

**Plastics - Determination of resistance to environmental stress cracking (ESC) - Part 5: Constant tensile deformation method**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 22088-5:2009 sisaldab Euroopa standardi EN ISO 22088-5:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.11.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 24.06.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 22088-5:2009 consists of the English text of the European standard EN ISO 22088-5:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

ICS 83.080.01

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English Version

Plastics - Determination of resistance to environmental stress  
cracking (ESC) - Part 5: Constant tensile deformation method  
(ISO 22088-5:2006)

Plastiques - Détermination de la fissuration sous contrainte  
dans un environnement donné (ESC) - Partie 5: Méthode  
de déformation en traction constante (ISO 22088-5:2006)

Kunststoffe - Bestimmung der Beständigkeit gegen  
umgebungsbedingte Spannungsrissbildung (ESC) - Teil 5:  
Verfahren mit konstanter Zugverformung (ISO 22088-  
5:2006)

This European Standard was approved by CEN on 23 May 2009.

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## Foreword

The text of ISO 22088-5:2006 has been prepared by Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 22088-5:2009 by Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

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### Endorsement notice

The text of ISO 22088-5:2006 has been approved by CEN as a EN ISO 22088-5:2009 without any modification.

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# Plastics — Determination of resistance to environmental stress cracking (ESC) —

## Part 5: Constant tensile deformation method

### 1 Scope

This part of ISO 22088 specifies a method for the determination of the environmental stress cracking (ESC) behaviour of thermoplastics when they are subjected to a constant tensile deformation in the presence of a chemical medium.

It is applicable to test specimens prepared by moulding and/or machining and can be used for the assessment of the ESC behaviour of plastic materials exposed to different environments, as well as for the determination of the ESC behaviour of different plastic materials exposed to a specific environment.

This is essentially a ranking test and is not intended to provide data to be used for design or performance prediction.

**NOTE** Alternative methods for the determination of environmental stress cracking by means of a constant-strain test are specified in ISO 22088-3 and ISO 22088-4. A method for the determination of environmental stress cracking by means of a constant tensile load is specified in ISO 22088-2.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 293, *Plastics — Compression moulding of test specimens of thermoplastic materials*

ISO 294-1, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 1: General principles, and moulding of multipurpose and bar test specimens*

ISO 294-5, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 5: Preparation of standard specimens for investigating anisotropy*

ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 2818, *Plastics — Preparation of test specimens by machining*

ISO 22088-1:2006, *Plastics — Determination of resistance to environmental stress cracking (ESC) — Part 1: General guidance*