

Soil quality — Determination of hydraulic conductivity of saturated porous materials using a flexible wall permeameter

ICS 13.080.40

National foreword

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Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to v, a blank page, pages 1 to 13 and a back cover.

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Amendments issued since publication

Amd. No.	Date	Comments

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 19 July 2004
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INTERNATIONAL STANDARD

ISO
17313

First edition
2004-07-01

Soil quality — Determination of hydraulic conductivity of saturated porous materials using a flexible wall permeameter

Qualité du sol — Détermination de la conductivité hydraulique de matériaux poreux saturés à l'aide d'un perméamètre à paroi flexible



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Foreword

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ISO 17313 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 5, *Physical methods*.

Introduction

The rate of water flow through the soil is of considerable importance in many aspects of agricultural and urban life. The entry of water into soil, the movement of water to plant roots, the flow of water to drains and wells, and the evaporation of water from the soil surface are but a few of the obvious situations in which the rate of water flow plays an important role. Also in cases of soil pollution and polluted groundwater, prediction of the rate of movement of soil water is of great importance in obtaining information about the spreading of pollutants.

The soil properties that determine the behaviour of soil water flow systems are the hydraulic conductivity and water retention characteristics. The hydraulic conductivity of soil is a measure of its ability to transmit water. The water retention characteristics are an expression of its ability to store water. These properties determine the response of a soil water system to imposed boundary conditions.