Kaitsekindad kemikaalide ja mikroorganismide eest. Osa 4: Vastupidavuse määramine kemikaalide tõttu lagundamisele

Protective gloves against chemicals and micro-organisms - Part 4: Determination of resistance to degradation by chemicals

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 374-4:2013 sisaldab Euroopa standardi EN 374-4:2013 inglisekeelset teksti.	This Estonian standard EVS-EN 374-4:2013 consists of the English text of the European standard EN 374-4:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.11.2013.	Date of Availability of the European standard is 20.11.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Protective gloves against chemicals and micro-organisms - Part 4: Determination of resistance to degradation by chemicals

Gants de protection contre les produits chimiques et les micro-organismes - Partie 4: Détermination de la résistance à la dégradation par des produits chimiques

Schutzhandschuhe gegen Chemikalien und Mikroorganismen - Teil 4: Bestimmung des Widerstandes gegen Degradation durch Chemikalien

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 374-4:2013) has been prepared by 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of an identical text or by endorsement, at the latest by May 2014 and conflicting national standards shall be withdrawn at the latest by May 2014.

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

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

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

EN 374 consists of the following parts under the general title, *Protective gloves against chemicals and micro-organisms:*

— *Part 1: Terminology and performance requirements;*

— *Part 2: Determination of resistance to penetration;*

— *Part 3: Determination of resistance to permeation by chemicals;*

— *Part 4: Determination of resistance to degradation by chemicals.*

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the test method for the determination of the resistance of protective glove materials to degradation by dangerous chemicals with continuous contact.

NOTE Annex A gives information on interlaboratory test results on this method.

Other tests used to evaluate chemical resistance such as permeation resistance and penetration resistance may not provide sufficient information on the physical property changes affecting a glove during exposure to a chemical. It is necessary that the outside surface of the glove be exposed to the chemical.

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.

EN 374-1:2003, *Protective gloves against chemicals and micro-organisms - Part 1: Terminology and performance requirements*

EN 388:2003, *Protective gloves against mechanical risks*

EN 420:2003+A1:2009, *Protective gloves - General requirements and test methods*

3 Terms and definitions

For the purposes of this document, the terms and definition given in EN 374-1:2003 and EN 420:2003+A1:2009 apply.

4 Test principles

The resistance of a protective glove material to degradation by a liquid chemical is determined by measuring the puncture resistance change of the glove material after a continuous contact with the external surface with the challenge test chemical. The test is applicable to gloves made of natural or synthetic polymer. Lined gloves may produce unusable measurement results.

5 Test methods, Puncture resistance test

5.1 Sampling

Select three gloves for testing. Condition the gloves at (23 ± 2) °C, (50 ± 5) % relative humidity for at least 24 hours.

In the case of irregular and/or multiple construction, one sample shall be tested from each area. Using the appropriate circular die of 20 mm, cut 6 specimens of each glove for a total of 18 test specimens. For each glove, 3 specimens will be exposed to the challenge chemical and 3 specimens will be unexposed.

Select specimens so that they are homogeneous and representative of the glove's primary construction. Avoid embossed patterned areas or other areas of varying thickness or composition when cutting these specimens.

If a glove is constituted of several unbounded layers, only the layer giving the chemical protection shall be tested.

The sample shall be tested according to the method described in 5.3. An additional non-mandatory informative test method is given as an example in Annex B.