

INTERNATIONAL STANDARD

**ISO
1241**

Second edition
1996-12-15

Essential oils — Determination of ester values, before and after acetylation, and evaluation of the contents of free and total alcohols

Huiles essentielles — Détermination de l'indice d'ester, avant et après acétylation, et évaluation de la teneur en alcools libres et en alcools totaux



Reference number
ISO 1241:1996(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 Standard ISO 1241 was prepared by Technical Committee ISO/TC 54, *Essential oils*.

This second edition cancels and replaces the first edition (ISO 1241:1980), which has been technically revised.

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Essential oils — Determination of ester values, before and after acetylation, and evaluation of the contents of free and total alcohols

1 SCOPE

This International Standard specifies a method to evaluate the contents of free alcohols and total alcohols in essential oils by determination of ester values before and after acetylation by acetic anhydride in the presence of sodium acetate.

The method is not applicable to essential oils containing appreciable quantities of tertiary alcohols (for example linalol and terpineols), which would not be completely acetylated.

NOTE: For these essential oils the method given in ISO 3794¹⁾ should be used.

The method is not applicable to essential oils containing appreciable quantities of phenols, lactones, aldehydes or enolysable ketones, which would be acetylated in addition to free alcohols.

2 NORMATIVE REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 212:1973, *Essential oils — Sampling*.

ISO 356:1996, *Essential oils — Preparation of test sample*.

ISO 385-1:1984, *Laboratory glassware — Burettes — Part 1: General requirements*.

ISO 709:1980, *Essential oils — Determination of ester value*.

1) ISO 3794:1976, *Essential oils (containing tertiary alcohols) - Estimation of free alcohols content by determination of ester value after acetylation*.