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

*Analyse des gaz — Manutention des gaz et des mélanges de gaz pour  
étalonnage — Lignes directrices*



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## Foreword

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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 16664 was prepared by Technical Committee ISO/TC 158, *Analysis of gases*.

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## Introduction

This International Standard 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.