

Australian Standard™

Essential oils—Oil of lemon

This Australian Standard was prepared by Committee CH/21, Essential Oils. It was approved on behalf of the Council of Standards Australia on 30 July 1999 and published on 5 September 1999.

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Australian Society of Cosmetic Chemists
Australian Society of Perfumers and Flavourists
Cosmetic Toiletry Fragrance Association of Australia
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PREFACE

This Standard was prepared by the Standards Australia Committee CH/21, Essential Oils to supersede AS 2781—1985. It was particularly noted that due to the kind of soil and climate found in Australia, the lemon oil of locally grown fruit does not meet the requirements of the British Pharmacopoeia with respect to aldehyde content, but it is felt that the BP value is probably based more on tradition and the growing conditions peculiar to Europe rather than having real practical value.

Although originally based on ISO 855:1981, *Oil of lemon, Italy, obtained by expression*, this Standard is not similar in its specification to that Standard. The objective of this Standard is to provide properties and range of values appropriate to oil of Australian-grown lemons, obtained by cold expression from the peel of such lemon fruit. It also gives specifications for flashpoint.

The aldehyde content determination detailed in Appendix B is derived from the AOAC method and is considered to be the simplest and most precise means of assessing the true aldehyde content. Several variations on this method have been examined and were rejected as unsuitable as they were found to actually give a total carbonyl value (including ketones) rather than simply the aldehyde content.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

Essential oils—Oil of lemon

1 SCOPE This Standard specifies certain characteristics for the oil of Australian-grown lemons, obtained by cold expression from the peel of such lemon fruit.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

2106 Method for the determination of the flashpoint of flammable liquids (closed cup)

2162 Verification and use of volumetric apparatus

2162.1 Part 1: General—Volumetric glassware

4550 Essential oils—Sampling

ISO

TR 210 Essential oils—General rules for packaging, conditioning and storage

TR 211 Essential oils—General rules for labelling and marking of containers

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

280 Essential oils—Determination of refractive index

356 Essential oils—Preparation of test samples

592 Essential oils—Determination of optical rotation

875 Essential oils—Evaluation of miscibility in ethanol

1242 Essential oils—Determination of the acid value

3696 Water for analytical laboratory use—Specification and test methods

4715 Essential oils—Quantitative evaluation of residue on evaporation

TR 11018 Essential oils—General guidance on the determination of the flashpoint

Australian Code for the Transport of Dangerous Goods by Road and Rail

3 DEFINITION For the purpose of this Standard, the following definition applies:

3.1 Oil of lemon—the oil obtained by cold expression from the outer part of the fresh pericarp of the ripe or nearly ripe fruit of *Citrus limon* (Linnaeus) Burman filius.

4 CHARACTERISTICS

4.1 General The characteristics of oil of lemon shall be as set out in Clauses 4.2 to 4.9.

The flashpoint value is dependent on the equipment used.

NOTE: See Appendix A for further information on flashpoint determination.

4.2 Appearance A clear, pale to deep yellow or greenish-yellow liquid, mobile at 20°C.

4.3 Odour Characteristic odour of crushed lemon peel.