



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN ISO 6942:2022

Protective clothing - Protection against heat and fire - Method of test: Evaluation of materials and material assemblies when exposed to a source

Vêtements de protection - Protection
contre la chaleur et le feu - Méthode
d'essai: Évaluation des matériaux et
assemblages des matériaux exposés à

Schutzkleidung - Schutz gegen Hitze und
Feuer - Prüfverfahren: Beurteilung von
Materialien und Materialkombinationen,
die einer Hitze-Strahlungsquelle

09/2022



National Foreword

This European Standard EN ISO 6942:2022 was adopted as Luxembourgish Standard ILNAS-EN ISO 6942:2022.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

<https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html>

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

ILNAS-EN ISO 6942:2022

EUROPEAN STANDARD **EN ISO 6942**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2022

ICS 13.340.10

Supersedes EN ISO 6942:2002

English Version

**Protective clothing - Protection against heat and fire -
Method of test: Evaluation of materials and material
assemblies when exposed to a source of radiant heat (ISO
6942:2022)**

Vêtements de protection - Protection contre la chaleur
et le feu - Méthode d'essai: Évaluation des matériaux et
assemblages des matériaux exposés à une source de
chaleur radiante (ISO 6942:2022)

Schutzbekleidung - Schutz gegen Hitze und Feuer -
Prüfverfahren: Beurteilung von Materialien und
Materialkombinationen, die einer Hitze
Strahlungsquelle ausgesetzt sind (ISO 6942:2022)

This European Standard was approved by CEN on 17 June 2022.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 6942:2022) has been prepared by Technical Committee ISO/TC 94 "Personal safety -- Personal protective equipment" in collaboration with Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2023, and conflicting national standards shall be withdrawn at the latest by March 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 6942:2002.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 6942:2022 has been approved by CEN as EN ISO 6942:2022 without any modification.

**Protective clothing — Protection
against heat and fire — Method of test:
Evaluation of materials and material
assemblies when exposed to a source
of radiant heat**

*Vêtements de protection — Protection contre la chaleur et le feu
— Méthode d'essai: Évaluation des matériaux et assemblages des
matériaux exposés à une source de chaleur radiante*



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative reference	1
3 Terms and definitions	1
4 Principle	2
4.1 Method A.....	2
4.2 Method B.....	2
5 Apparatus	3
5.1 General.....	3
5.2 Source of radiation.....	3
5.3 Specimen holder.....	4
5.4 Calorimeter.....	4
5.5 Temperature recorder.....	6
5.6 Apparatus location.....	6
6 Sampling	6
7 Test conditions	7
7.1 Conditioning atmosphere.....	7
7.2 Testing atmosphere.....	7
7.3 Heat flux density.....	7
8 Test method	7
8.1 Preliminary measures.....	7
8.2 Calibration of the radiant source.....	8
8.3 Procedure for method A.....	8
8.4 Evaluation A.....	9
8.5 Procedure for method B.....	9
8.6 Evaluation B.....	9
9 Test report	10
Annex A (informative) Precision of method B	11
Bibliography	13