

Treatment of wines using a membrane technology coupled with activated carbon to reduce excess
4-ethylphenol and 4-ethylguaiacol

II.3.5.18 Treatment of wines using a membrane technology coupled with activated carbon to reduce excess 4-ethylphenol and 4-ethylguaiacol

Definition:

Process that consists of reducing the excess content of 4-ethylphenol and 4-ethylguaiacol in wine using a coupling of technologies combining nanofiltration and treatment with activated carbon deodoriser

Objective:

- a) Reduce the content of 4-ethylphenol and 4-ethylguaiacol of microbial origin that constitutes organoleptic defects and masks the aromas of the wine..

Prescription:

- a) Refer to the general file on separative techniques used in the treatment of wines (Chapter 3.0) and the file on the application of membrane techniques applied to wines (Chapter 3.01).
- b) The objective of the first step of the process is to produce an ultrafiltrate containing some of the volatile phenols. This is achieved through nanofiltration.
- c) The ultrafiltrate obtained during the first step of the process is treated continuously on a column of activated carbon with deodorizing properties, then continuously and fully reincorporated into the initial tank of wine to be treated.
- d) The volume of ultrafiltrate extracted and treated with the column of activated carbon is dependent on the quantity of 4-ethylphenol and 4-ethylguaiacol to be removed.
- e) An oenologist or a qualified technician will be responsible for implementing the treatment.
- f) The activated carbon with deodorizing properties and nanofiltration membranes used must comply with the prescriptions contained in the “International Oenological Codex”.

Recommendation of OIV:

Admitted