

AS 2782:2021
ISO 4730:2017
ISO 4730:2017/Amd.1:2018



STANDARDS
Australia



Essential oil of *Melaleuca*, terpinen-4-ol type (Tea Tree oil)



AS 2782:2021

This Australian Standard ® was prepared by CH-021, Essential Oils. It was approved on behalf of the Council of Standards Australia on 6 September 2021.

This Standard was published on 17 September 2021.

The following are represented on Committee CH-021:

- Accord Australasia
- Australian Society of Cosmetic Chemists
- Australian Tea Tree Industry Association
- Essential Oil Producers Association of Australia
- Southern Cross University

This Standard was issued in draft form for comment as DR AS 2782:2021.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

ISBN 978 1 76113 506 4

Essential oil of *Melaleuca*, terpinen-4-ol type (Tea Tree oil)

Originated as AS K175—1967.
Second edition AS 2782—1997.
Previous edition 2009.
Fourth edition 2021.

COPYRIGHT

© ISO 2021 — All rights reserved
© Standards Australia Limited 2021

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

Preface

This Standard was prepared by the Standards Australia Committee CH-021, Essential Oils, to supersede AS 2782-2009, *Oil of Melaleuca, terpinen-4-ol type (Tea Tree oil)*.

The objective of this document is to specify certain characteristics of the essential oil of *Melaleuca, terpinen-4-ol type (Tea Tree oil)*, in order to facilitate assessment of its quality.

This document is identical with, and has been reproduced from, ISO 4730:2017, *Essential oil of Melaleuca, terpinen-4-ol type (Tea Tree oil)* and its Amendment No. 1 (2018).

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

Contents

Preface	ii
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Requirements	1
5 Additional information	2
5.1 Flashpoint	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) Flashpoint	8
Annex C (informative) Enantiomeric distribution — General information	9
Bibliography	10

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 54, *Essential oils*.

This third edition cancels and replaces the second edition (ISO 4730:2004), which has been technically revised.

Australian Standard®

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/TS 210, *Essential oils — General rules for packaging, conditioning and storage*

ISO/TS 211, *Essential oils — General rules 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 terminological databases for use in standardization at the following addresses:

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

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

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 et Betche) Cheel or of *M. linariifolia* Sm.

Note 1 to entry: For information on the CAS number, see ISO/TR 21092.

4 Requirements

4.1 Essential oil of *Melaleuca*, terpinen-4-ol type (Tea Tree oil) shall meet the requirements as given in [Table 1](#).

Table 1 — Requirements for the essential oil of *Melaleuca*, terpinen-4-ol type (Tea Tree oil)

Characteristics	Requirements	ISO test method
Appearance	Clear, mobile liquid	—
Colour	Colourless to pale yellow	—