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## Gas mixtures — Gravimetric preparation — Mastering correlations in composition

*Mélanges de gaz — Préparation gravimétrique — Maîtrise des corrélations en composition*



Reference number  
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## Foreword

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An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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/TS 29041 was prepared by Technical Committee ISO/TC 158, *Analysis of gases*.

This document is not to be regarded as an "International Standard". It is proposed for provisional application so that information and experience of its use in practice may be gathered. Comments on the content of this document should be sent to the ISO Central Secretariat.

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## Introduction

ISO/TC 158 decided at its meeting in Prague (October 2002) to investigate the influence of possible correlations (both extrinsic and intrinsic) on the uncertainty calculation(s) for mixture composition and gas mixture property data. Methods should be developed for taking all existing correlations into account, and exemplified appropriately.

This Technical Specification describes the tools needed for full accounting of correlations, and exemplifies how these tools should be applied to practical examples. Some recommendations are given which are intended to provide support to the decision on whether or not, and in which situations, the full calculatory scheme as described herein should be applied in practice, and in which situations simplified approaches as given in ISO 6142 are considered sufficient for the intended purpose.