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R 356

ESSENTIAL OILS

METHODS OF TEST
PREPARATION OF SAMPLE

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 356, *Essential oils—Methods of test—Preparation of sample*, was drawn up by Technical Committee ISO/TC 54, *Essential Oils*, the Secretariat of which is held by the Repartição de Normalização (IGPAI).

Work on this question by the Technical Committee began in 1955, and led to the adoption of a Draft ISO Recommendation.

In March 1962, this Draft ISO Recommendation (No. 505) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Australia	France	Portugal
Belgium	Germany	Romania
Brazil	India	Spain
Bulgaria	Israel	Switzerland
Burma	Italy	United Kingdom
Canada	Netherlands	U.S.S.R.
Chile	New Zealand	Yugoslavia
Czechoslovakia	Poland	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in December 1963, to accept it as an ISO RECOMMENDATION.

ISO Recommendation R 356 December 1963

ESSENTIAL OILS

METHODS OF TEST
PREPARATION OF SAMPLE

1. PURPOSE

This ISO Recommendation lays down general guidance for the preliminary preparation of samples of essential oils submitted to the laboratory for analysis.

2. PROCEDURE

If the essential oil is solid or partly solid at room temperature, liquefy it by placing it in an oven at the lowest temperature allowing liquefaction to be attained in less than 10 minutes. This is usually about 10 °C above the anticipated freezing point. During this operation, mainly in the case of essential oils containing aldehydes, it is necessary to avoid the entry of air into the container that holds the essential oil. To achieve this, loosen, but do not remove, the stopper. Pour the essential oil into a dry conical flask, previously warmed in the oven, so that it is not filled to more than two-thirds of its capacity.

During all subsequent operations, the oil should be kept at the lowest temperature at which it will remain liquid.

If the essential oil is liquid at room temperature, place it in a dry flask at the same temperature.

In both the above cases, add to the flask *freshly ignited* * *neutral* magnesium sulphate, corresponding in amount to about 15 per cent of the mass of the essential oil. Shake vigorously from time to time during a period of from one to two hours.

Filter the sample. In the first case, do this in the oven, but do not keep in the oven longer than is necessary.

Check the action of the dehydrating agent by a series of measurements of the refractive index after each desiccation.

These operations should immediately precede the analysis. If not, the filtered oil should be kept in a well-filled container, which has been previously dried, securely stoppered, protected against strong light and stored in a cool place.

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* Desiccate the magnesium sulphate as follows:

Heat the neutral magnesium sulphate at 180 to 200 °C (temperature taken in the material continuously stirred) to a constant mass. Grind to a fine powder and keep in a dried flask securely stoppered.