# COMMISSION REGULATION (EC) No 2053/97

## of 20 October 1997

## amending Regulation (EEC) No 3220/90 laying down conditions for the use of certain oenological practices provided for in Council Regulation (EEC) No 822/87

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 822/87 of 16 March 1987 on the common organization of the market in wine [1], as last amended by Regulation (EC) No 1417/97 [2], and in particular Article 15 (6) thereof,

Whereas Commission Regulation (EEC) No 3220/90 [3], as amended by Regulation (EEC) No 2624/95 [4], lays down the conditions for the use of certain oenological practices provided for in Regulation (EEC) No 822/87; whereas that Regulation should be supplemented as regards the conditions on the use of electrodialysis to guarantee tartaric stabilization of wine as provided for in Regulation (EEC) No 822/87;

Whereas, in the light of technical information currently available, it is not possible to establish definitively what impact the new treatment will have on the particular qualitative characteristics of quality wines psr, in particular as regards typicality; whereas, in view of the need to maintain a certain quality and avoid distortion of competition between the various specified regions, its use for quality wines psr should not be permitted in the immediate future;

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*

Regulation (EEC) No 3220/90 is hereby amended as follows:

1. the following paragraph is added to Article 1:

   '4. Electrodialysis to guarantee tartaric stabilization of wine as provided for in Annex VI (4) (b) to Regulation (EEC) No 822/87 may only be applied to table wine and on condition it meets the requirements set out in Annex IV to this Regulation.';

2. the Annex to this Regulation is added after Annex III.

*Article 2*

This Regulation shall enter into force on the day following its publication in the *Official Journal of the European Communities.*

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

Done at Brussels, 20 October 1997.

*For the Commission*

Franz FISCHLER

*Member of the Commission*

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[1] OJ L 84, 27. 3. 1987, p. 1.
[2] OJ L 196, 24. 7. 1997, p. 10.
[3] OJ L 308, 8. 11. 1990, p. 22.
[4] OJ L 269, 11. 11. 1995, p. 1.

*ANNEX*

*'ANNEX IV*

## REQUIREMENTS APPLYING TO ELECTRODIALYSIS TREATMENT

The purpose is to obtain tartaric stability of the wine with regard to potassium hydrotartrate and calcium tartrate (and other calcium salts) by extraction of ions in supersaturation in the wine under the action of an electrical field and using membranes that are either anion-permeable or cation-permeable.

1. MEMBRANE REQUIREMENTS

1.1 The membranes are to be arranged alternately in a "filter-press" type system or any other appropriate system separating the treatment (wine) and concentration (waste water) compartments.

1.2. The cation-permeable membranes must be designed to extract cations only, in particular $K^+$ and $Ca^{++}$.

1.3. The anion-permeable membranes must be designed to extract anions only, in particular tartrate anions.

1.4. The membranes must not excessively modify the physico-chemical composition and sensory characteristics of the wine. They must meet the following requirements:

— they must be manufactured according to good manufacturing practice from substances authorized for the manufacture of plastic materials intended to come into contact with foodstuffs as listed in Annex II to Commission Directive 90/128/EEC [1],

— the user of the electrodialysis equipment must show that the membranes used meet the above requirements and that any replacements have been made by specialized personnel,

— they must not release any substance in quantities endangering human health or affecting the taste or smell of the foodstuff and must meet the criteria laid down in Directive 90/128/EEC,

— their use must not trigger interactions between their constituents and the wine liable to result in the formation of new compounds that may be toxic in the treated product.

The stability of fresh electrodialysis membranes is to be determined using a simulant reproducing the physico-chemical composition of the wine for investigation of possible migration of certain substances from them.

The experimental method recommended is as follows:

The simulant is a water-alcohol solution buffered to the pH and conductivity of the wine. Its composition is as follows:

— absolute ethanol: 11 l,

— potassium hydrotartrate: 380 g,

— potassium chloride: 60 g,

— concentrated sulphuric acid: 5 ml,

— distilled water: to make up 100 litres.

This solution is used for closed circuit migration tests on an electrodialysis stack under tension (1 volt/cell), on the basis of 50 l/m² of anionic and cationic membranes, until 50 % demineralization of the solution. The effluent circuit is initiated by a 5 g/l potassium chloride solution. Migrating substances are tested for in both the simulant and the effluent.

Organic molecules entering into the membrane composition that are liable to migrate into the treated solution will be determined. A specific determination will be carried out for each of these constituents by an approved laboratory. The content in the simulant of all the determined compounds must be less than 50 µg/l.

The general rules on controls of materials in contact with foodstuffs must be applied to these membranes.

[1] OJ L 75, 21. 3. 1990, p. 19.

2. MEMBRANE UTILIZATION REQUIREMENTS

The membrane pair is formulated so that the following conditions are met:

— the pH reduction of the wine is to be no more than 0,3 pH units,

— the volatile acidity reduction is to be less than 0,12 g/l (2 meq expressed as acetic acid),

— treatment must not affect the non-ionic constituents of the wine, in particular polyphenols and polysaccharides,

— diffusion of small molecules such as ethanol is to be reduced and must not cause a reduction in alcoholic strength of more than 0,1 % vol,

— the membranes must be conserved and cleaned by authorized methods with substances authorized for use in the preparation of foodstuffs,

— the membranes are marked so that alternation in the stack can be checked,

— the equipment is to be run using a command and control mechanism that will take account of the particular instability of each wine so as to eliminate only the supersaturation of potassium hydrotartrate and calcium salts,

— the treatment is to be carried out under the responsibility of an oenologist or qualified technician.

The treatment is to be recorded in the register referred to in Article 71 (2) of Regulation (EEC) No 822/87.'