ISO 15394:2017-11 (E)

Packaging - Bar code and two-dimensional symbols for shipping, transport and receiving labels

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 2

4 Concepts 2
4.1 Principles 2
4.2 Transport package, unit load and transport unit 3
4.2.1 Transport package 3
4.2.2 Unit load 3
4.2.3 Transport unit 3
4.3 Unique transport unit identifier 3
4.4 Label formats 3
4.4.1 Base shipping/transport/receiving label 3
4.4.2 Extended shipping/transport/receiving label 3

5 Data content 4
5.1 Data representation 4
5.1.1 Data in linear bar code symbols 4
5.1.2 Data in two-dimensional (2D) symbols 4
5.1.3 Data in human-readable form 4
5.2 Data elements 4
5.2.1 Unique transport unit identifier 4
5.2.2 Ship to 5
5.2.3 Ship from 5
5.2.4 Key to carrier's database 5
5.2.5 Key to customer's database 5
5.2.6 Other data elements 6
5.3 Concatenating data fields in linear bar code symbols 6
5.3.1 Using GS1 Application Identifiers (AI) 6
5.3.2 Using ANSI MH10.8.2 Data Identifiers (DI) 6
5.4 Structured data files 6
5.4.1 General 6
5.4.2 Shipping and receiving data 6
5.4.3 Supporting documentation application 6
5.4.4 Carrier sorting and tracking applications 7
5.5 Data area identification 7

6 Data carriers 7
6.1 Linear bar code symbols 7
6.2 Two-dimensional symbols 7
6.3 Human-readable information 8
6.3.1 Human-readable interpretation 8
6.3.2 Human translation 8
6.3.3 Data area titles 8
6.3.4 Free text and data 8

6.3.5 Choice of language 8

7 Label design 8
7.1 General considerations 8
7.2 Layout 9
7.2.1 Base label layout 9
7.2.2 Extended label layout 9
7.2.3 Other data 10
7.3 Label dimensions 10
7.3.1 General considerations 10
7.3.2 Label height 10
7.3.3 Label width 10
7.3.4 Data limits 10
7.4 Text size 11
7.4.1 General considerations 11
7.4.2 Specific text dimensions 12
7.5 Material 12

8 Label placement 13
8.1 General considerations 13
8.2 Unit loads (pallets) 13
8.3 Transport packages 13
8.4 Other transport units 14

Annex A (normative) Guidelines for using linear bar code symbols 15

Annex B (normative) Guidelines for using 2D symbols 18

Annex C (informative) Designing compliant labels using a building block approach 37

Annex D (informative) Issues to consider in the drafting of application guidelines or standards conforming to this document 41

Annex E (informative) Label examples 44

Annex F (informative) Recommended label locations on various containers 61

Annex G (informative) The impact of systems confronted with multiple symbologies and formats 64

Bibliography 68