INTERNATIONAL STANDARD

ISO 2030

Second edition
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Granulated cork — Size analysis by mechanical sieving

Granulés crus de liège — Analyse granulométrique par tamisage mécanique

Reference number
ISO 2030:1990(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 2030 was prepared by Technical Committee ISO/TC 87, *Cork*.

This second edition cancels and replaces the first edition (ISO 2030:1976), which has been technically revised.

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Granulated cork — Size analysis by mechanical sieving

1 Scope

This International Standard specifies a method to obtain granule size distribution of granulated cork by mechanical sieving.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 565:1990, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings.*

ISO 1997:1972, *Granulated cork and cork powder — Specifications.*

ISO 2067:1988, *Granulated cork — Sampling.*

3 Principle

Mechanical sieving of a test portion in specified conditions. Weighing of each portion of sieved material.

4 Apparatus

4.1 Screening column, comprising:

4.1.1 Cover, which shall fit the sieves perfectly (see 4.1.2 and 4.1.3).

4.1.2 Sequence of sieves, whose mesh apertures conform to the series ISO/R 40/3 (see ISO 565). The first sieve corresponds to the dimension just higher than the maximum wanted, the next to the last corresponds to the dimension just lower than the minimum wanted, and the last corresponds to the dimension of the powder.

4.1.3 Base, which shall fit the sieves perfectly (see 4.1.2).

4.1.4 Vibrator, capable of producing 300 vertical vibrations of 5 mm amplitude per minute and having a rotating speed of 1 rev/min.

4.1.5 Balance, accuracy 0,1 g.

5 Sampling

Sampling shall be carried out in accordance with ISO 2067.

6 Procedure

6.1 Test portion

Take at random, from the sample, three test portions of about 50 g each, for the granulated cork with bulk density equal to or lower than 60 kg/m^3, or of about 100 g each, for the granulated cork with bulk density higher than 60 kg/m^3. Weigh the test portions.

6.2 Determination

Fit together the screening column (4.1), lift the cover (4.1.1), place a test portion (6.1) in the upper sieve (4.1.2) of the column and replace the cover. Place the screening column on the vibrator (4.1.4) and let the latter run for a period of between 9 min and 11 min; then weigh on the balance (4.1.5) the quantities of granulated cork held in each sieve (4.1.2) as well as the quantity gathered at the base (4.1.3).

Carry out three tests, each time with a different test portion.

7 Expression of results

7.1 The mass of the granulated cork, as a percentage, held by the sieve (i) is given by

$$\frac{m_i}{m_0} \times 100$$

where

m_0 is the mass, in grams, of the test portion;

m_i is the mass, in grams, of granulated cork held by the sieve (i).

7.2 The mass of cork powder, as a percentage, is given by the formula

$$\frac{m_f}{m_0} \times 100$$

where

m_0 is as in 7.1;

m_f is the mass, in grams, of the powder gathered at the base.

7.3 Express the results as the arithmetic means of the values arrived at for the three test samples, rounding them off to the nearest integer.

8 Test report

The test report shall include the following particulars:

a) complete identification of the sample;

b) the results obtained;

c) reference to this International Standard;

d) any operational details not specified in this International Standard, or regarded as optional;

e) any occurrences that may have affected the results.

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