



Designation: B792 – 12

Standard Specification for Zinc Alloys in Ingot Form for Slush Casting¹

This standard is issued under the fixed designation B792; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

1. Scope*

1.1 This specification covers commercial zinc alloys in ingot form for remelting for the manufacture of castings from the alloys as specified and designated as shown in [Table 1](#).

1.2 Slush casting alloys are used primarily for the manufacture of hollow castings such as lighting fixtures, lamp bases, and small statues.

1.3 This specification covers two zinc alloys which are specified and designated as follows:

UNS	ASTM
Z34510	Slush Casting Alloy A
Z30500	Slush Casting Alloy B

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.5 *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 (MSDS) 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 The following documents of the issue in effect on date of order acceptance form a part of this specification to the extent referenced herein:

2.2 ASTM Standards:²

[B899 Terminology Relating to Non-ferrous Metals and Alloys](#)

¹ This specification is under the jurisdiction of ASTM Committee B02 on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee B02.04 on Zinc and Cadmium.

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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.

[B908 Practice for the Use of Color Codes for Zinc Casting Alloy Ingot](#)

[B949 Specification for General Requirements for Zinc and Zinc Alloy Products](#)

[E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications](#)

[E88 Practice for Sampling Nonferrous Metals and Alloys in Cast Form for Determination of Chemical Composition](#)

[E527 Practice for Numbering Metals and Alloys in the Unified Numbering System \(UNS\)](#)

[E536 Test Methods for Chemical Analysis of Zinc and Zinc Alloys](#)

2.3 ISO Standards:³

[ISO 3815-1 Zinc and zinc alloys — Part 1: Analysis of solid samples by optical emission spectrometry](#)

[ISO 3815-2 Zinc and zinc alloys — Part 2: Analysis by inductively coupled plasma optical emission spectrometry](#)

3. Terminology

3.1 Terms shall be defined in accordance with Terminology [B899](#).

4. Ordering Information

4.1 Orders for zinc alloy ingot under this specification shall include information as specified in Specification [B949](#), Section 4.

5. Materials and Manufacture

5.1 The alloys may be made by any approved process.

5.2 The material covered by this specification shall be of uniform quality and shall be free from dross, slag, or other harmful contamination. The ingot shall also be reasonably free of surface corrosion and adhering foreign matter.

6. Chemical Requirements

6.1 *Limits*—This alloy shall conform to the requirements as to chemical composition [Table 1](#).

6.2 Chemical requirement procedures shall be in compliance with the provisions of Specification [B949](#), Section 5.2.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

*A Summary of Changes section appears at the end of this standard