

**Kaitserõivad. Kaitse kuumuse ja tule eest.
Katsemeetod soojuskiirgusallikale
eksponeeritud materjalide ja
materjalikogumite hindamiseks**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 6942:2002 sisaldab Euroopa standardi EN ISO 6942:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 12.07.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 6942:2002 consists of the English text of the European standard EN ISO 6942:2002.</p> <p>This document is endorsed on 12.07.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies two complementary methods (method A and method B) for determining the behaviour of materials for heat protective clothing subjected to heat radiation.</p>	<p>Scope:</p> <p>This European Standard specifies two complementary methods (method A and method B) for determining the behaviour of materials for heat protective clothing subjected to heat radiation.</p>
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ICS 13.340.10

Võtmesõnad: definition, definitions, fire protection, heat protective clothing, protective clothing, radiant heat, testing, testing conditions, thermal protection, thermal testing

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 : 2002)

Vêtements de protection – Protection
contre la chaleur et le feu – Méthode
d'essai: Evaluation des matériaux et
assemblages des matériaux exposés
à une source de chaleur radiante
(ISO 6942 : 2002)

Schutzkleidung – Schutz gegen Hitze
und Feuer – Prüfverfahren: Beurteilung
von Materialien und Materialkombi-
nationen, die einer Hitze-Strahlungs-
quelle ausgesetzt sind
(ISO 6942 : 2002)

This European Standard was approved by CEN on 2001-11-12.

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 Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 6942 : 2002 Protective clothing – Protection against heat and fire – Method of test: Evaluation of materials and material assemblies when exposed to a source of radiant heat,

which was prepared by ISO/TC 94 'Personal safety – Protective clothing and equipment' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 162 'Protective clothing including hand and arm protection and lifejackets', the Secretariat of which is held by DIN, as a European Standard.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of the relevant EU Directive.

For relationship with this directive, see Annex ZA.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by November 2002 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 6942 : 2002 was approved by CEN as a European Standard without any modification.

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Introduction

Protective clothing against radiant heat is worn at different occasions and accordingly the radiation intensity (characterised by the heat flux density) acting on the clothing material extends over a wide range. This European Standard describes two test methods which can be applied to all sorts of materials, but, according to the intended use of the material, the heat flux density has to be chosen properly and the results have to be interpreted correctly,

Industrial workers or fire fighters may be exposed to a relatively low radiation intensity over a long period of time. On the other hand, industrial workers or fire fighters may be exposed to medium radiation intensities for relatively short periods of time or to high radiation intensities for very short periods of time. In the latter case, the clothing material may be changed or even destroyed.

The materials for the protective clothing should be tested at medium and high heat flux densities. The reaction on method A and the times t_{12} and t_{24} and transmission factor measured with method B characterise the material. Information of the precision of method B see annex A.

1 Scope

This European Standard specifies two complementary methods (method A and method B) for determining the behaviour of materials for heat protective clothing subjected to heat radiation.

These tests are carried out on representative single or multi-layer textiles or other materials intended for clothing for protection against heat. They are also applicable to assemblies, which correspond to the overall build up of a heat protective clothing assembly with or without underclothing,

Method A serves for visual assessment of any changes in the material after the action of heat radiation. With method B the protective effect of the materials is determined. The materials may be tested either by both methods or only by one of them.

The tests according to these two methods serve to classify materials; however, to be able to make a statement or prediction as to the suitability of a material for protective clothing additional criteria must be taken into account.

Since the tests are carried out at room temperature the results do not necessarily correspond to the behaviour of the materials at higher ambient temperatures and therefore are only to a limited extent suitable for predicting the performance of the protective clothing made from the materials under test.

2 Normative reference

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at appropriate places in the text and the publications are listed below. In the case of dated references, subsequent amendments to, or revisions of, any of these publications, apply to this European Standard only when incorporated into it by amendment or revision. In the case of undated references the latest edition of the publications referred to applies (including amendments).

EN 20139

Textiles - standard atmospheres for conditioning and testing (ISO 139:1973)

IEC 60584-1

Thermocouples. Part 1: Reference table