

This is a preview of "ISO 17892-4:2016". [Click here to purchase the full version from the ANSI store.](#)

First edition
2016-11-01

Geotechnical investigation and testing — Laboratory testing of soil —

Part 4: Determination of particle size distribution

Reconnaissance et essais géotechniques — Essais de laboratoire sur les sols —

Partie 4: Détermination de la distribution granulométrique des particules



Reference number
ISO 17892-4:2016(E)

© ISO 2016

This is a preview of "ISO 17892-4:2016". [Click here to purchase the full version from the ANSI store.](#)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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
www.iso.org

This is a preview of "ISO 17892-4:2016". Click here to purchase the full version from the ANSI store.

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Apparatus	2
4.1 General.....	2
4.2 Sieving method.....	3
4.3 Hydrometer method.....	4
4.4 Pipette method.....	4
4.5 Reagents.....	6
5 Test procedure	6
5.1 Selection of test method.....	6
5.2 Sieving method.....	7
5.2.1 General.....	7
5.2.2 Specimen preparation.....	9
5.2.3 Test execution.....	10
5.3 Hydrometer method.....	12
5.3.1 General.....	12
5.3.2 Specimen preparation.....	14
5.3.3 Test execution.....	15
5.4 Pipette method.....	15
5.4.1 General.....	15
5.4.2 Specimen preparation.....	16
5.4.3 Test execution.....	16
5.5 Combined tests.....	16
6 Test results	18
6.1 Sieving.....	18
6.1.1 Fraction passing each sieve.....	18
6.2 Hydrometer.....	18
6.2.1 Total dry mass.....	18
6.2.2 Fraction passing each sieve.....	19
6.2.3 True hydrometer reading.....	19
6.2.4 Effective depth.....	19
6.2.5 Equivalent particle diameter.....	19
6.2.6 Modified hydrometer reading.....	20
6.2.7 Fraction smaller than equivalent particle diameter.....	20
6.2.8 Correction for material larger than 2 mm.....	21
6.3 Pipette.....	21
6.3.1 Total dry mass.....	21
6.3.2 Fraction passing each sieve.....	21
6.3.3 Equivalent particle diameter.....	21
6.3.4 Fraction smaller than equivalent particle diameter.....	22
6.3.5 Correction for material larger than 2 mm.....	22
7 Test report	22
Annex A (normative) Calibration, maintenance and checks	24
Annex B (informative) Pre-treatment of samples	30
Bibliography	31

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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

ISO 17892-4 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 341, *Geotechnical investigation and testing*, in collaboration with ISO Technical Committee TC 182, *Geotechnics*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition cancels and replaces the first edition (ISO/TS 17892-4:2004), which has been technically revised.

It also incorporates the Technical Corrigendum ISO/TS 17892-4:2004/Cor 1:2006.

A full list of parts in the ISO 17892 series, published under the general title *Geotechnical investigation and testing — Laboratory testing of soil*, can be found on the ISO website.

This is a preview of "ISO 17892-4:2016". [Click here to purchase the full version from the ANSI store.](#)

Introduction

This part of ISO 17892 covers areas in the international field of geotechnical engineering never previously standardized. It is intended that this part of ISO 17892 presents broad good practice throughout the world and significant differences with national documents is not anticipated. It is based on international practice (see Reference [2]).