
**Rubber, vulcanized or thermoplastic —
Rubber sheets and rubber-coated
fabrics — Determination of transmission
rate of volatile liquids (gravimetric
technique)**

*Caoutchouc vulcanisé ou thermoplastique — Feuilles de caoutchouc
et supports textiles revêtus de caoutchouc — Détermination du taux
de transmission des liquides volatils (technique gravimétrique)*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 6179 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 2, *Testing and analysis*.

This fourth edition cancels and replaces the third edition (ISO 6179:1998), of which it constitutes a minor revision intended to update the normative references (ISO 471 and ISO 4648 have been replaced by ISO 23529).

Rubber, vulcanized or thermoplastic — Rubber sheets and rubber-coated fabrics — Determination of transmission rate of volatile liquids (gravimetric technique)

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

CAUTION — Certain procedures specified in this International Standard may involve the use or generation of substances, or the generation of waste, that could constitute a local environmental hazard. Reference should be made to appropriate documentation on safe handling and disposal after use.

1 Scope

This International Standard specifies two methods for determining, by measurement of the transmission rate, the permeability of rubber to volatile liquids diffusing into open air.

It is applicable only to materials in sheet form and to coated fabrics having thicknesses between 0,2 mm and 3,0 mm.

It is restricted to transmission rates of more than 0,1 g/m²·h.

The methods are particularly useful for comparing the relative transmission rates of one liquid through different materials, or of several liquids through one material.

Method A, with refilling, is used when testing mixtures of liquids which give different transmission rates.

Method B, with no refilling, is used for a single-component liquid.

NOTE A method for the determination of water vapour transmission rate is given in ISO 2528, *Sheet materials — Determination of water vapour transmission rate — Gravimetric (dish) method*.

2 Normative references

The following referenced documents are indispensable for the application 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 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 2231, *Rubber- or plastics-coated fabrics — Standard atmospheres for conditioning and testing*

ISO 2286-3, *Rubber- or plastics-coated fabrics — Determination of roll characteristics — Part 3: Method for determination of thickness*

ISO 3310-1, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*