



Designation: B914 – 19

Standard Practice for Color Codes on Zinc and Zinc Alloy Ingot for Use in Hot-Dip Galvanizing of Steel¹

This standard is issued under the fixed designation B914; 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 standard is published with the following objectives:

1.1.1 To establish standard color codes for zinc, zinc alloy and zinc master alloy ingot used by the Hot-Dip Galvanizing industry, and

1.1.2 To standardize the use and application of these color codes.

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 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.*

1.3 *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 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

[B6 Specification for Zinc](#)

[B750 Specification for GALFAN](#)

[B852 Specification for Continuous Galvanizing Grade \(CGG\) Zinc Alloys for Hot-Dip Galvanizing of Sheet Steel](#)

[B860 Specification for Zinc Master Alloys for Use in Hot Dip Galvanizing](#)

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

[B997 Specification for Zinc-Aluminum Alloys in Ingot Form for Hot-Dip Coatings](#)

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

2.3 *ISO Standard:*

[ISO 752 Zinc and Zinc Alloys—Primary Zinc](#)³

2.4 *CEN Standard:*

[EN 1179 Zinc and Zinc Alloys—Primary Zinc](#)⁴

3. Terminology

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

4. Significance and Use

4.1 The purpose of these color codes is to allow for quick identification of ingot bundles or jumbo ingots of alloys used for hot-dip galvanizing. Other than jumbo ingots, this standard is not intended to imply that each ingot will be color-coded but only that each ingot bundle be color coded.

4.2 Each ingot bundle or jumbo ingot shall be identified with the appropriate color code listed in [Table 1](#).

4.3 The color will be applied as a stripe, or stripes, on two adjacent sides of the ingot bundle or jumbo ingot. The color stripes will be applied to include the ingot bundle foot.

4.4 When using multiple stripes, the colored stripes will be applied from left to right as indicated in [Table 1](#).

4.5 In the absence of a written agreement to the contrary between the supplier and end user, the North American color code will be the standard for all North American transactions; for all other transactions the International Color Code will be used.

¹ This practice 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.

Current edition approved July 1, 2019. Published July 2019. Originally approved in 2000. Last previous edition approved in 2013 as B914–13^{ε1}. DOI: 10.1520/B0914-19.

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

⁴ Available from Global Engineering Documents, 15 Inverness Way, East Englewood, CO 80112-5704, <http://www.global.ihs.com>.

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

TABLE 1 Color Codes for Zinc and Zinc Alloys Used for Hot Dip Galvanizing

Alloy	UNS ^A	ASTM Standard	Nominal Composition		Color Code	
			Al	Other	North America ^B	International
Primary Zinc Grades ^C						
SHG	(Z13001)	B6			Yellow	Yellow
HG	(Z14003)	B6			Green	Green
PW	(Z18005)	B6		Pb–1.0 %	Black	Black
CGG Alloys						
	(Z80310)	B852	0.25		Brown/Brown	Yellow/Brown
	(Z80411)	B852	0.35		Blue/Blue	Yellow/Blue
	(Z80511)	B852	0.45		Purple/Purple	Yellow/Purple
	(Z80531)	B852	0.45	Pb–0.02 %	Red/Red	Yellow/Red
	(Z80610)	B852	0.55		Pink/Pink	Yellow/Pink
	(Z80710)	B852	0.65		Green/Green	Yellow/Green
	(Z80810)	B852	0.75		Black/Black	Yellow/Black
	(Z80910)	B852	1.00		Orange/Orange	Yellow/Orange
Master Alloys						
Type A-1	(Z30750)	B860	10.0	High Purity	Red/Green	Yellow/Red/Green
Type A-2	(Z31710)	B860	10.0	Low Purity	Red/Black	Yellow/Red/Black
Type A-3	(Z30503)	B860	5.0	High Purity	Red/Blue	Yellow/Red/Blue
Type A-4	(Z31510)	B860	5.0	Low Purity	Red/Yellow	Yellow/Red/Yellow
Type A-5	(Z31520)	B860	4.0	High Purity	Red/Brown	Yellow/Red/Brown
Type A-6	(Z30504)	B860	4.0	Low Purity	Red/Purple	Yellow/Red/Purple
Type S-1	(Z55710)	B860		Sb–10.0 %	Black/Green	Yellow/Black/Green
Specialty Alloys						
GALFAN ^D	(Z38510)	B750	5.0	Mischmetal	Purple/Blue	Yellow/Purple/Blue
Type 5 (95/5 Zn/Al)		B997	5.0		Purple/Red	Yellow/Purple/Red
Type 10 (90/10 Zn/Al)		B997	10		Purple/Green	Yellow/Purple/Green
Type 15 (85/15 Zn/Al)		B997	15		Purple/Orange	Yellow/Purple/Orange
GALVALUME ^E			55.0	Si–1.5 %	Orange/Green	Yellow/Orange/Green

^A UNS assignments were established in accordance with Practice E527. The last digit of a UNS number differentiates between alloys of similar composition.

^B The North American system is designed to be a simplified version of the International system by eliminating the leading yellow stripe.

^C Color codes taken from European Standard EN 1179.

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

^E GALVALUME is a registered trademark of BIEC International Inc., USA.

5. Keywords

5.1 Alloy A-1; Alloy A-2; Alloy A-3; Alloy A-4; Alloy A-5; Alloy A-6; Alloy S-1; aluminum-zinc alloys; color; color code;

GALFAN; GALVALUME; galvanizing; hot-dip; non-ferrous metals; Type 5; Type 10; Type 15; zinc; zinc alloys; zinc-aluminum alloys; Zn/Al

SUMMARY OF CHANGES

Committee B02 has identified the location of selected changes to this standard since the last issue (B914 – 13^{E1}) that may impact the use of this standard. (Approved July 1, 2019.)

(1) Alloys Type 5, Type 10, and Type 15 from Specification B997 have been added.

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; http://www.copyright.com/