
Composition cork — Gasket material — Test methods

*Aggloméré composé de liège — Joints pour industries mécaniques —
Méthodes d'essai*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html

This document was prepared by Technical Committee ISO/TC 87, *Cork*.

This fourth edition cancels and replaces the third edition (ISO 4078:2015), of which it constitutes a minor revision. The change compared to the previous edition is as follows: in [Table 1](#) the line “Sealing behaviour” was deleted.

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Composition cork — Gasket material — Test methods

1 Scope

This document specifies test methods to determine the characteristics of agglomerated composition cork and rubbercork to be used as gaskets in the mechanical industry. The following characteristics are considered:

- thickness,
- apparent density,
- tensile strength,
- compressibility and recovery,
- flexibility,
- resistance to boiling water,
- behaviour in fluids.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 633, *Cork — Vocabulary*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 7322:2014, *Composition cork — Test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 633 and the following apply.

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

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

3.1

composition cork

product obtained from the agglutination of cork granules with the addition of a binder generally not derived from corkwood cells

3.2

rubbercork

product manufactured as a compound of cork granules and rubber, which can be used either in the form of granules or as a binder

3.3

failure

appearance of any crack, break or surface separation

3.4

disaggregation

substantial loss of particles and/or splitting open of a test specimen during the test

4 Apparatus

Material specified in ISO 7322, and the following.

4.1 Series of mandrels, with diameters ranging from 8 mm to 25 mm, in steps of 1 mm.

4.2 Air circulation oven, capable of being maintained at $(100 \pm 2) ^\circ\text{C}$.

4.3 Open containers.

4.4 Oven or climatic room, capable of being maintained at $(23 \pm 5) ^\circ\text{C}$ and $(50 \pm 5) \%$ relative humidity.

4.5 Absorbent paper, of analysis type.¹⁾

4.6 Aluminium foil.

4.7 Cutting system, to cut the test specimens.

5 Reagents

5.1 ASTM IRM 903 oil, or equivalent oil meeting the specifications given in [Annex A](#).

5.2 ASTM IRM 901 oil, or equivalent oil meeting the specifications given in [Annex A](#).

5.3 ASTM Fuel A, or equivalent fuel meeting the specifications given in [Annex A](#).

6 Sampling and preparation of test specimens

6.1 Sampling

The number of packages from each lot (at least three packages) and the quantity of material to be taken from the sample shall be in accordance with ISO 2859-1 for the inspection level agreed between the interested parties.

6.2 Preparation of the test specimens

6.2.1 From each sheet of material and using the cutting system ([4.7](#)), take test specimens at a distance of at least 100 mm from the edges. The number and dimensions of the test specimens shall be as specified in [Table 1](#). Each test specimen shall be squarely cut with the edges perpendicular to its surface, and shall not show any cracks or folds.

1) Paper Whatman No. 4 has demonstrated proper absorptive properties for oils. This is an example of a suitable product available commercially. This information is given for the convenience of users of this document and should not be taken as an endorsement by ISO of this product.