

English Version

Waste - Guidance on analysis of eluates

Déchets - Lignes directrices pour analyse des éluats

Abfällen - Anleitung zur analyse von Eluaten

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European foreword

This document (CEN/TR 16192:2020) has been prepared by Technical Committee CEN/TC 444 "Test methods for environmental characterization of solid matrices", the secretariat of which is held by NEN.

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

This document supersedes EN 16192:2011.

The changes between this document and the previous edition involve updating the relevant EN and ISO standards or removing them if withdrawn, and adding new relevant standards. Furthermore, the document has changed from a normative standard into an informative report.

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Introduction

This document is intended to be used for the characterization of waste as defined in the Council Directive 75/442/EEC on waste, as amended by Council Directive 91/156/EEC of 18th March 1991, and national regulations, whose final destination for disposal is landfill. In the Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC, the test methods are described for determining the acceptability of waste at landfills. In section 3 of the Annex of this Decision, the European standards EN 12506 and EN 13370 are included which are replaced by this document.

This document deals with the determination of chemical constituents, electrical conductivity, pH and total dissolved solids (TDS) in eluates which have been obtained by leaching of waste samples, for example using EN 12457-1 to EN 12457-4: "Characterization of waste - Leaching - Compliance test for leaching of granular waste materials and sludges". In principle, it can be used for the analysis of every kind of eluate as long as the performance characteristics of the applied analytical method fulfil the specific requirements.

1 Scope

This document summarizes methods for the determination of the parameters pH, ammonium, AOX, As, Ba, Cd, Cl⁻, easily liberatable cyanide, Co, Cr, Cr(VI), Cu, DOC/TOC, electrical conductivity, F⁻, Hg, Mo, Ni, NO₂⁻, Pb, phenol index, total S, Sb, Se, SO₄²⁻, TDS, V and Zn in aqueous eluates for the characterization of waste.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp/ui>

3.1

eluate

solution obtained by a defined leaching test

3.2

laboratory sample

sample or subsample(s) sent to or received by a laboratory

3.3

leachant

aqueous solution used in a leaching test

3.4

leaching test

laboratory test for the determination of the release of matter from a waste into water or an aqueous solution

3.5

sample

portion of material selected from a larger quantity of material

3.6

test portion

analytical portion

quantity of material of proper size for measurement of the concentration or other properties of interest, removed from the test sample

Note 1 to entry: The test portion can be taken from the laboratory sample directly if no preparation of sample is required (e.g. with liquids), but usually it is taken from the prepared test sample.

Note 2 to entry: A unit or increment of suitable homogeneity, size and fineness, needing no further preparation, can be a test portion.