



Designation: B750 – 22

Standard Specification for GALFAN (Zinc-5 % Aluminum-Mischmetal) Alloy in Ingot Form for Hot-Dip Coatings^{1,2}

This standard is issued under the fixed designation B750; 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.

1. Scope*

1.1 This specification covers GALFAN, zinc-5 % aluminum-mischmetal (Zn-5Al-MM) alloy (UNS Z38510)³ in ingot form for remelting for use in the production of hot-dip coatings on steel. Alloy composition is specified in [Table 1](#).

1.2 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.

1.3 *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 Safety Data Sheet (SDS) for this product/material as provided by the manufacturer; to establish appropriate safety, health, and environmental practices, and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:⁴

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

[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](#)

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

[E1277 Test Method for Analysis of Zinc-5 % Aluminum-Mischmetal Alloys by ICP Emission Spectrometry](#)

2.2 Other Standard:⁵

[GF-1 Standard Practice for Determination of Cerium and Lanthanum Compositions in GALFAN Alloy \(5 % -0.04 % La-0.04 % Ce-Bal SHG Zn\)](#)

2.3 ISO Standards:⁶

[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](#).

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *mischmetal, n*—a naturally occurring mixture of rare-earth elements in metallic form, primarily cerium and lanthanum.

3.3 Abbreviations:

3.3.1 MM—mischmetal.

3.3.2 Zn-5Al-MM—zinc-5 % aluminum mischmetal.

4. Ordering Information

4.1 Orders for ingot under this specification shall include the relevant information as listed in Specification [B949](#).

5. Materials and Manufacture

5.1 The alloys may be made by any approved process.

5.2 See appropriate requirements in Specification [B949](#).

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 GALFAN is a registered trademark of the GALFAN Information Center, Inc.

³ UNS number in conformance with Practice [E527](#).

⁴ 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.

⁵ Available from International Lead Zinc Research Organization, 2525 Meridian Parkway, P.O. Box 12036, Research Triangle Park, NC 27709 – 2036, <http://www.ilzro.org>.

⁶ 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