



~~Designation: B 617-98~~ **Designation: B617 – 98 (Reapproved 2004)**

## Standard Specification for Coin Silver Electrical Contact Alloy<sup>1</sup>

This standard is issued under the fixed designation B617; 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 covers 90 % silver-10 % copper alloy tubing, rod, wire, strip, and sheet material for electrical contacts.

~~1.2 This standard does not purport to address all 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 limitations prior to use.~~

~~1.3 It is the responsibility of the user to become familiar with all hazards including those identified in the appropriate Material Safety Data Sheet for this product/material as provided by the manufacturer.~~

~~1.2 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 become familiar with all hazards including those identified in the appropriate Material Safety Data Sheet for this product/material as provided by the manufacturer, to establish appropriate safety and health practices, and determine the applicability of regulatory limitations prior to use.~~

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

B277 [Test Method for Hardness of Electrical Contact Materials](#)

B476 [Specification for General Requirements for Wrought Precious Metal Electrical Contact Materials](#)<sup>2</sup>[Materials](#)

### 3. Manufacture

3.1 Raw materials shall be of such quality and purity that the finished product will have the properties and characteristics prescribed in this specification.

3.2 The material shall be finished by such operations (cold working, heat treating, annealing, turning, grinding, or pickling) as are required to produce the prescribed properties.

### 4. Chemical Composition

4.1 Material produced under this specification shall meet the requirements for chemical composition prescribed in Table 1.

### 5. Mechanical Requirements

5.1 Mechanical properties shall conform to the listings of Table 2 or Table 3.

5.2 All test specimens shall be full thickness or diameter when practical.

5.3 All tests are to be conducted at room temperature, about 68°F (20°C).

### 6. General Requirements

6.1 The provisions of Specification ~~B476~~[B476](#) shall apply to all materials produced to this specification.

### 7. Inspection and Testing

7.1 Material furnished under this specification shall be inspected by the manufacturer as detailed in the applicable provisions of Specification ~~B476~~[B476](#) and as listed as follows:

7.1.1 Visual inspection at 10 $\times$ .

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee [B-2B02](#) on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee [B2.05](#) on Precious Metals.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* Vol 03.04, volume information, refer to the standard's Document Summary page on the ASTM website.