



BSI Standards Publication

Characterization of sludges — Filtration properties

Part 4: Determination of the drainability of
flocculated sludges

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee EH/5, Sludge characterization.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

**Characterization of sludges - Filtration properties - Part 4:
Determination of the drainability of flocculated sludges**

Caractérisation des boues - Propriétés de filtration - Partie
4: Détermination de l'aptitude à l'égouttage des boues
floculées

Charakterisierung von Schlämmen -
Filtrationseigenschaften - Teil 4: Bestimmung der
Entwässerbarkeit geflockter Schlämme

This European Standard was approved by CEN on 28 November 2009.

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Foreword

This document (EN 14701-4:2010) has been prepared by Technical Committee CEN/TC 308 “Characterization of sludges”, 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of an identical text or by endorsement, at the latest by July 2010, and conflicting national standards shall be withdrawn at the latest by July 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

EN 14701, *Characterisation of sludges — Filtration properties*, consists of the following parts:

- *Part 1: Capillary suction time (CST)*
- *Part 2: Determination of the specific resistance to filtration*
- *Part 3: Determination of the compressibility*

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Introduction

The determination of drainability of flocculated sludges is an important parameter for evaluating their suitability to be thickened by means of a draining process. It also gives indications for the choice of flocculant or their dosage in view of the thickening of the sludge through a filtering medium. These easy and quick tests are the best means to narrow the number of products to be tested in full scale experiments and to adapt the pre-treatment to the sludge variability.

The results obtained are the mass of filtrate collected in a standard time or the time required to recover a given volume of filtrate (commonly 50 % of the water content of the sludge), the maximum volume of filtrate and the corresponding wet and dry mass of the sludge, the undissolved solids remaining in the filtrate and the best flocculant and its optimum dose in the case of comparative tests.