



SLOVENSKI STANDARD

SIST EN 1573:2003

01-oktober-2003

f1bc`_cX]fUb^Y`E`BUYd_UnUa YX]bXi ghJ]`g_]`fUbgdcfh

Bar coding - Multi-industry transport label

Strichcodierung - Multi Industrie Transport Etikett

Code a barres - Etiquette de transport multisectorielle

Ta slovenski standard je istoveten z: EN 1573:1996

[SIST EN 1573:2003](https://standards.iteh.ai/catalog/standards/sist/29ede101-8628-483b-8a90-aa37180fd7ee/sist-en-1573-2003)

<https://standards.iteh.ai/catalog/standards/sist/29ede101-8628-483b-8a90-aa37180fd7ee/sist-en-1573-2003>

ICS:

35.040

Nabori znakov in kodiranje
informacij

Character sets and
information coding

SIST EN 1573:2003

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 1573:2003

<https://standards.iteh.ai/catalog/standards/sist/29ede101-8628-483b-8a90-aa37180fd7ee/sist-en-1573-2003>

EUROPEAN STANDARD

EN 1573

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 1996

ICS 35.040

Descriptors: data processing, character recognition, optical recognition, bar codes, transportation, labelling

English version

Bar coding - Multi industry transport labelCode à barres - Etiquette de transport
multisectorielleStrichcodierung - Multi Industrie Transport
Etikett**Itch STANDARD PREVIEW**
(standards.itech.ai)SIST EN 1573:2003<https://standards.itech.ai/catalog/standards/sist/29ede101-8628-483b-8a90-aa37180fd7ec/sist-en-1573-2003>

This European Standard was approved by CEN on 1996-08-29. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENEuropean Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Contents

	Page
Foreword	3
Introduction	3
1 Scope	4
2 Normative references	4
3 Definitions	4
3.1 License plate	4
3.2 Transport unit	4
4 General concepts	4
5 Data elements	5
5.1 Data elements in bar code	5
5.2 Data identifiers	5
5.3 Data area identification	5
6 Human readable information	5
6.1 Human readable interpretation	5
6.2 Human translation	5
6.3 Free text and data	6
7 Bar codes	6
7.1 Symbology	6
7.2 Narrow element dimension	6
7.3 Wide to narrow ratio for "Code 39" symbols	6
7.4 Quiet zones	6
7.5 Orientation	6
7.6 Placement	6
7.7 Quality	6
7.8 Scanning distances	6
8 Label design	7
8.1 General	7
8.2 Dimensions	7
8.3 Materials	7
9 Optional requirements	7
9.1 Graphics	7
9.2 Free area	7
10 Location of labels	7
Annexe A (informative)	8
Examples of bar coded transport labels	



Foreword

This European Standard has been prepared by Technical Committee CEN/TC 225 "Bar coding", the secretariat of which is held by NNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 1997, and conflicting national standards shall be withdrawn at the latest by March 1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

It is considered that the use of electronic data interchange (EDI) is a significant factor for improved productivity by the efficient administration of logistics. The use of EDI in association with the physical transport and handling of goods requires a clear and unique identifier linking the electronic data and the transport unit.

Bar coded transport labels are in widespread use in the European industry. There exists a number of different standards each designed to meet the requirements of the specific industry sector. For effective and economic use within and between industry sectors one common multi industry standard is a necessity.

It is considered that a bar coded transport label designed for use with UN/EDIFACT messages is the solution as a first step towards a standard bar coded transport label for EDI trading. This European Standard provides that facility.

A bar coded transport label is designed to facilitate the automation of shipping and handling administrative operations. The bar coded information on the transport label may be used to access the appropriate data base which contains detailed information about the transport unit.

Annex A contains examples of bar coded transport labels.

1 Scope

This European Standard

- specifies the general requirements for the design of bar coded transport labels for use by a wide range of industries;
- provides for traceability of transported units by automatic access via a 'license plate' printed in bar code and supplemented where necessary by other identified data presented both in bar code and human readable form.
- provides a choice of bar code symbologies;
- specifies quality requirements, classes of bar code density;
- gives recommendations as to label material, size and the inclusion of free text and any appropriate graphics.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 800	Bar coding - Symbology specifications - "Code 39"
EN 799	Bar coding - Symbology specifications - "Code 128"
prEN 1556	Bar coding - Terminology
prEN 1571	Bar coding - Data identifiers
prEN 1572	Bar coding - Unique identifier for transport units
prEN 1635	Bar coding - Test specifications - Bar code symbols

3 Definitions

For the purposes of this standard the definitions of prEN 1556 and the following apply:

3.1 license plate (number): A unique number, regardless of use, specified by the label issuer and applied to a transport unit to provide access to traceability data regardless of content and destination and valid for the lifetime of the transport unit.

3.2 transport unit: A package intended for transportation comprising one or more articles, wrapped or unwrapped, and when multiple articles constrained to form a unit.

4 General concepts

The purpose of a bar coded label is to facilitate the automatic exchange of data among all members within a channel of distribution, e.g. supplier, carrier, purchaser, other intermediaries. The amount of data both in bar code and in human readable form is dependent on the requirements of the trading partners. Where a bar coded label is used in conjunction with electronic data bases and/or electronic data interchange (EDI) systems the amount of data may be significantly reduced by the use of only one data, the unique identifier for the transport unit (see 5.1 a)).

Trading partners, have different information requirements. Some information may be common to two or more trading partners while other information may be specific to a single trading partner.

Information for various trading partners becomes available at different times, eg:

- order processing information at the time of processing the order;
- product specific information at the point of manufacture or packaging;
- transport information at the time of shipment.

Trading partners can find it necessary to include significant data elements dealing with the above which may be presented both in bar code (see 5.1 b)) and human readable form (see 6.2).

5 Data elements

5.1 Data elements in bar code

The following data elements in bar code shall be provided as indicated:

- a) A unique identifier (license plate number) printed in bar code in accordance with prEN 1572;
- b) Other data elements which may be printed in bar code depending upon agreement between the trading partners, eg:
 - 1) supplier information;
 - 2) customer information;
 - 3) transport information.

5.2 Data identifiers

Data elements in bar code shall include data identifiers in accordance with prEN 1571.

UCC/EAN application identifiers in accordance with prEN 1571 shall only be used in conjunction with "EAN 128" symbology being a subset of "Code 128" in accordance with EN 799. ANSI/FACT data identifiers in accordance with prEN 1571 shall be used in conjunction with either "Code 39" in accordance with EN 800 or "Code 128" in accordance with EN 799.

5.3 Data area identification

Data areas, that are, those areas presenting information in bar code (see 5.1) or human readable form (see clause 6) shall be identified with the corresponding data area title and may be prefixed by the appropriate data identifier. (see 5.2).

EXAMPLE 1: (K) Customers Purchase Order Number, where (K) is an ANSI/FACT data identifier.

EXAMPLE 2: (400) Customers Purchaser Order Number, where (400) is a UCC/EAN application identifier.

6 Human readable information

6.1 Human readable interpretation

In order to provide a fall back key entry and a diagnostic, trouble shooting and maintenance facility a human readable interpretation of each bar code symbol shall be provided adjacent to the bar code. Such human readable interpretation shall represent the encoded data.

6.2 Human translation

Where human translation of bar code information is required, other than in 6.1, it shall be:

- a) a translation of the bar codes and shall exclude non significant characters;
- b) in a separate section of the label;
- c) divided into fields;

- d) identified by appropriate data area identification (see 5.3).

6.3 Free text and data

Human readable information not being a translation of the bar coded information may be provided according to the requirements of the trading partners.

7 Bar codes

7.1 Symbology

Bar code symbology shall be one of the following:

- a) "Code 39" in accordance with EN 800;
- b) "Code 128" in accordance with EN 799.

7.2 Narrow element dimension

The X dimension shall not be less than 0,250mm.

NOTE: Symbols with the X dimension at lower values, i.e. 0,250mm to 0,330mm may require special care in order to meet the quality requirements of 7.7.

7.3 Wide to narrow ratio for "Code 39" symbols

The wide to narrow ratio (N) of elements of "Code 39" symbols in accordance with EN 800 should be 3,0:1. The measured ratio should be 2,4:1 to 3,2:1.

7.4 Quiet zones

Bar code symbols should be printed with leading and trailing quiet zones not less than 6,4mm. Where the X dimension is greater than 0,64mm the quiet zones should not be less than 10 X.

7.5 Orientation

Bar code symbols should be presented on transported units with the bars vertical (picket fence orientation). Subject to agreement between trading partners bars may be presented horizontally (ladder orientation), which, from a scanning perspective, may be more appropriate for roll products, such as reels of paper.

7.6 Placement

Bar code fields should be placed to ensure that they do not interfere with each other when scanned.

NOTE: Placing bar codes side by side can interfere with successful bar code scanning such that only one bar code is read.

7.7 Quality

The minimum print quality, measurement aperture and inspection wavelength depend on the application and shall be agreed by the industry or trading partners concerned. The quality of the printed bar code symbol shall be determined in accordance with prEN 1635.

7.8 Scanning distances

Bar code symbols should be printed in accordance with 7.2 and where appropriate with 7.3. Scanning distances appropriate to bar code symbols having various X dimensions are set out in table 1.

Table 1: Scanning distance

Dimensions in millimeters

X dimension	Scanning distance
0,25	< 250
0,33	100 to 450
0,38	150 to 550
0,43	200 to 650
0,50	350 upwards

8 Label design

8.1 General

The design of the label is the responsibility of the industry or trading partners concerned and includes the 'license plate number' (see 3.1 and 5.1 a)) and takes account of the following elements:

- the size and number of bar codes (see clause 7);
- the size and number of human readable information (see clause 6);
- free text (see 6.3);
- graphics, e.g. safety, hazard, quality signs (see 9.1);
- logos, e.g. suppliers logo (see 9.1).

8.2 Dimensions

The width of the label should be 105mm or 148mm. The height of the label shall be specified by the user.

<https://standards.iteh.ai/catalog/standards/sist/29ede101-8628-483b-8a90-aa37180fd7ec/sist-en-1573-2003>

8.3 Materials

Label material and fixing shall be selected having regard to the following:

- security of fixing for the active life of the label;
- maintenance of readability for the active life of the label;
- the environment, e.g. contamination, heat, light;
- ultimate disposability.

9 Optional requirements

9.1 Graphics

Certain graphics may be required, e.g. safety, hazard, quality signs, logos, for additional information.

9.2 Free area

Free areas may be added to the label according to the requirements of the trading partners and subject to the size requirements in 8.2.

10 Location of labels

Labels should be placed on the side of the package with the human readable information parallel to the natural bottom of the package. The edge of the label(s) should be a minimum of 32mm from any package edge.

Unit loads should have the label affixed on two adjacent sides. Labels should be affixed at a suitable location where there is a minimum risk of damage. Trading partners may require the placement of the label on the top of the transport unit.