
**Clothing and equipment for protection
against heat — Test method for
convective heat resistance using a hot
air circulating oven**

*Vêtements et équipement de protection contre la chaleur — Méthode
d'essai de la résistance à la chaleur de convection au moyen d'un four
à circulation d'air chaud*

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 94, *Personal safety — Protective clothing and equipment*, Subcommittee SC 13, *Protective clothing*.

This second edition cancels and replaces the first edition (ISO 17493:2000), which has been technically revised with the following changes:

- the specifications for the apparatus have been improved and completed ([5.1](#), [5.2](#), [5.4](#), new [5.5](#), [5.6](#), [5.7](#));
- procedures for the calibration of the test oven have been added (new [Clause 7](#));
- a list of ASTM standards related to ISO 17493 is given in the Bibliography.

Introduction

This test method allows for the evaluation of the heat resistance of materials, protective clothing and equipment when suspended in a hot air circulating oven at a specified temperature of typically 180 °C or 260 °C for typically 5 min. Visible observations of charring, deformation, delamination, hole formation, ignition, melting of the specimen are recorded. The exposure in the hot air circulating oven may be used either for a visual evaluation only or as a pre-treatment for a material property measurement such as shrinkage or other property measurement which is not specified in this document.

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