

Adhesives — Short term method for measuring the emission properties of low-solvent or solvent-free adhesives after application —

Part 4: Determination of volatile diisocyanates

ICS 83.180

National foreword

This Draft for Development is the official English language version of ENV 13999-4:2002.

This publication is not to be regarded as a British Standard.

It is being issued in the Draft for Development series of publications and is of a provisional nature because the test methods need further testing and analysis of the tests results on the emission of volatile gases. It should be applied on this provisional basis, so that information and experience of its practical application may be obtained.

Comments arising from the use of this Draft for Development are requested so that UK experience can be reported to the European organization responsible for its conversion into a European Standard. A review of this publication will be initiated 2 years after its publication by the European organization so that a decision can be taken on its status at the end of its 3-year life. Notification of the start of the review period will be made in an announcement in the appropriate issue of *Update Standards*.

According to the replies received by the end of the review period, the responsible BSI Committee will decide whether to support the conversion into a European Standard, to extend the life of the Technical Specification or to withdraw it. Comments should be sent in writing to the Secretary of BSI Technical Committee PRI/52, Adhesives, at British Standards House, 389 Chiswick High Road, London W4 4AL, giving the document reference and clause number and proposing, where possible, an appropriate revision of the text.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This Draft for Development, having been prepared under the direction of the Materials and Chemicals Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 12 December 2002

Summary of pages

This document comprises a front cover, an inside front cover, the ENV title page, pages 2 to 11 and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

© BSI 12 December 2002

ISBN 0 580 40914 7

English version

Adhesives - Short term method for measuring the emission properties of low-solvent or solvent-free adhesives after application - Part 4: Determination of volatile diisocyanates

Adhésifs - Méthode de courte durée de mesurage des propriétés d'émission des adhésifs à faible teneur en solvants ou exempts de solvants après application - Partie 4: Dosage des diisocyanates volatils

Klebstoffe - Kurzzeit-Verfahren zum Messen der Emissionseigenschaften von lösemittelarmen oder lösemittelfreien Klebstoffen nach der Applikation - Teil 4: Bestimmung flüchtiger Diisocyanate

This European Prestandard (ENV) was approved by CEN on 16 October 2002 as a prospective standard for provisional application.

The period of validity of this ENV 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 ENV can be converted into a European Standard.

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

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, 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

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Principle	4
4 Safety	5
5 Reagents and materials.....	5
6 Apparatus	5
6.1 Sampler	5
6.1.1 Filter holder	5
6.1.2 Filter	5
6.2 Filtration equipment	5
6.3 Sampling pump	5
6.4 Tubing	5
6.5 Flow meter calibrator.....	6
6.6 High performance liquid chromatograph (HPLC).....	6
7 Procedure	6
7.1 Preparation of sampling devices.....	6
7.2 Test chamber air sampling	6
7.3 Storage of loaded sampling filters.....	6
7.4 Blanks	6
7.5 Analysis	7
7.5.1 Cleaning of glassware	7
7.5.2 Sample desorption and pre-reaction before HPLC analysis	7
7.5.3 Preparation of calibration standards	7
7.5.4 Calibration of liquid chromatograph.....	7
7.5.5 Analysis of pre-reacted sample solutions.....	8
8 Identification and calculation	8
8.1 Identification of isocyanates.....	8
8.2 Concentration of analytes in the sampled air	8
9 Interferences.....	9
10 Precision and bias	9
11 Test report	9
12 Quality control.....	10
Bibliography	11

Foreword

This document ENV 13999-4:2002 has been prepared by Technical Committee CEN/TC 193, "Adhesives", the secretariat of which is held by AENOR.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard : Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.