



SLOVENSKI STANDARD
SIST EN 13046:2001
01-februar-2001

Embalaža - Upogibne valjaste kovinske tube - Mere in odstopanja

Packaging - Flexible cylindrical metallic tubes - Dimensions and tolerances

Packmittel - Zylindrische Metalltuben - Maße und Grenzabmaße

Emballage - Tubes souples métalliques cylindriques - Dimensions et tolérances

Ta slovenski standard je istoveten z: EN 13046:2000

[SIST EN 13046:2001](https://standards.iteh.ai/catalog/standards/sist/90c2cc83-b0a6-45c5-9684-7dfbb995d6dd/sist-en-13046-2001)

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ICS:

55.120

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Cans. Tins. Tubes

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13046

July 2000

ICS 55.120

English version

Packaging - Flexible cylindrical metallic tubes - Dimensions and tolerances

Emballage - Tubes souples métalliques cylindriques -
Dimensions et tolérances

Packmittel - Zylindrische Metalltuben - Maße und
Grenzabmaße

This European Standard was approved by CEN on 15 June 2000.

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.

This European Standard exists 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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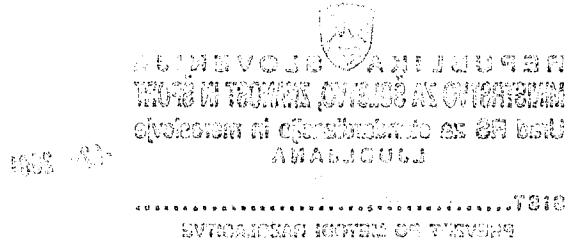
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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

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 January 2001, and conflicting national standards shall be withdrawn at the latest by January 2001.

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

It is based on the professional recommendations of the European Tube Association (ETA).

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1 Scope

This standard specifies the diameters, lengths, wall thicknesses, shoulder thicknesses and geometry of cylindrical metallic collapsible tubes.

It is applicable to tubes used for packing pharmaceutical, cosmetic, hygiene, food and other domestic and industrial products.

2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the 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 (including amendments).

ISO 209-1	Wrought aluminium and aluminium alloys - Chemical composition and forms of products - Part 1 : Chemical composition
EN ISO 11683	Packaging - Tactile warnings of danger - Requirements (ISO 11683:1997)
EN 12374	Packaging - Flexible tubes – Terminology

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3 Terms and definitions

For the purposes of this standard the terms and definitions in EN 12374 and the following apply :

3.1 [SIST EN 13046:2001](https://standards.iteh.ai/catalog/standards/sist/90c2cc83-b0a6-45c5-9684-7dfbb995d6dd/sist-en-13046-2001)
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nominal diameter, D

diameter d_1 of the tube measured at the shoulder (see in Figure 1).

3.2

nominal length, L

length l_1 , shown in figure 1. It is the measured distance between the shoulder and the open end of the tube.

3.3

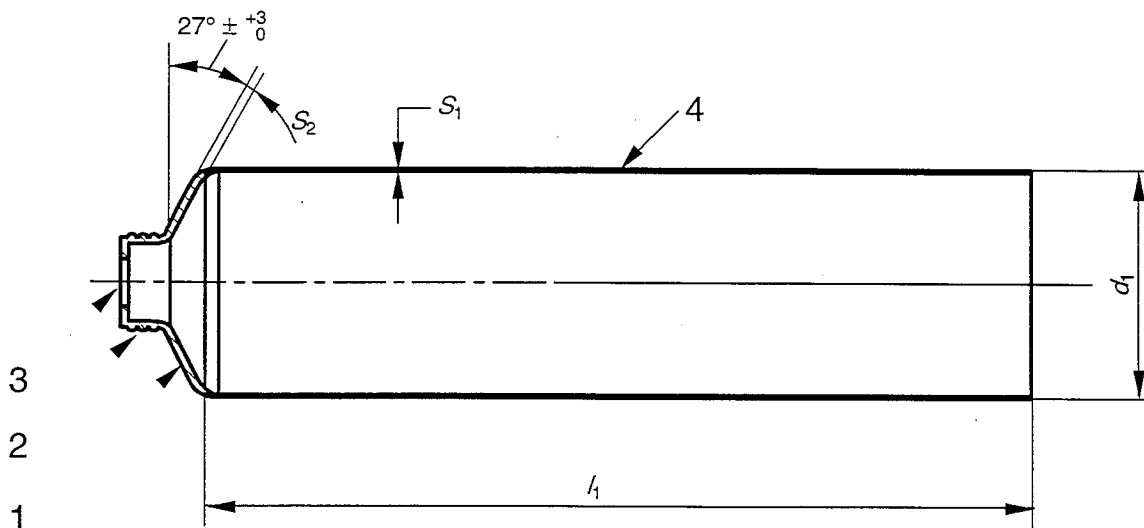
thickness of the sleeve, S₁

thickness of the body wall of the tube.

3.4

thickness of the shoulder, S₂

thickness of the wall measured at the shoulder.



Key

- 1 Shoulder
- 2 Nozzle
- 3 Orifice
- 4 Body (Tube sleeve)

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Figure 1 — Cylindrical metallic tube

4 Dimensions

All tube dimensions shall be in accordance with table 1:

Table 1 — Dimensions (measurements in mm)

Nominal diameter	d_1 +0,1 -0,2	Standard length (a) $l_1 \pm 0,5$	Wall thickness (b) S_1		Shoulder thickness (b) S_2	
			Thickness	Tolerance	Thickness	Tolerance
11	11	Up to 55	0,08	+ 0,03	0,4	+ 0,2
13,5	13,5	Up to 90				
16	16	Up to 100				
19	19	Up to 120				
22	22	Up to 130				
25	25	Up to 150	0,10	- 0,01	0,5	0
28	28	Up to 170				
30	30	Up to 175	0,12	+ 0,04	0,6	+ 0,3
32	32	Up to 175				
35	35	Up to 180				
38	38	Up to 180	0,13	- 0,01	0,7	0
40	40	Up to 200				
45	45	Up to 200				
50	50	Up to 200				

^{a)} It is technically possible to produce tubes longer than specified here. If required, the chosen length shall be the subject of a separate agreement between customer and supplier.

^{b)} Without internal lacquer or external decoration.