INTERNATIONAL STANDARD 2189

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Cork — Expanded pure agglomerated cork — Determination of bulk density

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2189 was drawn up by Technical Committee ISO/TC 87, *Cork.*

It was approved in March 1971 by the Member Bodies of the following countries:

France	Italy	Spain
Germany	Portugal	United Kingdom
Iran	South Africa, Rep. of	Yugoslavia

No Member Body expressed disapproval of the document.

Printed in Switzerland

Cork — Expanded pure agglomerated cork — Determination of bulk density

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method of determination of the bulk density of expanded pure agglomerated cork.

2 REFERENCE

ISO 2219, *Cork — Expanded pure agglomerated thermal cork — Characteristics, sampling and packing.*

3 APPARATUS

3.1 Balance, accurate to within 0.5 g.

3.2 Electric oven, capable of maintaining a constant temperature of 103 ± 2 °C.

3.3 Metal ruler, graduated in 0.5 mm.

3.4 Electric disc saw.

4 SAMPLING

Sampling shall be carried out in accordance with ISO 2219.

5 PROCEDURE

5.1 Preparation of sample

Use the saw (3.4) to cut from each sample board one right-angled parallelepiped shaped test sample measuring not less than 30 cm × 30 cm and not more than 50 cm × 50 cm and having the same thickness as the board. The surfaces of these test samples must be plane and parallel.

5.2 Determination

Carry out the tests at room temperature and humidity.

Use the ruler (3.3) to measure the linear dimensions of the test samples.

Then dry the test samples in the oven (3.2) at a temperature of 103 ± 2 °C until constant mass is obtained (i.e. until the results of two consecutive weighings at an interval of 1 h in the oven do not differ by more than 0.5 % of the initial mass of the test sample). After drying, remove the test samples from the oven and allow to cool to room temperature. Weigh again on the balance (3.1).

6 EXPRESSION OF RESULTS

The apparent density (ρ) of the test sample, expressed in kilograms per cubic metre, is given by the formula

$$\rho = \frac{m}{V} \times 10^3$$

where

m is the mass of the test sample, in grams, rounded off to the nearest integer;

V is the volume of the test sample, in cubic centimetres, rounded off to the nearest integer, obtained from the formula

$$V = l \times b \times \delta$$

l, b and δ being respectively the length, width and thickness of the test sample, in centimetres, rounded off to the nearest tenth.

Take as the result the arithmetic mean of the individual apparent densities obtained from three determinations, rounded off to the nearest integer.

7 TEST REPORT

The test report shall give the following information:

a) the result obtained;

b) the method used;

c) all details of procedure not specified in this International Standard, or optional;

d) any occurrences that may have affected the result;

e) every detail needed to fully identify the sample.