



**International
Standard**

ISO 13741-2

**Plastics/rubber — Determination
of residual monomers and other
organic components by capillary-
column gas chromatography —**

**Part 2:
Headspace method**

**Second edition
2026-10**

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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.

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This second edition cancels and replaces the first edition (ISO 13741-2:1988), which has been technically revised.

The main changes are as follows:

- the relative corrective factors for internal standard method in quantitative method are now determined by standard addition method, rather than external standard in previous version;
- added details for the preparation of standard solutions, calibration solutions and sample solutions are described;
- added the specification for automated headspace sampler;
- add [Clause 3](#) Terms and definitions.

A list of all parts in the ISO 13741 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The requirements imposed today by authorities include the assessment of the content of residual monomers and organic volatiles, for health and environmental reasons sometimes down to minute traces.

This document presents a method for the determination by gas chromatography of residual monomers and other organic components in polymer dispersions and lattices. This document provides a method that is in line with present-day requirements for analytical methods and is intended for use instead of ISO 3899, where precise measurements of volatile-matter content are needed. This document also expands the scope to include other volatile organic components than residue monomers.

Since the chromatograms obtained normally contain a series of peaks, it is only possible to determine the content of those volatiles for which response factors have been determined. For the identification of unknown peaks, auxiliary methods like mass spectroscopy or the use of a second GC column with a different polarity are advisable.

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