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Second edition
2017-05

Gas analysis — Handling of calibration gases and gas mixtures — Guidelines

Analyse des gaz — Mise en oeuvre des gaz et des mélanges de gaz pour étalonnage — Lignes directrices



Reference number
ISO 16664:2017(E)

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Foreword

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This document was prepared by Technical Committee ISO/TC 158, *Analysis of gases*.

This second edition cancels and replaces the first edition (ISO 16664:2004), which has been technically revised. The major changes are the following:

- [Figures 1](#) and [5](#) have been revised to more clearly depict the arrangements;
- several references and terminological entries have been updated.

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Introduction

This document uses the terms “calibration gas” for both gas mixtures and pure gases as the limiting case of gas mixtures.

The quality of calibration gases in cylinders as certified by producers is defined by

- a) the correct analyte content;
- b) a known uncertainty which is appropriate for its intended use;
- c) the stability;
- d) the homogeneity.

During its utilization period, the quality of calibration gases is influenced by

- storage conditions at the manufacturer’s and user’s sites;
- transport conditions;
- modes of calibration gas withdrawal and transfer;
- the transfer system employed.