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**Soil quality — Determination of  
particle density**

*Qualité du sol — Détermination de la masse volumique des particules*

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ISO copyright office  
Ch. de Blandonnet 8 • CP 401  
CH-1214 Vernier, Geneva, Switzerland  
Tel. +41 22 749 01 11  
Fax +41 22 749 09 47  
[copyright@iso.org](mailto:copyright@iso.org)  
[www.iso.org](http://www.iso.org)

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## 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](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 3, *Chemical methods and soil characteristics*.

This second edition cancels and replaces the first edition (ISO 11508:1998), which has been technically revised.

The main changes compared to the previous edition are as follows:

- a) the terms and definitions have been updated;
- b) a new subclause 4.3 “Unified reference temperature” was added;
- c) a new subclause 4.4 “Calculation of mean particle density” was added;
- d) Table 1, “Density of water...”, was deleted under 4.1.4;
- e) a new Annex A “Density of water at different temperatures” was added;
- f) bibliographic references were added;
- g) editorial changes were made.

## Introduction

This document specifies the particle density ( $\rho_s$ ) which is used together with the dry bulk density ( $^b\rho_s$ , see ISO 11272) for the calculation of the pore volume of a soil layer.

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