



National Standards Authority of Ireland

IRISH STANDARD

I.S. CEN/TS 15364:2006

ICS 47.020.30

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

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales
<http://www.standards.ie>

*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland and comes into
effect on:
5 July 2006*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
LAW**

© NSAI 2006

Price Code H

Údarás um Chaighdeán Náisiúnta na hÉireann

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 15364

April 2006

ICS 47.020.30

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.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword	3
Introduction.....	4
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Symbols and abbreviations	6
5 Principle	6
6 Reagents and laboratory devices.....	7
7 Sampling	7
8 Test procedure.....	9
9 Performance characteristics.....	12
10 Test report.....	12
Annex A (informative) Example of a data sheet	13
Annex B (informative) Preliminary determination of the acid/base consumption	14
Annex C (informative) Examples of acid and base neutralisation capacities for waste, soil, sediment and construction materials and use of the data	18
Annex D (informative) Examples of steps in the full evaluation of ANC and BNC for waste materials	20
Bibliography	21

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.

CEN/TS 15364:2006 (E)

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.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-