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Rubber, vulcanized or thermoplastic — Determination of permeability to gases —

Part 1: Differential-pressure methods

*Caoutchouc vulcanisé ou thermoplastique — Détermination de la
perméabilité aux gaz —*

Partie 1: Méthodes à pression différentielle



Reference number
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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.

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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 2782-1 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 2, *Testing and analysis*.

Together with Part 2, it cancels and replaces ISO 2782:2006, which has been technically revised.

ISO 2782 consists of the following parts, under the general title *Rubber, vulcanized or thermoplastic — Determination of permeability to gases*:

- *Part 1: Differential-pressure methods*
- *Part 2: Equal-pressure method*

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Introduction

The measurement of the permeability of rubber to gases is important in the evaluation of compounds for products such as inner tubes, tubeless-tyre liners, hoses, balloons and other gas-containing products, as well as seals and diaphragms. The measurement is also of theoretical importance in the study of the characteristics of gas diffusion and gas solubility in relation to polymer structure.