



National Standards Authority of Ireland

IRISH STANDARD

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ICS 13.030.01

**CHARACTERIZATION OF WASTE - LEACHING  
BEHAVIOUR TESTS - INFLUENCE OF PH ON  
LEACHING WITH CONTINUOUS PH-CONTROL**

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TECHNICAL SPECIFICATION  
SPÉCIFICATION TECHNIQUE  
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**CEN/TS 14997**

November 2006

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ICS 13.030.01

English Version

**Characterization of waste - Leaching behaviour tests - Influence  
of pH on leaching with continuous pH-control**

Caractérisation des déchets - Essais de comportement à la  
lixiviation - Influence du pH sur la lixiviation avec contrôle  
continu du pH

Charakterisierung von Abfällen - Untersuchung des  
Auslaugungsverhaltens - Einfluss des pH-Wertes auf die  
Auslaugung bei kontinuierlicher pH-Wert-Kontrolle

This Technical Specification (CEN/TS) was approved by CEN on 9 October 2006 for provisional application.

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## **Foreword**

This document (CEN/TS 14997:2006) has been prepared by Technical Committee CEN/TC 292 “Characterization of waste”, the secretariat of which is held by NEN.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, B, C or D, which is an integral part of this document.

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## CEN/TS 14997:2006 (E)

### Introduction

This document has been developed primarily to support the requirements for leaching behaviour testing within EU and EFTA countries. Tests to characterize the behaviour of waste materials can generally be divided into three categories. The relationship between these tests is summarized below:

- a) "Basic characterization" tests are used to obtain information on the short and long term leaching behaviour and characteristic properties of waste materials. Liquid/solid (*L/S*) ratios, leachant composition, factors controlling leachability such as pH, redox potential, complexing capacity, ageing of waste and physical parameters are addressed in these tests.
- b) "Compliance" tests are used to determine whether the waste complies with a specific behaviour or with specific reference values. The tests focus on key variables and leaching behaviour previously identified by basic characterization tests.
- c) "On-site verification" tests are used as a rapid check to confirm that the waste is the same as that which has been subjected to the compliance test(s). On-site verification tests are not necessarily leaching tests.

The test procedure specified in this document belongs to category (a): basic characterization tests.

In the test described in this standard an equilibrium condition is established as a result of continuous adjustment of pH. Size reduction is performed to accelerate reaching of equilibrium condition.

This test is different from the "Influence of pH on leaching with initial acid/base addition " (see CEN/TS 14429) in which the pH is controlled by addition of pre-determined amounts of acid or base to reach desired end pH values. The test is aiming at approaching equilibrium at the end of the procedure.

NOTE In Annex B specific uses of both the pH dependence test with initial acid/ base addition and the pH dependence test with continuous pH control are indicated.

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