



**International
Standard**

ISO 4730

**Essential oil of *Melaleuca*, terpinen-
4-ol type (tea tree oil)**

*Huile essentielle de Melaleuca, type terpinén-4-ol (huile
essentielle de Tea Tree)*

**Fourth edition
2025-06**

This document is a preview generated by EMS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Requirements	1
4.1 General.....	1
4.2 Chromatographic profile.....	2
5 Additional information	2
5.1 Flash point.....	2
5.2 Enantiomeric distribution.....	3
6 Sampling	3
7 Packaging, labelling, marking and storage	3
Annex A (informative) Typical chromatograms of the analysis by gas chromatography of the essential oil of <i>Melaleuca</i>, terpinen-4-ol type (tea tree oil)	4
Annex B (informative) Flash point	7
Annex C (informative) Enantiomeric distribution — General information	8
Bibliography	9

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 54, *Essential oils*.

This fourth edition cancels and replaces the third edition (ISO 4730:2017), which has been technically revised. It also incorporates the Amendment ISO 4730:2017/Amd 1:2018.

The main changes are as follows:

- inclusion of enantiomeric distribution parameters for α -terpineol.

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.

Essential oil of *Melaleuca*, terpinen-4-ol type (tea tree oil)

1 Scope

This document specifies certain characteristics of the essential oil of *Melaleuca*, terpinen-4-ol type (tea tree oil), in order to facilitate assessment of its quality.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 210, *Essential oils — General requirements and guidelines for packaging, conditioning and storage*

ISO 211, *Essential oils — General requirements for labelling and marking of containers*

ISO 212, *Essential oils — Sampling*

ISO 279, *Essential oils — Determination of relative density at 20 °C — Reference method*

ISO 280, *Essential oils — Determination of refractive index*

ISO 592, *Essential oils — Determination of optical rotation*

ISO 875, *Essential oils — Evaluation of miscibility in ethanol*

ISO 11024 (all parts), *Essential oils — General guidance on chromatographic profiles*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org/>

3.1

essential oil of *Melaleuca*, terpinen-4-ol type tea tree oil

essential oil obtained by steam distillation of the leaves and terminal branchlets of *Melaleuca alternifolia* (Maiden and Betche) Cheel or of *M. linariifolia* Sm

Note 1 to entry: For information on the characterization of this essential oil, see ISO/TR 21092.

4 Requirements

4.1 General

Essential oil of *Melaleuca*, terpinen-4-ol type (tea tree oil) shall meet the requirements and follow the test methods given in [Table 1](#).