

ICS 35.040
CCS A 24



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 12904-1991

Replacing GB 12904-2003

**Bar code for commodity -- Retail commodity numbering and bar
code marking**

(English Translation)

Issued on: November 7, 2008

Implemented on: November 15, 2009

Issued by: Standardization Administration of China

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Foreword

Section 4.1.1 of this standard, Article 4.1.2, Article 4.2.1.2, paragraph 7, Chapter 9.2, 9.3 and Appendix C, C. 1, Section C. 4 are mandatory, others are recommended.

The Standard and ISO/IEC 15420:2000 "Information technology - Automatic identification and data capture techniques - Bar code symbology specification EAN/UPC "of non-equivalent, combined with" GS1 General Specifications "(2008) and China's actual situation, GB 12904-2003 "commodity bar code" basis, changed its name to "barcode retail commodity numbering and bar code", the standard number remains Change, commodity bar code system standard system is an important criterion.

This standard replaces GB 12904-2003 "commodity bar code." This standard compared with GB 12904-2003 main changes are as follows.

--- Modify the original standard as defined in Chapter 3, "barcode", the deletion of the "commodity identification code", "commodity items", "EAN-13 Suppliers the term product barcode "," EAN-8 barcode for commodity "," UPC-A barcode for commodity "," UPC-E bar code of goods "and" preamble "and Definition, increase the "retail" "retail commodity code", "amplification factor" and "prefix" and other terms and their definitions.

--- Chapter 4, the original standard "commodity identification code" to "code", the original

content is adjusted by addition of section 4.3 "Code of prepared by".

--- Original standard Chapters 5 and 6 were combined to Chapter 5, "bar code indicates", and the original content has been adjusted.

--- Original standard Chapter 7 "symbol size and colors" to Chapter 6, "the bar code symbol design." Barcode color original content with content adjusted to the Appendix F of F. 3.

--- Original content standards in Chapter 8, "signed rank" and Chapter 9 "Symbols quality and determine the rules" of the merger, to Chapter 9, "Article Code symbol quality evaluation and requirements. "Article 8.1 of the original standard" symbol of quality and classification parameters "and Section 9.1" Symbols matter Amount "of content merged into 9.1" bar code symbol quality requirements. "

--- Original standard of Chapter 10, "the principle of selection symbol" to Chapter 7, "the choice of the bar code symbol," and as a mandatory provision.

--- Increased Chapter 8, "the bar code symbol placement."

--- Update Appendix A content of the original standard and instead "GS1 has been assigned to the country (region) encoding organizations prefix code."

--- Cancel the original standard Appendix C "UPC barcode for commodity" content, the words "12 and barcode representation." The original contents of the Adjustment.

--- Keep the original standard Appendix D "commodity bar code system identifier", renamed in Appendix D "EAN/UPC bar code symbology identifier."

--- Remove the original standard Appendix E "barcode reading and printing guidelines" content.

--- Original Standard Appendix F "barcode reference decoding algorithm" to Appendix E, renamed "EAN/UPC bar code reference translation Code algorithm. "

--- Original Standard Appendix G "commodity bar code printing process quality control technology requirements," the content, to Appendix F, renamed "EAN/UPC bar code printing process quality control technology requirements. " the Standard Appendix B, Appendix C, Appendix D, Appendix E are normative appendices, Appendix A and Appendix F for information only.

The standard of the National Logistics Standardization Technical Committee Information Management and centralized.

This standard was drafted. Article Numbering Center of China.

1 Scope

This standard specifies the encoding of retail goods, bar code representation, technical requirements and quality bar code determination rules.

This standard applies to bar code identification of retail goods.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 1988 Technical information interchange bit coded character set (GB/T 1988-1998, eqv ISO/IEC 646.

1991)

GB/T 12508 optical recognition - Alphanumeric character sets for the second part. OCR-B character set of the printed image shapes and sizes (GB/T 12508-1990, eqv ISO 1073-2. 1976) GB/T 12905 Tiaoma term GB/T 14257 goods bar code symbol location GB/T 18283 product barcode for shop GB/T 18348 goods bar code bar code symbol print quality test ISO/IEC 15420 Information technology - Automatic identification and data capture techniques - Bar code symbology specification EAN/UPC ISO/IEC 15424 Information technology - Automatic identification and data capture techniques - Data Carrier Identifiers (including Symbology Identifiers)

3 Terms and Definitions

GB/T 12905 and established in the following terms and definitions apply to this standard.

Bars, air and corresponding code consists of a set of rules arranged in form, that the product code symbologies, including retail trade, transportation packagers Products, logistics units, locations, etc. participant code and bar code identification.

Retailing, according to pre-defined features and pricing, ordering or settlement of transactions in any one product or service.

Retailing, unique code identifies the product identity globally unique.

The first 2 or 3 digits of the product code, unified distribution by the International Article Numbering Association (GS1).

The actual size of the barcode module width (X dimension) is the ratio of 0.330mm barcode size.

4.1 Code Structure

4.1.1 13 code structure

4.1.1.1 Composition

Consists of vendor identification code, commodity item code, check code three parts of the 13-digit code is divided into four structures, the structure shown in Table 1.

Table 1 13-bit code structure

Configuration type vendor identification code commodity item code check code A structure
 X13X12X11X10X9X8X7 X6X5X4X3X2 X1 Structured titanium X13X12X11X10X9X8X7X6
 X5X4X3X2 X1 Structure three X13X12X11X10X9X8X7X6X5 X4X3X2 X1 Structure four
 X13X12X11X10X9X8X7X6X5X4 X3X2 X1

4.1.1.2 Manufacturer Identification Code

Vendor identification code consists of 7 to 10 digits, Article Numbering Center of China is responsible for the allocation and management.

The first 3-digit code for the vendor identification code prefix code, EAN International has been assigned to the Article Numbering Center of China as a prefix code 690 to 695. EAN International has been assigned to the state (or regional) organizations prefix coding Appendix A.

4.1.1.3 Commodity item code

Commodity item code consists of 5 to 2 digits, generally prepared by the manufacturer, it may also be responsible for preparing the Article Numbering Center of China.

4.1.1.4 Checksum

Check code is a number that is used to examine the entire coding right and wrong. Checksum calculation in Appendix B.

4.1.2 8-bit code structure

4.1.2.1 Composition

8-bit code by a prefix code, commodity item code and check code consists of three parts. The structure shown in Table 2.

Table 2 8-bit code structure

Prefix commodity item code check code X8X7X6 X5X4X3X2 X1

4.1.2.2 Prefix code

X8 ~ X6 is a prefix code, EAN International has been assigned to the Article Numbering Center of China's prefix code is 690 to 695.