ammonia Vapor Test for Determining Susceptibility to Stress Corrosion Cracking in Copper Allovs
- E8/E8M Test Methods for Tension Testing of Metallic Materials
- E54 Test Methods for Chemical Analysis of Special Brasses and Bronzes (Withdrawn 2002)³
- E62 Test Methods for Chemical Analysis of Copper and Copper Alloys (Photometric Methods) (Withdrawn 2010)³ E478 Test Methods for Chemical Analysis of Copper Alloys

3. General Requirements

- 3.1 The following sections of Specification B249/B249M constitutes a part of this specification:
 - 3.1.1 Terminology,
 - 3.1.2 Materials and Manufacture,
 - 3.1.3 Workmanship, Finish, and Appearance,
 - 3.1.4 Sampling,
 - 3.1.5 Number of Tests and Retests,
 - 3.1.6 Specimen Preparation,
 - 3.1.7 Test Methods,
 - 3.1.8 Significance of Numerical Limits,
 - 3.1.9 Inspection,
 - 3.1.10 Rejection and Rehearing,
 - 3.1.11 Certification,

¹ 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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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.

³ The last approved version of this historical standard is referenced on www.astm.org.