

Vervangt ENV 12506:2000

Nederlandse norm

# NEN-EN 12506 (en)

Characterization of waste - Analysis of eluates -  
Determination of pH, As, Ba, Cd, Cl, Co, Cr, Cr  
VI, Cu, Mo, Ni, NO<sub>2</sub>, Pb, total S, SO<sub>4</sub><sup>2-</sup>, V and  
Zn

ICS 13.030.99

juli 2003

Als Nederlandse norm is aanvaard:  
 - EN 12506:2003, IDT

VOORBEELD  
 Preview

Normcommissie 390 016 "Milieuanalyses"

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## Nederlands voorwoord

Voor de in deze norm vermelde normatieve verwijzingen bestaan in Nederland de volgende equivalenten:

<u>vermelde norm</u>	<u>Nederlandse norm</u>	<u>titel</u>
EN 26777	NEN-ISO 6777	Water - Bepaling van het gehalte aan nitriet - Moleculaire-absorptiespectrometrische methode (en)
EN ISO 5667-3	NEN-EN-ISO 5667-3	Water - Bemonstering - Deel 3: Richtlijn voor de conservering en behandeling van monsters (nl)
EN ISO 10304-1	NEN-EN-ISO 10304-1	Water - Bepaling van opgeloste fluoride-, chloride-, nitriet-, orthofosfaat-, bromide-, nitraat- en sulfaationen met vloeistofchromatografie - Deel 1: Methode voor water met geringe vervuiling (en)
EN ISO 10304-2	NEN-EN-ISO 10304-2	Water - Bepaling van opgeloste anionen met vloeistofionchromatografie - Deel 2: Bepaling van bromide, chloride, nitraat, nitriet, orthofosfaat en sulfaat in afvalwater (en)
EN ISO 11885	NEN-EN-ISO 11885	Water - Bepaling van 33 elementen met atomaire-emissiespectrometrie met inductief gekoppeld plasma (en)
EN ISO 11969	NEN-EN-ISO 11969	Water - Bepaling van het arseengehalte - Methode met atomaire-absorptiespectrometrie (hydridetechniek) (nl)
EN ISO 13395	NEN-EN-ISO 13395	Water - Bepaling van het stikstofgehalte in de vorm van nitriet en in de vorm van nitraat en de som van beide met doorstroomanalyse (CFA en FIA) en spectrometrische detectie (nl)
ISO 8288	-	-
ISO 9297	-	-
ISO 10523	-	-
ISO 11083	-	-

Preview



English version

Characterization of waste - Analysis of eluates - Determination  
of pH, As, Ba, Cd, Cl<sup>-</sup>, Co, Cr, Cr VI, Cu, Mo, Ni, NO<sub>2</sub><sup>-</sup>, Pb, total  
S, SO<sub>4</sub><sup>2-</sup>, V and Zn

Caractérisation des déchets - Analyse des éluats -  
Détermination du pH et dosage de As, Ba, Cd, Cl<sup>-</sup>, Co, Cr,  
Cr VI, Cu, Mo, Ni, NO<sub>2</sub><sup>-</sup>, Pb, total S, SO<sub>4</sub><sup>2-</sup>, V et Zn

Charakterisierung von Abfällen - Analyse von Eluaten -  
Bestimmung von pH, As, Ba, Cd, Cl<sup>-</sup>, Co, Cr, Cr (VI), Cu,  
Mo, Ni, NO<sub>2</sub><sup>-</sup>, Pb, Gesamt-S, SO<sub>4</sub><sup>2-</sup>, V und Zn

This European Standard was approved by CEN on 25 March 2003.

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## Foreword

This document (EN 12506:2003) has been prepared by Technical Committee CEN/TC 292 "Characterization of waste", the secretariat of which is held by NEN.

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 December 2003, and conflicting national standards shall be withdrawn at the latest by December 2003.

This document supersedes ENV 12506:2000.

Annex A is informative

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

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## Introduction

This standard 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.

It deals with the determination of pH and chemical constituents which have been extracted by leaching of waste samples for example using EN 12457 Characterisation of waste - Leaching - Compliance test for leaching of granular waste materials and sludges – Part 1 - 4.

This European Standard together with EN 13370 is intended to define analytical methods for eluates. A large number of compounds can interfere with the determination of the parameters concerned. These potential interferences are listed in the individual standards in question.

For the analytical determinations ENV ISO 13530 and EN ISO/IEC 17025 should be considered.

## 1 Scope

This European Standard specifies methods for the determination of the parameters pH, As, Ba, Cd, Cl<sup>-</sup>, Co, Cr, Cr<sup>VI</sup>, Cu, Mo, Ni, NO<sub>2</sub><sup>-</sup>, Pb, total S, SO<sub>4</sub><sup>2-</sup>, V and Zn in aqueous eluates for the characterization of waste.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 26777	Water quality - Determination of nitrite - Molecular absorption spectrometric method (ISO 6777:1984)
EN ISO 5667-3	Water quality - Sampling - Part 3: Guidance on the preservation and handling of samples (ISO 5667-3:1994)
EN ISO 10304-1	Water quality - Determination of dissolved fluoride, chloride, nitrite, orthophosphate, bromide, nitrate and sulfate ions, using liquid chromatography of ions - Part 1: Method for water with low contamination (ISO 10304-1:1992)
EN ISO 10304-2	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulfate in waste water (ISO 10304-2:1995)
EN ISO 11885	Water quality - Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy (ISO 11885:1996)
EN ISO 11969	Water quality - Determination of arsenic - Atomic-absorption spectrometric method (hydride technique) (ISO 11969:1996)



EN ISO 13395	Water quality - Determination of nitrite nitrogen and nitrate nitrogen and the sum of both by flow analysis (CFA and FIA) and spectrometric detection (ISO 13395:1996)
ISO 8288	Water quality - Determination of cobalt, nickel, copper, zinc, cadmium and lead - Flame atomic absorption spectrometric methods
ISO 9297	Water quality - Determination of chloride - Silver nitrate titration with chromate indicator (Mohr's method)
ISO 10523	Water quality - Determination of pH
ISO 11063	Water quality - Determination of chromium (VI) - Spectrometric method using 1,5-diphenylcarbazide

### 3 Terms and definitions

For the purposes of this European Standard the following terms and definitions apply:

#### 3.1

##### **sample**

portion of material selected from a larger quantity of material

#### 3.2

##### **eluate**

solution obtained by a leaching test

#### 3.3

##### **laboratory sample**

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

#### 3.4

##### **test sample; analytical sample**

sample, prepared from the laboratory sample, from which test portions are removed for testing or analysis

#### 3.5

##### **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 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 A unit or increment of proper homogeneity, size and fineness, needing no further preparation, can be a test portion.

#### 3.6

##### **leachant**

aqueous solution used in a leaching test

#### 3.7

##### **leaching test**

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

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