



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 14240-1:2011

# Soil quality - Determination of soil microbial biomass - Part 1: Substrate-induced respiration method (ISO 14240-1:1997)

## I.S. EN ISO 14240-1:2011

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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English Version

**Soil quality - Determination of soil microbial biomass - Part 1:  
Substrate-induced respiration method (ISO 14240-1:1997)**

Qualité du sol - Détermination de la biomasse microbienne  
du sol - Partie 1 : Méthode par respiration induite par le  
substrat (ISO 14240-1:1997)

Bodenbeschaffenheit - Bestimmung der mikrobiellen  
Biomasse von Böden - Teil 1: Substrat-induziertes  
Respirationsverfahren (ISO 14240-1:1997)

This European Standard was approved by CEN on 3 June 2011.

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## **Foreword**

The text of ISO 14240-1:1997 has been prepared by Technical Committee ISO/TC 190 "Soil quality" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 14240-1:2011 by Technical Committee CEN/TC 345 "Characterization of soils" the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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### **Endorsement notice**

The text of ISO 14240-1:1997 has been approved by CEN as a EN ISO 14240-1:2011 without any modification.

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# INTERNATIONAL STANDARD

**ISO**  
**14240-1**

First edition  
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## **Soil quality — Determination of soil microbial biomass —**

### **Part 1: Substrate-induced respiration method**

*Qualité du sol — Détermination de la biomasse microbienne du sol —  
Partie 1: Méthode par respiration induite par substrat*



Reference number  
ISO 14240-1:1997(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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 14240-1 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 4, *Biological methods*.

ISO 14240 consists of the following parts, under the general title *Soil quality — Determination of soil microbial biomass*:

*Part 1: Substrate-induced respiration method*

*Part 2: Fumigation-extraction method*

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## **Introduction**

Soil consists of both living and nonliving components which exist in a complex and heterogeneous environment. Soil microflora is responsible for the degradation of organic matter, stability of aggregates and most nutrient cycling which occurs in soils. The purpose of determining the microbial biomass of soils is to allow assessment of the continued maintenance of soil fertility, the potential ability to degrade organic materials, and the effects of added materials on the natural microbial population.

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