
Ceramic tiles —

Part 15:
**Determination of lead and cadmium
given off by tiles**

Carreaux et dalles céramiques —

*Partie 15: Détermination de la teneur en plomb et en cadmium
relargués par les carreaux*



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Contents

	Page
Foreword.....	iv
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Principle.....	1
5 Reagents.....	1
5.1 General.....	1
5.2 Test solution.....	1
6 Apparatus and materials.....	2
7 Test specimens.....	2
8 Procedure.....	2
9 Expression of results.....	3
10 Test report.....	3

Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 189, *Ceramic tile*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 67, *Ceramic tiles*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10545-15:1995), which has been technically revised.

The main changes compared to the previous edition are as follows:

- addition of [Clause 3](#), subsequent clauses have been renumbered;
- modifications to [Clause 7](#);
- correction of typographical errors from the previous edition;
- application of this test method to all tile surfaces.

A list of all parts in the ISO 10545 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Ceramic tiles —

Part 15:

Determination of lead and cadmium given off by tiles

1 Scope

This document specifies a method for the determination of lead and cadmium given off by the ceramic tiles surface.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 6353-2:1983, *Reagents for chemical analysis — Part 2: Specifications — First series*

3 Terms and definitions

No terms and definitions are listed in this document.

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

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

4 Principle

Exposure of the surface of a ceramic tile to an acetic acid solution. Determination of the amount of lead and cadmium released into the solution by an appropriate method.

5 Reagents

5.1 General

During the analysis, unless otherwise indicated, use only the reagents specified in ISO 6353-2 if indicated, if not, use reagents of recognized analytical grade, and grade 2 complying with ISO 3696:1987.

5.2 Test solution

Prepare acetic acid solution, 4 % (V/V) as follows: add 40 ml of glacial acetic acid (R 1 of ISO 6353-2:1983) to 960 ml of distilled water of grade 2.