

INTERNATIONAL STANDARD

ISO 14714

First edition
1998-08-01

Essential oils and aromatic extracts — Determination of residual benzene content

*Huiles essentielles et extraits aromatiques — Détermination de la teneur en
benzène résiduel*



Reference number
ISO 14714:1998(E)

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.

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

International Standard ISO 14714 was prepared by Technical Committee ISO/TC 54, *Essential oils*.

Annex A of this International Standard is for information only.

© ISO 1998

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet iso@iso.ch
Printed in Switzerland

Essential oils and aromatic extracts — Determination of residual benzene content

1 Scope

This International Standard describes a method for determining the residual traces of benzene in essential oils and aromatic extracts, using static headspace gas chromatography.

It applies to residual contents of around 10×10^{-6} (10 ppm) in the analysed product.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 356, *Essential oils — Preparation of test samples*.

ISO 7609, *Essential oils — Analysis by gas chromatography on capillary columns — General method*.

3 Principle

Analysis by gas chromatography of the static headspace on a capillary column, either by flame ionization detector or by detection by means of mass spectrometry.

Determination of residual benzene content using external standard method (by calibration).

4 Reagents

4.1 Reference substance: benzene, of minimum purity 99 %, as determined by gas chromatography.

4.2 Diethyl phthalate, free from any traces of benzene, to be verified under test conditions.