

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

Part 1:

Direct liquid injection method



Reference number
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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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 13741-1:1998), which has been technically revised.

The main changes are as follows:

- the title has been modified to 3 elements from 4 elements;
- part of the Scope (1.3) has been removed;
- [Clause 3](#), Terms and definitions, has been added and subsequent clauses have been renumbered;
- [Formulae \(1\)](#) and [\(2\)](#) have been numbered.

A list of all parts in the ISO 13741-1 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.

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Introduction

The requirements imposed today by authorities include the assessment of the content of residual monomers and organic saturated volatiles, for health and environmental reasons sometimes down to minute traces. Former standards for measurement of residual volatiles based on distillation linked with titration cannot cope with such exigences.

This document presents an advanced method for the determination, by gas chromatography, of residual monomers and other organic components in polymer dispersions and lattices. It 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, and expands their scope to include other volatile organic components.