II.3.3.2 Tartrate stabilisation by electrodialysis

Definition :

Physical method for the extraction of ions in super-saturation in the wine under the action of an electric field with the help of membranes permeable only to anions on the one hand, and membranes permeable only to cations on the other hand.

Objective :

To obtain a tartrate-stable wine:

- With respect to potassium hydrogen tartrate
- With respect to calcium tartrate (and other salts of calcium).

Prescriptions :

a) The membranes are flat and arranged alternately in a system typical of a filter-press, that establishes compartments of processing (wine) and concentration (reject water).
b) Cation exchange membranes shall be adapted to the extraction of only cations and in particular: K^+, Ca^{++}.
c) Anion exchange membranes shall be adapted to the extraction of only anions and especially of tartrate anions.
d) The equipment used will be operated under a control system that takes into account the instability of each wine in such a way that only the super-saturation in potassium hydrogen tartrate and in salts of calcium is eliminated.
e) The implementation of the process will be under the responsibility of an oenologist or specialist technician.
f) The membranes shall comply with the prescriptions of the International Oenological Codex and shall not to lead to excessive modifications of the physico-chemical composition and sensory characteristics of the wine.

Recommendation of OIV

Admitted