



National Standards Authority of Ireland

IRISH STANDARD

I.S. CEN/TS 15364:2006

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**CHARACTERIZATION OF WASTE - LEACHING  
BEHAVIOUR TESTS - ACID AND BASE  
NEUTRALIZATION CAPACITY TEST**

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English Version

## Characterization of waste - Leaching behaviour tests - Acid and base neutralization capacity test

Caractérisation des déchets - Essais de comportement à la lixiviation - Essai de capacité de neutralisation des acides et des bases

Charakterisierung von Abfällen - Untersuchung des Auslaugungsverhaltens - Prüfung der Säure- und Base-Neutralisierungskapazität

This Technical Specification (CEN/TS) was approved by CEN on 2 February 2006 for provisional application.

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## Foreword

This Technical Specification (CEN/TS 15364:2006) has been prepared by Technical Committee CEN/TC 292 “Characterisation of waste”, the secretariat of which is held by NEN.

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

## Introduction

This Technical Specification 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 are summarized below:

1. "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.
2. "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 behavior previously identified by basic characterization tests.
3. "On-site verification" tests are used as a rapid check to confirm that the waste is the same as that one which has been subjected to the compliance test(s). On-site verification tests are not necessarily leaching tests.

The test procedure described in this Technical Specification belongs to category (1): basic characterization tests.

NOTE When sufficient information is available for a material type or class, a single measurement to a relevant final pH may suffice. In that case, the procedure would qualify as a category 2 method.

In the test, which is described in this Technical Specification, equilibrium condition is established at different pH values as a result of the reaction between pre-selected amounts of acid or base and test portions of the waste material. Size reduction is performed to accelerate reaching of equilibrium condition.

This test is different from the method to assess the influence of pH on leaching with initial acid/base addition, in that the chemical analysis of inorganic constituents in eluates produced is not carried out.

The neutralization capacity can also be derived from a test addressing the influence of pH on leaching by continuous pH control as described in prEN 14997. The test addressing the influence of pH on leaching by continuous pH control can be particularly suitable in the case of measurement of pH influence on leaching at a pH where a small pH change leads to strong change in release.

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