



SLOVENSKI STANDARD
oSIST prEN 16565:2021
01-september-2021

Embalaža - Prožne tube - Preskusna metoda za ugotavljanje orientacije zaskočnega pokrova

Packaging - Flexible tubes - Test method to determine the orientation of the flip-top cap

Verpackung - Tuben - Prüfverfahren zur Bestimmung der Ausrichtung des Klappdeckelverschlusses

Emballage - Tubes souples - Méthode d'essai pour la détermination de l'orientation de l'obturateur à charnière

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Ta slovenski standard je istoveten z: prEN 16565

ICS:

55.120

Pločevinke. Tube

Cans. Tins. Tubes

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en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 16565

September 2021

ICS 55.120

Will supersede EN 16565:2014

English Version

Packaging - Flexible tubes - Test method to determine the orientation of the flip-top cap

Emballage - Tubes souples - Méthode d'essai pour la détermination de l'orientation de l'obturateur à charnière

Verpackung - Tuben - Prüfverfahren zur Bestimmung der Ausrichtung des Klappdeckelverschlusses

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 261.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (prEN 16565:2021) has been prepared by Technical Committee CEN/TC 261 “Packaging”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 16565:2014.

In comparison with the previous edition, the following technical modifications have been made:

- considered in Clause 1 Scope, cylindrical tubes;
- in Clause 5 Execution, correction of the conversion Formula (1);
- in Clause 6 Test Report, specification of the date of the publication of this document.

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prEN 16565:2021 (E)

1 Scope

This document specifies a method to test the orientation of the flip-top cap on flexible cylindrical tubes [1].

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

2 Normative references

There are no normative references in this document.

3 Terms and definitions

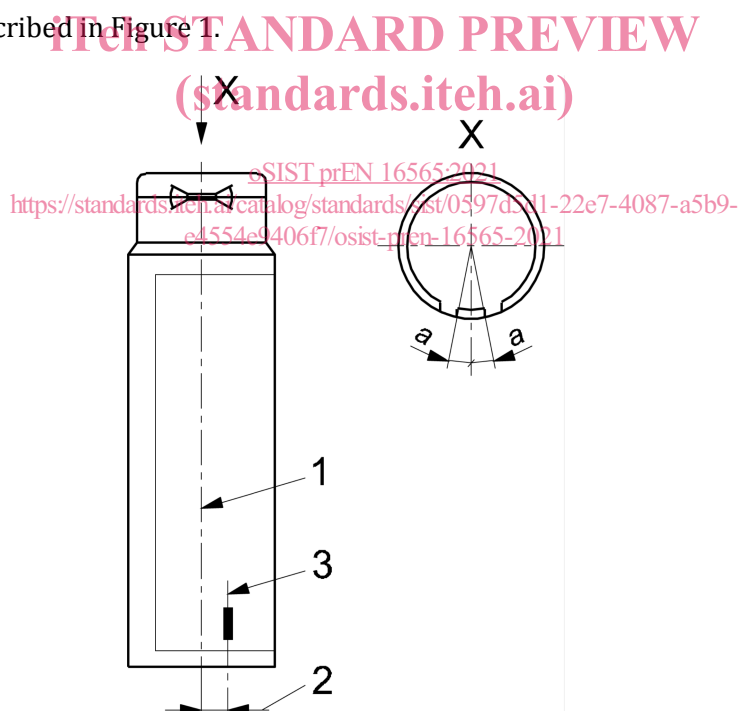
No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Test principle and testing equipment

The test principle is described in Figure 1.



Key

- a maximum deviation in mm/degree
- 1 axis of symmetry of cap hinge
- 2 deviation
- 3 axis of symmetry of back printed face

Figure 1 — Test principle

Any test equipment which is able to accurately measure the correct orientation of the flip-top cap can be used. An example for a suitable test device is given in Figure 2.

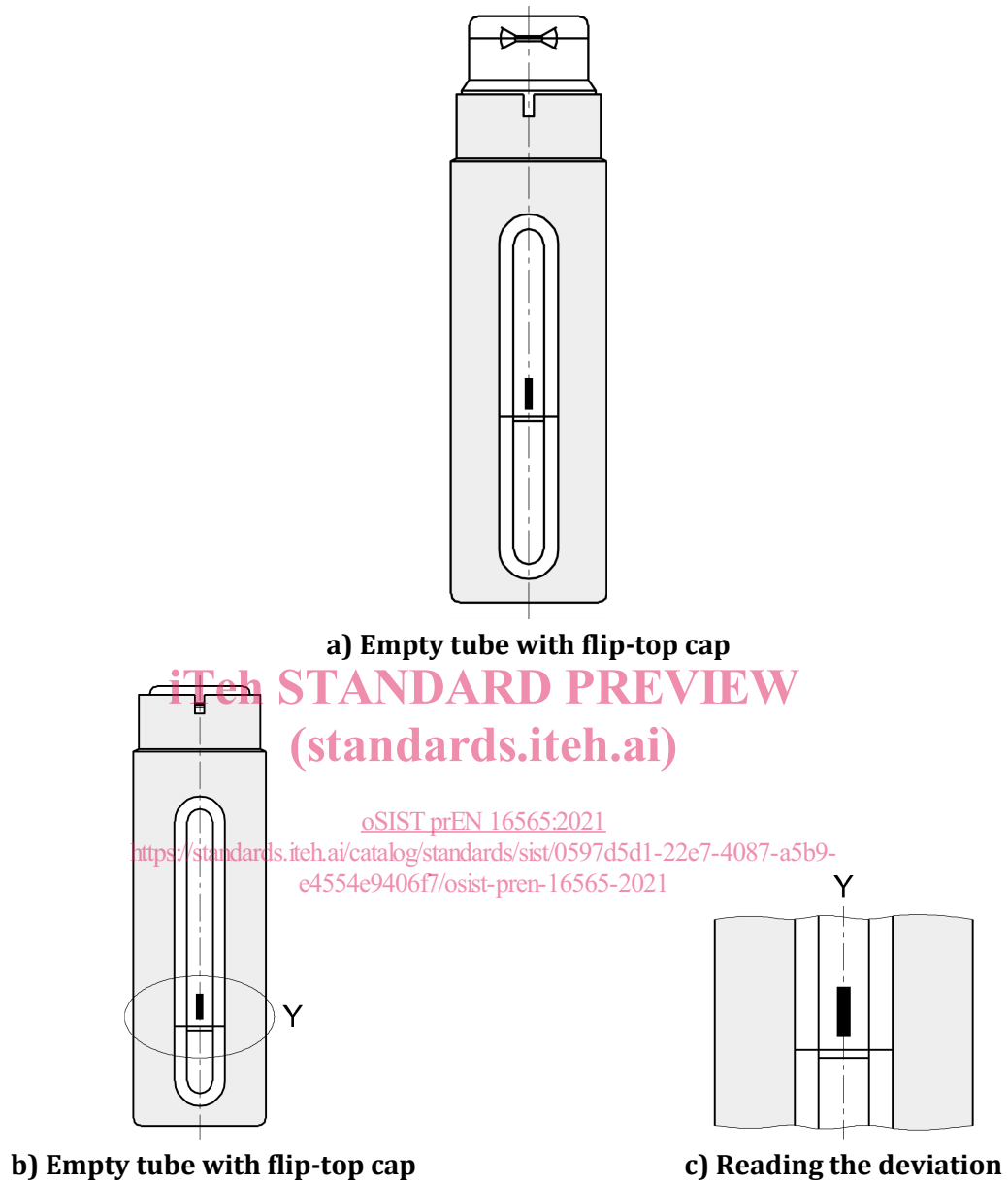


Figure 2 — Example for test device and measurement

5 Execution

Take samples of the finished product (empty tube including flip-top cap).

Measure the deviation with the test device.

Read the deviation.

The maximum deviation shall be within the limits given in Table 1.

Table 1 — Maximum deviation in mm and degree depending on tube diameter

Tube diameter D mm	Maximum deviation X \pm mm	Maximum deviation Y \pm °
19	3	18,1
22	3	15,6
25	3	13,8
28	3	12,3
30	3	11,5
32	3	10,7
35	3	9,8
38	4	12,1
40	4	11,5
45	4	10,2
50	6	13,8
56	6	12,3
60	6	11,5

Conversion Formula (1) for the maximum deviation (X) in degree versus maximum deviation (Y) in millimetres:

$$X = \frac{Y \times 360}{\pi \times D} \quad (1)$$

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where

X is the maximum deviation value in degrees (°);

Y is the maximum deviation in millimeters (mm);

D is the tube diameter (mm);

π is 3,14.

6 Test report

The test report shall contain the following information:

- reference to this document (including publication date) and, if necessary, a specification for the method of sampling and acceptance of the batch;
- the identification of the batch and of the tubes checked;
- the date of production;
- the number of tubes checked;
- the number of defects;

- f) the test result;
- g) all factors which could have affected the results or all operating details not specified in this document;
- h) date, place of test and name of tester.

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Bibliography

- [1] EN 12374, *Packaging - Flexible tubes - Terminology*

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