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STANDARD

I.S. EN 13130-4:2004

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MATERIALS AND ARTICLES IN CONTACT WITH FOODSTUFFS - PLASTICS SUBSTANCES SUBJECT TO LIMITATION - PART 4: DETERMINATION OF 1,3 - BUTADIENE IN PLASTICS

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English version

Materials and articles in contact with foodstuffs - Plastics substances subject to limitation - Part 4: Determination of 1,3-butadiene in plastics

Matériaux et objets en contact avec les denrées alimentaires - Substances dans les matières plastiques soumises à des limitations - Partie 4 : Détermination du 1,3-butadiène dans les matières plastiques

Werkstoffe und Gegenstände in Kontakt mit Lebensmitteln - Substanzen in Kunststoffen, die Beschränkungen unterliegen - Teil 4: Bestimmung von 1,3-Butadien in Kunststoffen

This European Standard was approved by CEN on 24 March 2004.

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Foreword

This document (EN 13130-4:2004) has been prepared by Technical Committee CEN/TC 194 “Utensils in contact with food”, the secretariat of which is held by BSI.

This document was prepared by Subcommittee SC1 of TC 194 as one of a series of analytical test methods for plastics materials and articles in contact with foodstuffs.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2004, and conflicting national standards shall be withdrawn at the latest by November 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This standard is intended to support Directives 2002/72/EC [1], 89/109/EEC [2], 82/711/EEC [3] and its amendments 93/8/EEC [4] and 97/48/EC [5], and 85/572/EEC [6].

At the time of preparation and publication of this part of EN 13130 the European Union legislation relating to plastics materials and articles intended to come into contact with foodstuffs is incomplete. Further Directives and amendments to existing Directives are expected which could change the legislative requirements which this standard supports. It is therefore strongly recommended that users of this standard refer to the latest relevant published Directive(s) before commencement of a test or tests described in this standard..

EN 13130-4 should be read in conjunction with EN 13130-1

Further parts of EN 13130, under the general title *Materials and articles in contact with foodstuffs - Plastics substances subject to limitation*, have been prepared, and others are in preparation, concerned with the determination of specific migration from plastics materials into foodstuffs and food simulants and the determination of specific monomers and additives in plastics. The other parts of EN 13130 are as follows.

Part 1: *Guide to test methods for the specific migration of substances from plastics to foods and food simulants and the determination of substances in plastics and the selection of conditions of exposure to food simulants*

Part 2: *Determination of terephthalic acid in food simulants*

Part 3*:* *Determination of acrylonitrile in food and food simulants*

Part 5*:* *Determination of vinylidene chloride in food simulants*

Part 6: *Determination of vinylidene chloride in plastics*

Part 7: *Determination of monoethylene glycol and diethylene glycol in food simulants*

Part 8*:* *Determination of isocyanates in plastics*

Part 9*:* *Determination of acetic acid, vinyl ester in food simulants*

Part 10*:* *Determination of acrylamide in food simulants*

Part 11*:* *Determination of 11-aminoundecanoic acid in food simulants*

Part 12*:* *Determination of 1,3-benzenedimethanamine in food simulants*

Part 13: *Determination of 2,2-bis(4-hydroxyphenyl)propane (Bisphenol A) in food simulants*

Part 14*:* *Determination of 3,3-bis(3-methyl-4-hydroxyphenyl)-2-indoline in food simulants*

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Part 15*: Determination of 1,3-butadiene in food simulants*

Part 16*: Determination of caprolactam and caprolactam salt in food simulants*

Part 17*: Determination of carbonyl chloride in plastics*

Part 18*: Determination of 1,2-dihydroxybenzene, 1,3- dihydroxybenzene, 1,4- dihydroxybenzene, 4,4'-dihydroxybenzophenone and 4,4'dihydroxybiphenyl in food simulants*

Part 19*: Determination of dimethylaminoethanol in food simulants*

Part 20*: Determination of epichlorohydrin in plastics*

Part 21*: Determination of ethylenediamine and hexamethylenediamine in food simulants*

Part 22*: Determination of ethylene oxide and propylene oxide in plastics*

Part 23*: Determination of formaldehyde and hexamethylenetetramine in food simulants*

Part 24*: Determination of maleic acid and maleic anhydride in food simulants*

Part 25*: Determination of 4-methyl-pentene in food simulants*

Part 26*: Determination of 1-octene and tetrahydrofuran in food simulants*

Part 27*: Determination of 2,4,6-triamino-1,3,5-triazine in food simulants*

Part 28*: Determination of 1,1,1-trimethylopropane in food simulants*

Parts 1 to 8 are European Standards.

Parts 9 to 28 are Technical Specifications, prepared within the Standards, Measurement and Testing project, MAT1-CT92-0006, "*Development of Methods of Analysis for Monomers*".

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

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