SLOVENSKI STANDARD
oSIST prEN 12377:2013

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Embalaža - Prožne tube - Preskusna metoda za zračno tesnost zapork

Packaging - Flexible tubes - Test method for the air tightness of closures

Packmittel - Tuben - Prüfverfahren zur Bestimmung der Luftdichtheit der Verschlüsse

Emballage - Tubes souples - Méthode d'essai de l'étanchéité à l'air des bouchons d'obturation

Ta slovenski standard je istoveten z: **prEN 12377**

ICS:

55.120	Pločevinke. Tube	Cans. Tins. Tubes

oSIST prEN 12377:2013 **en,fr,de**

EUROPEAN STANDARD

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prEN 12377

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ICS 55.120

Will supersede EN 12377:1998

English Version

Packaging - Flexible tubes - Test method for the air tightness of closures

Emballage - Tubes souples - Méthode d'essai de l'étanchéité à l'air des bouchons d'obturation

Packmittel - Tuben - Prüfverfahren zur Bestimmung der Luftdichtheit der Verschlüsse

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.

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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
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Foreword

This document (prEN 12377:2013) 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 12377:1998.

1 Scope

This European Standard specifies a test method for airtightness of the closures for flexible tubes.

It is applicable to flexible single-layer metal or plastics tubes and multilayer or laminated tubes used for packing pharmaceutical, cosmetic, hygiene, food and other domestic and industrial products.

2 Principle

The detection of air bubbles escaping from the cap, when the tube is held under water and subjected to an internal air pressure of 0,25 bar.

3 Apparatus

3.1 Air compressor with an initial minimum pressure of 2 bar, equipped with an air regulator allowing a constant and stable pressure of 0,25 ± 0,01 bar.

3.2 Manometer accurate to 0,01 bar.

3.3 Conical connector, adapted to the diameter of the tube, which allows the attachment of the open end of the tube to the compressed air source without leaks.

3.4 Transparent glass container of a size such as to allow the head of the tube to be immersed in water.

4 Procedure

The test shall be carried out on the capped tube at an ambient temperature of between 10°C and 25°C.

Attach the open end of the tube to the compressed air source with the conical connector (see figure 1).

Set the air regulator so as to maintain an air pressure of (0,25 ±0,01) bar inside the tube.

Immerse the head of the tube in the water ensuring that the cap is totally immersed for at least 3 s.

During the test period some bubbles might occur shortly after immersing the tube into the water due to air which is present under the closure before immersing the tube. After a test period of 3 s without bubbles, the tube closure is considered to be tight.

5 Test report

The test report shall contain the following information :

a) The reference to this standard and if necessary a specification for the method of sampling and the acceptance of the batch.

b) The complete identification of the batch and of the tubes tested.

c) The number of tubes tested.

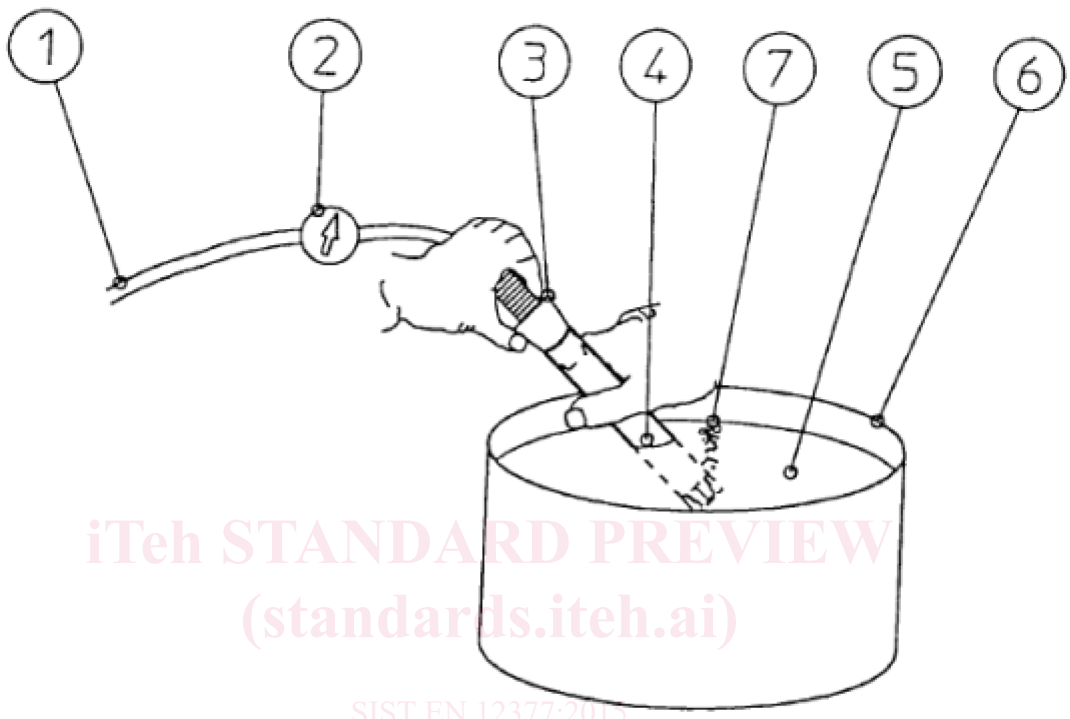
d) The number of defects.

e) If applicable, acceptance or refusal of the batch in accordance with specifications (see a)).

f) All factors which could have affected the results, or all operating details not specified in this standard.

g) Date of test.

h) Name of the tester.



1 - Compressed air line infeed

2 - Manometer gauge

3 - Conical applicator

4 - Tube under test

5 - Water

6 - Transparent glass container

7 - Air bubbles

Figure 1 — Diagram of the test device