



**International
Standard**

ISO 247-1

**Rubber — Determination of ash —
Part 1:
Combustion method**

*Caoutchouc — Détermination du taux de cendres —
Partie 1: Technique de combustion sèche*

**Second edition
2026-08**

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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 document 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).

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For an explanation of 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 www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO 247-1:2018), which has been technically revised.

The main changes are as follows:

- addition of incineration temperature for compounds containing calcium carbonate in "Method C";
- revision of the condition for determining constant weight in "Method C".

A list of all parts in the ISO 247 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Rubber — Determination of ash —

Part 1: Combustion method

1 Scope

This document specifies three methods for the determination of ash from raw rubbers, compounded rubbers and vulcanizates. The methods are applicable to raw, compounded or vulcanized rubbers of the M, N, O, R and U families described in ISO 1629 [\[1\]](#), except that:

- Method A is not used for the determination of ash from compounded or vulcanized rubbers containing chlorine, bromine or iodine;
- Method B is used for compounded or vulcanized rubbers containing chlorine, bromine or iodine. It is not applicable to uncompounded rubbers;
- Method C is intended to be used for the determination of ash from raw, compounded or vulcanized rubber not containing chlorine, bromine or iodine by wrapping the test portion in ashless filter paper;
- lithium and fluorine compounds can react with silica crucibles to form volatile compounds, giving low ash results.

This document does not cover the interpretation of the ash results as to the inorganic chemical content of a compound or vulcanizate, which is the responsibility of the analyst, who must be aware of the behaviour of rubber additives at elevated temperatures.

WARNING — Persons using this document should be familiar with normal laboratory practice. This document 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 determine the applicability of any other restrictions.

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

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 248-1, *Rubber, raw — Determination of volatile-matter content — Part 1: Hot-mill method and oven method*

ISO 1795, *Rubber, raw natural and raw synthetic — Sampling and further preparative procedures*

3 Terms and definitions

No terms and definitions are listed in this document.

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

- IEC Electropedia: available at <http://www.electropedia.org/>