



SLOVENSKI STANDARD SIST EN ISO 6145-8:2008

01-oktober-2008

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Gas analysis - Preparation of calibration gas mixtures using dynamic volumetric methods
- Part 8: Diffusion method (ISO 6145-8:2005)

Gasanalyse - Herstellung von Kalibriergasgemischen mit Hilfe von dynamisch-
volumetrischen Verfahren - Teil 8: Diffusionsverfahren (ISO 6145-8:2005)

Analyse des gaz - Préparation de mélanges de gaz pour étalonnage à l'aide de
méthodes volumétriques - Partie 8: Méthode par diffusion (ISO 6145-8:2005)

Ta slovenski standard je istoveten z: EN ISO 6145-8:2008

ICS:

71.040.40 Kemijska analiza Chemical analysis

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 6145-8

August 2008

ICS 71.040.40

English Version

**Gas analysis - Preparation of calibration gas mixtures using
dynamic volumetric methods - Part 8: Diffusion method (ISO
6145-8:2005)**

Analyse des gaz - Préparation des mélanges de gaz pour
étalonnage à l'aide de méthodes volumétriques
dynamiques - Partie 8: Méthode par diffusion (ISO 6145-
8:2005)

Gasanalyse - Herstellung von Kalibriergasgemischen mit
Hilfe von dynamisch-volumetrischen Verfahren - Teil 8:
Diffusionsverfahren (ISO 6145-8:2005)

This European Standard was approved by CEN on 30 July 2008.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

The text of ISO 6145-8:2005 has been prepared by Technical Committee ISO/TC 158 "Analysis of gases" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 6145-8:2008 by Technical Committee CEN/SS N21 "Gaseous fuels and combustible gas" the secretariat of which is held by CMC.

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of an identical text or by endorsement, at the latest by February 2009, and conflicting national standards shall be withdrawn at the latest by February 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, 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 the United Kingdom.

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INTERNATIONAL STANDARD

ISO
6145-8

First edition
2005-02-01

Gas analysis — Preparation of calibration gas mixtures using dynamic volumetric methods —

Part 8: Diffusion method

iTeh STANDARD PREVIEW

*Analyse des gaz — Préparation de mélanges de gaz pour étalonnage à
l'aide de méthodes volumétriques —*

Partie 8: Méthode par diffusion

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ISO 6145-8:2005(E)

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 6145-8 was prepared by Technical Committee ISO/TC 158, *Analysis of gases*.

ISO 6145 consists of the following parts, under the general title *Gas analysis — Preparation of calibration gas mixtures using dynamic volumetric methods*:

— *Part 1: Methods of calibration*

— *Part 2: Volumetric pumps*

— *Part 4: Continuous syringe injection method*

— *Part 5: Capillary calibration devices*

— *Part 6: Critical orifices*

— *Part 7: Thermal mass-flow controllers*

— *Part 8: Diffusion method*

— *Part 9: Saturation method*

— *Part 10: Permeation method*

— *Part 11: Electrochemical generation*

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Introduction

This part of ISO 6145 is one of a series of International Standards that present various dynamic volumetric methods used for the preparation of calibration gas mixtures. In the lower part of the mole fraction range considered, it is difficult to prepare and maintain gas mixtures – for example of certain organic or reactive components – in cylinders. This dynamic method has the advantage of a practically unlimited supply of calibration component, whereby adsorption effects can be reduced or even eliminated.

If the complementary gas flow is measured as a gas mass flow, the preparation of calibration gas mixtures using diffusion is a dynamic-gravimetric method which gives contents in mole fractions. Principles for the measurement of the complementary gas flow are given in ISO 6145-1.

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