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REGULATION (EEC) No 1539/71 OF THE COMMISSION

of 19 July 1971

determining Community methods for the analysis of wines

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community;

Having regard to Council Regulation (EEC) No 816/70[1] of 28 April 1970 laying down additional provisions for the common organisation of the market in wine, as last amended by Regulation (EEC) No 2612/70[2] and in particular Article 20 (4) and Article 39 thereof;

Having regard to Council Regulation (EEC) No 817/70[3] of 28 April 1970 laying down special provisions for quality wines produced in specified regions, and in particular Article 11 (4) thereof;

Whereas Article 39 of Regulation (EEC) No 816/70 provides for the adoption of detailed rules necessary for implementing the provisions of Annexes I and II and in particular the adoption of methods of analysis;

Whereas Article 11 (1) of Regulation (EEC) No 817/70 provides for an analytical test, including an assessment of the characteristics, as listed in the Annex to that Regulation, of the quality wine p.s.r. in question; whereas paragraph 3 of that same Article envisages the adoption of Community methods;

Whereas the provisions relating to oenological processes and conditions for release to the market call for an effective control of the products in question; whereas the uniform application of such control and the verification of documentary particulars of products call for the introduction of uniform methods of analysis to ensure that accurate and comparable information is obtained; whereas, consequently, these methods should be compulsory for all commercial transactions and all verification procedures; whereas, however, in view of commercial requirements and limitations, a restricted number of simplified procedures should be permitted enabling the requisite factors to be determined rapidly and with reasonable accuracy;

Whereas generally recognised methods should be used; whereas, therefore, maximum use should be made of the methods formulated under the 1954 International Convention for the Unification of Methods for the Analysis and Appraisal of Wines;

Whereas the measures provided for in this Regulation are in accordance with the Opinion of the Management Committee for Wine;

HAS ADOPTED THIS REGULATION:

Article 1

1. The methods of analysis for the application of Regulations (EEC) Nos 816/70 and 817/70 shall be those set out in the Annex to this Regulation.

Except where expressly stated in that Annex, such methods shall be applied as directed in the Annex to the Compendium of International Methods for the Analysis of Wines, prepared and supplemented under the 1954 International Convention for the Unification of Methods for the Analysis and Appraisal of Wines.

2. For the items for which both standard methods and simplified methods are laid down, results obtained from the standard methods shall prevail.

Article 2

This Regulation shall enter into force on 1 September 1971.

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[1] OJ No L 99, 5.5.1970, p. 1.
[2] OJ No L 281, 27.12.1970, p. 6.
[3] OJ No L 99, 5.5.1970, p. 20.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 19 July 1971.

For the Commission

The President

Franco M. MALFATTI

ANNEX

1. For determining specific gravity and density:

   (a) the standard method shall be measurement by a pycnometer

   (b) the simplified method shall be measurement by a hydrometer.

   These methods are described under A 1 (c) in the Annex to the Compendium referred to in Article 1.

2. For determining the actual alcoholic strength:

   (a) of wines:

      (aa) the standard method shall be double distillation and measurement of the specific gravity of the distillate by a pycnometer;

      (bb) the simplified method shall be simple distillation of the neutralised liquid and measurement of the alcoholic strength by a hydrometer;

   (b) of must and must in fermentation with an actual alcoholic strength not exceeding 6°:

      (aa) the standard method shall be the measurement of alcohol by chemical means,

      (bb) the simplified method shall be that given under (a) (bb).

   These methods are described under A 2 (c) in the Annex to the Compendium referred to in Article 1.

3. The total dry extract shall be measured by a densimeter and calculated indirectly from the specific gravity of the residue without alcohol.

   This method is decribed under A 3 (c) in the Annex to the Compendium referred to in Article 1.

4. The reducing sugar content shall be determined as follows:

   (a) by clarification:

      — of red wines: with lead subacetate,

      — of other products: with zinc ferrocyanide;

   (b) by allowing the clarified wine to react with a fixed quantity of an alkaline copper salt solution, and measuring the excess of copper ions by iodometry.

   These methods are described under A 4 (d) in the Annex to the Compendium referred to in Article 1.

5. For determining the sucrose content:

   (a) the standard method shall be:

      (aa) for qualitative testing: thin layer chromatography and paper chromatography,

      (bb) for measurement after inversion; method outlined under 4;

(b) the simplified method shall be:

(aa) for qualitative testing: colorimetry.

(bb) for measurement after inversion: method outlined under 4.

These methods are described under A 5 (f) in the Annex to the Compendium referred to in Article 1.

Where the result obtained from the measurement of the sucrose content is less than 1 g/l for dry wines or 2 g/l for sweet wines, a qualitative test shall be carried out. If this gives a negative result, it is not attributable to the sucrose.

6. Ash content shall be determined by incinerating the dry extract at between 500 °C and 550 °C until complete combustion of the carbon has taken place.

This method is described under A 6 (a) in the Annex to the Compendium referred to in Article 1.

7. The methods of determining the alkalinity of the ash shall be:

(a) in respect of total alkalinity: back titration with sulphuric acid after heating using methyl orange as an indicator to which, if necessary, a drop of methylene blue may be added;

(b) in respect of partial alkalinity: back titration with sulphuric acid in the presence of a small excess of cerous ions using a colour indicator changing at pH 4·5.

Those methods are described under A 7 (a) in the Annex to the Compendium referred to in Article 1.

8. For determining the total acidity:

After first removing the carbonic acid and sulphur dioxide:

(a) the standard method shall be potentiometric titration,

(b) the simplified method shall be titration with bromothymol blue to indicate the end of the reaction.

The total acidity shall be expressed in milli-equivalents per litre.

These methods are described under A 10 (a) in the Annex to the Compendium referred to in Article 1.

9. The volatile acidity shall be determined by separation of the volatile acids by steam distillation. The colour indicator used shall be phenolphthalein.

The volatile acidity shall be expressed in milli-equivalents per litre.

This method is described under A 11 (a) in the Annex to the Compendium referred to in Article 1.

10. The non-volatile acidity shall be determined by calculating the difference between the total acidity and the volatile acidity.

11. For determining tartaric acid:

(a) the standard method shall be colorimetric measurement of the tartaric acid—isolated by means of an anion exchange column—by means of the red coloration which it gives with vanadic acid;

(b) the simplified method shall be acidimetric measurement of the tartaric acid precipitated in the form of potassium acid tartrate under conditions which reduce solubility to a minimum.

These methods are described under A 12 (g) in the Annex to the Compendium referred to in Article 1.

12. Citric acid shall be determined with the other acids by an anion exchange resin. The citramalic acid is separated by fractional elution. The citric acid is converted by oxidization into acetone which is separated by distillation. The acetone is measured by iodometry.

This method is described under A 29 (e) in the Annex to the Compendium referred to in Article 1.

13. For determining sulphur dioxide:

(a) the standard method shall be measurement of the total sulphur dioxide, carried over by a current of air or nitrogen into a standard solution of sodium hydroxide;

(b) the simplified method shall be:

(aa) in the case of free sulphur dioxide, direct iodometric titration with a blank titration of the same wine in which the free sulphur dioxide has been combined by an excess of ethanal or propanal;

(bb) in the case of combined sulphur dioxide, iodometric titration after double alkaline hydrolysis of the wine where the free sulphur dioxide has been oxidized in the course of the iodometric titration;

(cc) in the case of the total sulphur dioxide, by adding the results obtained in the two analyses referred to in (aa) and (bb)

These methods are described under A 17 (c) in the Annex to the Compendium referred to in Article 1.

14. The pH value of the wine and that of the must shall be determined by measuring the difference in potential between two electrodes dipped in the liquid under examination. One of these electrodes has a potential which is a certain function of the pH of the liquid, the other has a fixed and known potential and constitutes the reference electrode.

This method is described under A 31 (f) in the Annex to the Compendium referred to in Article 1.