
Merjenje radioaktivnosti v okolju - Tla - 3. del: Preskusna metoda za radionuklide, ki sevajo žarke gama, s spektrometrijo gama (ISO 18589-3:2015)

Measurement of radioactivity in the environment - Soil - Part 3: Test method of gamma-emitting radionuclides using gamma-ray spectrometry (ISO 18589-3:2015)

Ermittlung der Radioaktivität in der Umwelt - Erdboden - Teil 3: Messung von Gammastrahlen emittierenden Radionukliden mittels Gammaspectrometrie (ISO 18589-3:2015)

Mesurage de la radioactivité dans l'environnement - Sol - Partie 3: Méthode d'essai des radionucléides émetteurs gamma par spectrométrie gamma (ISO 18589-3:2015)

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Ta slovenski standard je istoveten z: EN ISO 18589-3:2017

ICS:

13.080.99	Drugi standardi v zvezi s kakovostjo tal	Other standards related to soil quality
17.240	Merjenje sevanja	Radiation measurements

SIST EN ISO 18589-3:2017**en,fr,de**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 18589-3

October 2017

ICS 17.240; 13.080.01

English Version

**Measurement of radioactivity in the environment - Soil -
Part 3: Test method of gamma-emitting radionuclides
using gamma-ray spectrometry (ISO 18589-3:2015,
Corrected version 2015-12-01)**

Mesurage de la radioactivité dans l'environnement -
Sol - Partie 3: Méthode d'essai des radionucléides
émetteurs gamma par spectrométrie gamma (ISO
18589-3:2015, Version corrigée 2015-12-01)

Ermittlung der Radioaktivität in der Umwelt -
Erboden - Teil 3: Messung von Gammastrahlen
emittierenden Radionukliden mittels
Gammaskpektrometrie (ISO 18589-3:2015, korrigierte
Fassung 2015-12-01)

This European Standard was approved by CEN on 13 September 2017.

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



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European foreword

The text of ISO 18589-3:2015, Corrected version 2015-12-01 has been prepared by Technical Committee ISO/TC 85 “Nuclear energy, nuclear technologies, and radiological protection” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 18589-3:2017 by Technical Committee CEN/TC 430 “Nuclear energy, nuclear technologies, and radiological protection” the secretariat of which is held by AFNOR.

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 April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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2015-12-01

**Measurement of radioactivity in the
environment — Soil —**

**Part 3:
Test method of gamma-emitting
radionuclides using gamma-ray
spectrometry**

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Mesurage de la radioactivité dans l'environnement — Sol —

*Partie 3: Méthode d'essai des radionucléides émetteurs gamma par
spectrométrie gamma*

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ISO 18589-3:2015(E)

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 85, *Nuclear energy, nuclear technologies, and radiological protection*, Subcommittee SC 2, *Radiological protection*.

This second edition cancels and replaces the first edition (ISO 18589-3:2007), which has been technically revised.

ISO 18589 consists of the following parts, under the general title *Measurement of radioactivity in the environment — Soil*:

- Part 1: *General guidelines and definitions*
- Part 2: *Guidance for the selection of the sampling strategy, sampling and pre-treatment of samples*
- Part 3: *Test method of gamma-emitting radionuclides using gamma-ray spectrometry*
- Part 4: *Measurement of plutonium isotopes (plutonium 238 and plutonium 239 + 240) by alpha spectrometry*
- Part 5: *Measurement of strontium 90*
- Part 6: *Measurement of gross alpha and gross beta activities*
- Part 7: *In situ measurement of gamma-emitting radionuclides*

This corrected version of ISO 18589-3:2015 incorporates a correction to Formula (4).

Introduction

This part of ISO 18589 is published in several parts to be used jointly or separately according to needs. ISO 18589-1 to ISO 18589-6, concerning the measurements of radioactivity in the soil, have been prepared simultaneously. These parts are complementary and are addressed to those responsible for determining the radioactivity present in soils. The first two parts are general in nature. ISO 18589-3 to ISO 18589-5 deal with radionuclide-specific measurements and ISO 18589-6 with non-specific measurements of gross alpha or gross beta activities. ISO 18589-7 deals with the measurement of gamma-emitting radionuclides using *in situ* spectrometry.

Additional parts can be added to ISO 18589 in the future if the standardization of the measurement of other radionuclides becomes necessary.

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