# INTERNATIONAL STANDARD



First edition 2000-12-01

## 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



Reference number ISO 17493:2000(E)

#### **PDF** disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

this document is a preview generated by the set

© ISO 2000

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.ch Web www.iso.ch

Printed in Switzerland

### 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 grafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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 International Standard may be the subject of patent rights. ISO shall not be held reconsible for identifying any or all such patent rights.

International Standard ISO 17493 was prepared by Technical Committee ISO/TC 94, Personal safety — Protective clothing and equipment, Subcommittee SC Protective clothing.



this document is a preview denerated by EUS

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

#### 1 Scope

This International Standard describes a test method for evaluating the heat resistance of protective clothing materials or items and equipment when exposed in a hot air circulating oven. The method is intended to evaluate physical changes in a material at a given exposure temperature. Materials are evaluated for visible changes or subjected to a material property measurement following heat exposure. This test method also enables the measurement of shrinkage that obeyes as a result of the heat exposure.

Different procedures are provided depending on the type of the protective clothing material or item being tested.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standard

ISO 139:1973, Textiles — Standard atmospheres for conditioning and testing.

ISO 3759:1994, Textiles — Preparation, marking and measuring of fabric specimens and garments in tests for determination of dimensional change.

ISO 3873:1977, Industrial safety helmets.

ISO 4643:1992, Moulded plastics footwear — Lined or unlined poly(viny) (Noride) boots for general industrial use — Specification.

#### 3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

#### 3.1

#### charring

formation of a carbonaceous residue when material is exposed to thermal energy

#### 3.2

#### clothing

materials worn by a person, including textile and other sheet materials, accessories such as slide fasteners and hook and loop fasteners, bands, reflective tapes and small whole items such as gloves

#### 3.3

#### embrittlement

formation of a brittle residue when material is exposed to thermal energy