International Standard ISO 8391/2

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Ceramic cookware in contact with food — Release of lead and cadmium — Part 2 : Permissible limits

Articles de cuisson en céramique en contact avec les aliments — Émission de plomb et de cadmium — Partie 2 : Limites admissibles

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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8391/2 was prepared by Technical Committee ISO/TC 166, *Ceramic ware, glassware and glass ceramic ware in contact with food.*

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Ceramic cookware in contact with food — Release of lead and cadmium — Part 2 : Permissible limits

0 Introduction

The problems of lead and cadmium release from cookware require effective means of control to ensure the protection of the population against a possible health hazard. This potential arises when improperly formulated, applied or fired glazes are applied to cookware. There is a particular concern for cookware because the normal conditions of use (heating acid foods for prolonged periods) are conducive to the extraction of soluble lead and cadmium into food.

As a secondary consideration, the varying standards for cookware that exist from country to country present non-tariff barriers to international trade. Accordingly, there is a need to establish internationally accepted methods of testing cookware for lead and cadmium release, and to define permissible limits for the extraction of these toxic metals.

An expert panel convened by the World Health Organization (WHO) met (with ISO participation) in Geneva, in November 1979, and recommended limits for the release of toxic materials from ceramic cookware for a proposed hot test method. Further, the meeting directed that the proposed method be further studied to determine its repeatability and reproducibility. The method specified in this part of ISO 8391 is based on the WHO recommendations and subsequent collaborative studies in which 14 laboratories throughout the USA, Europe and Japan participated. As the capability of the industry increases, efforts will be made to reduce these limits for lead and cadmium release.

ISO 8391 consists of the following parts :

Part 1 : Method of test.

Part 2 : Permissible limits.

1 Scope

This part of ISO 8391 specifies the permissible limits for the release of lead and cadmium by ceramic cookware intended for use in contact with food.

2 Field of application

This part of ISO 8391 is applicable to ceramic cookware intended to be used for the preparation of foods by heating.

3 Reference

ISO 8391/1, *Ceramic cookware in contact with food — Release of lead and cadmium — Part 1 : Method of test.*

4 Definition

For the purpose of this part of ISO 8391, the following definition applies.

ceramic cookware : Ceramic articles which are intended to be heated in the preparation of foodstuffs, for example china, porcelain and earthenware, but excludes glass, glass ceramic and porcelain enamel articles.

5 Permissible limits

The permissible limits for lead and cadmium release from any individual article, when determined by the method specified in ISO 8391/1, shall not exceed the values given in the table.

Table

Cookware	Lead	Cadmium
	5 mg/l	0,5 mg/l

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