

ICS 13.030.20; 13.080.30

English Version

**Sludge, treated biowaste and soil - Determination of impurities
and stones**

Boue, biodéchet traité et sol - Détermination des matières
étrangères et pierres

Schlamm, behandelter Bioabfall und Boden - Bestimmung
von Fremdstoffen und Steinen

This Technical Specification (CEN/TS) was approved by CEN on 5 March 2011 for provisional application.

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Foreword

This document (CEN/TS 16202:2013) has been prepared by Technical Committee CEN/TC 400 "Project Committee - Horizontal standards in the field of sludge, biowaste and soil", the secretariat of which is held by DIN.

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.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This Technical Specification is part of a modular horizontal approach in which this document belongs to the analytical step.

The preparation of this document by CEN is based on a mandate by the European Commission (Mandate M/330), which assigned the development of standards on sampling and analytical methods for hygienic and biological parameters as well as inorganic and organic determinants, aiming to make these standards applicable to sludge, treated biowaste and soil as far as this is technically feasible.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This Technical Specification is applicable for several types of matrices as indicated below (see also Annex B for the results of the validation).

Table 1 — Matrices for which this Technical Specification is applicable and validated

Matrix	Materials used for validation
Sludge	Sewage sludge
Compost	Horticultural green compost
	Mixture of municipal and green compost (1:1)
Soil	Sandy soil with some organic matter

WARNING — Care is to be taken when handling samples, since they may contain sharp fragments, chemical contaminants or possible pathogenic organisms. When using bleach, care is to be taken to avoid inhaling fumes containing Cl₂.

1 Scope

This Technical Specification specifies a method to determine the physical impurities > 2 mm and stones > 5 mm in sludge, treated biowaste and soil.

Fragments of wood or bark can be acceptable constituents of the sample.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12579:2013, *Soil improvers and growing media — Sampling*

EN 13040:2007, *Soil improvers and growing media — Sample preparation for chemical and physical tests, determination of dry matter content, moisture content and laboratory compacted bulk density*

CR 13456:1999, *Soil improvers and growing media — Labelling, specifications and product schedules*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12579:2013, EN 13040:2007 and CR 13456:1999 and the following apply.

3.1

stone

unattached pieces of rock 2 mm in diameter or larger that are strongly cemented or more resistant to rupture

[SOURCE: Soil Science Society of America, 2001]

Note 1 to entry: Rock being hard consolidated mineral matter.

Note 2 to entry: Limestone, including added limestone, is counted as stone.

3.2

glass

material consisting mostly of presumably man-made hard not crystallised minerals

3.3

metal

material consisting mostly of metals

3.4

plastics

material consisting mostly of presumably man-made synthetics

3.5

other material

unexpected material not accounted for in the method

Note 1 to entry: It will at least be recorded in mass but is usually also labelled qualitatively when possible, e.g. "mainly leather fragments".