
**Rubber compounding ingredients —
Carbon black — Determination of ash**

*Ingrédients de mélange du caoutchouc — Noir de carbone —
Détermination du taux de cendres*



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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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 3, *Raw materials (including latex) for use in the rubber industry*.

This fourth edition cancels and replaces the third edition (ISO 1125:1999), of which it constitutes a minor revision. It also incorporates ISO 1125:1999/Amd.1:2011.

The modifications include updating the normative references (in Clause 2 and throughout the text), moving precision data in an informative annex and adding a Bibliography.

Rubber compounding ingredients — Carbon black — Determination of ash

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.

1 Scope

This International Standard specifies a method for determining the ash of all types of carbon black for use in the rubber industry.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1124, *Rubber compounding ingredients — Carbon black shipment sampling procedures*

3 Principle

An accurately weighed portion of dried sample is ignited in a crucible until all the carbonaceous material is oxidized. The crucible is cooled in a desiccator, weighed, and the percentage of ash calculated.

4 Apparatus

4.1 Muffle furnace, capable of maintaining a temperature of $550\text{ }^{\circ}\text{C} \pm 25\text{ }^{\circ}\text{C}$ (or other required temperature).

NOTE The use of a vented furnace would decrease the time of heating to constant mass (see 6.3).

4.2 Porcelain crucible, tall form, diameter 35 mm, height 30 mm, with lid.

The use of the lid on the crucible is optional. If it is not used, this shall be mentioned in the test report.

4.3 Analytical balance, accurate to 0,1 mg.

4.4 Desiccator.

4.5 Oven, preferably of the gravity-convection type, capable of temperature regulation to within $\pm 1\text{ }^{\circ}\text{C}$ at $125\text{ }^{\circ}\text{C}$ and temperature uniformity to within $\pm 5\text{ }^{\circ}\text{C}$.

5 Sampling

Carry out sampling in accordance with ISO 1124.