SLOVENSKI STANDARD
SIST EN 1161:2000

01-december-2000

Feather and down - Test methods - Determination of moisture content

Feather and down - Test methods - Determination of moisture content

Federn und Daunen - Prüfverfahren - Bestimmung des Feuchtigkeitsgehaltes

Plumes et duvets - Méthodes d'essai - Mesure de la teneur en humidité

Ta slovenski standard je istoveten z: EN 1161:1996

ICS:

59.040 Pomožni materiali za tekstilije Textile auxiliary materials

SIST EN 1161:2000 en

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1161

August 1996

ICS 67.120.20; 97.160

Descriptors: stuffings, feathers, tests, determination of content, humidity, samples

English version

Feather and down - Test methods - Determination of moisture content

Plumes et duvets - Méthodes d'essai - Mesure de la teneur en humidité

Federn und Daunen - Prüfverfahren - Bestimmung des Feuchtigkeitsgehaltes

This European Standard was approved by CEN on 1996-05-09. 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.

CEN

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

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

Foreword

This European Standard has been prepared by the Technical Committee CEN/TC 222 "Feather and down as filling material for any article, as well as finished articles filled with feather and down", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by February 1997, and conflicting national standards shall be withdrawn at the latest by February 1997.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.

1 Scope

This European Standard specifies a procedure to determine the moisture content of an individual sample of feather and down.

2 Definitions

For the purposes of this standard the following definition applies:

moisture content: The ratio between the loss of mass of a test specimen by drying at (105 ± 2) °C and the initial mass of the same test specimen.

3 Principle

The moisture content is determined by drying the test specimen at (105 ± 2) °C until a constant mass is obtained. The test specimen is weighed before and after this operation.

4 Apparatus

4.1 An analytical balance (with sensitivity of 0,1 mg)

4.2 Weighing containers, water-vapour proof and with tightly fitting lids

4.3 Oven, capable of being controlled at (105 ± 2) °C, and suitably ventilated

4.4 Tongs

4.5 A desiccator with desiccating agent

5 Preparation of the test specimen

A representative part of the laboratory bulk sample shall be drawn and mixed. From this, two test specimens of about 5 g weighed with an accuracy of 1 mg each shall be drawn, taking care to avoid humidity variation, and placed into containers (4.2).

6 Procedure

6.1 The uncovered container and the lid shall be placed for 2 h ±10 min in the oven at a temperature of (105 ± 2) °C.
The container shall then be covered, and using clean tongs quickly transferred to the desiccator. After cooling to room temperature for not less than 1 h the covered container shall be weighed.

This procedure shall be repeated until a constant mass, within 1 mg, is obtained.

6.2 A representative test specimen of about 5 g weighed with an accuracy of 1 mg shall then be transferred as quick as possible to the predried container taking care to avoid humidity variations. The container shall be covered with a lid and weighed with an accuracy of 1 mg.

6.3 The containers and the lids shall be placed separately in the oven and dried at (105 ± 2) °C. After drying for 1 h ± 10 min the container and the lid shall be transferred using clean tongs to the desiccator, and allowed to cool for not less than 1 h.
After cooling to room temperature, the containers with the lids shall be transferred using clean tongs to the analytical balance and weighed. The heating, cooling and weighing cycle shall be repeated until the mass of the container with a dried lid is constant to within 1 mg.

6.4 Repeat the procedure on a second test specimen.

7 Expression of results

The moisture content expressed in percentage is calculated as follows:

$$M_c\% = \frac{A-B}{A-C} x100$$

where:

M_c is the moisture content in percent;
A is the mass of the container with lid and undried individual sample;
B is the mass of the container with lid and dried individual sample;
C is the mass of the container with a dried lid.

All masses shall be expressed in grams, to three decimal values.

Calculate the mean of the two determinations with the approximation to the nearest integer.

8 Test report

The test report shall include at least the following information:

- the reference to this standard;

- date and place of testing;

- identification mark of the individual sample tested;

- the arithmetic mean result to the nearest integer in accordance with clause 7;

- any departure from the procedure and any other circumstances that can have affected the result.