



Standard Specification for Copper-Nickel-Tin Spinodal Alloy Strip¹

This standard is issued under the fixed designation B 740; 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 Department of Defense.

1. Scope *

1.1 This specification establishes requirements for copper-nickel-tin alloy strip in the following alloys:

Copper Alloy UNS No.	Nominal Composition Weight %		
	Copper	Nickel	Tin
C72700	85	9	6
C72900	77	15	8
C72650	87.5	7.5	5

1.2 *Units*—The values stated in inch-pound units and the values stated in SI units in Table 5 are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units and are provided for information only and are not considered standard.

2. Referenced Documents

2.1 The following documents of the issue in effect on date of material purchase form a part of this specification to the extent referenced herein:

2.2 ASTM Standards:

B 248 Specification for General Requirements for Wrought Copper and Copper-Alloy Plate, Sheet, Strip, and Rolled Bar²

B 598 Practice for Determining Offset Yield Strength in Tension for Copper Alloys²

B 601 Classification for Temper Designations for Copper and Copper Alloys—Wrought and Cast²

B 820 Test Method for Bend Test for Formability of Copper Alloy Spring Material²

B 846 Terminology for Copper and Copper Alloys²

E 3 Guide for Preparation of Metallographic Specimens³

E 8 Test Methods for Tension Testing of Metallic Materials³

E 75 Test Methods for Chemical Analysis of Copper-Nickel and Copper-Nickel-Zinc Alloys⁴

E 290 Test Method for Bend Testing of Material for Ductility³

E 478 Test Methods for Chemical Analysis of Copper Alloys⁴

3. General Requirements

3.1 The following sections of Specification B 248 constitute a part of this specification:

- 3.1.1 Terminology,
- 3.1.2 Materials and Manufacture,
- 3.1.3 Dimensions and Permissible Variations,
- 3.1.4 Workmanship, Finish, and Appearance,
- 3.1.5 Sampling,
- 3.1.6 Significance of Numerical Limits,
- 3.1.7 Inspection,
- 3.1.8 Rejection and Rehearing,
- 3.1.9 Certification,
- 3.1.10 Test Reports, and
- 3.1.11 Packaging and Package Marking.

3.2 In addition, when a section with a title identical to that referenced in 3.1 above appears in this specification, it contains additional requirements that supplement those appearing in Specification B 248.

4. Terminology

4.1 For definitions of terms related to copper and copper alloys, refer to Terminology B 846.

5. Ordering Information

5.1 Include the following information in orders for products:

- 5.1.1 Specification number and date,
- 5.1.2 Quantity,
- 5.1.3 Copper Alloy UNS number (see 1.1),
- 5.1.4 Form of material: strip,
- 5.1.5 Temper (see 7.1),
- 5.1.6 Dimensions: thickness and width, and length if applicable,
- 5.1.7 How furnished: rolls or coils, stock lengths with or without ends, specific lengths with or without ends, and

¹ This specification is under the ASTM Committee B05 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.01 on Plate, Sheet, and Strip.

Current edition approved July 10, 2002. Published September 2002. Originally published as B 740 – 84. Last previous edition B 740 – 96.

² Annual Book of ASTM Standards, Vol 02.01.

³ Annual Book of ASTM Standards, Vol 03.01.

⁴ Annual Book of ASTM Standards, Vol 03.05.