II.2.1.25.1 Reduction of the sugar content in musts through membrane coupling

Definition:

Process that consists in extracting the sugar from musts, by using membrane coupling combining microfiltration or ultrafiltration with nanofiltration or inverted osmosis.

Objectives:

a) Reducing the sugar content of musts destined for fermentation, with the purpose of obtaining a wine with reduced ethanol content;

Prescriptions:

a) Refer to the general sheet concerning the reduction of sugar content in musts (*sheet II.2.1.25 'Reduction of the sugar content in musts Fining using yeast protein extracts'*)

b) The treatment is carried out on a volume of must that is determined according to the required result in terms of sugar content reduction.

c) The objective of the first step is to prepare the must for the second concentration step and to filter out all the macromolecules smaller than the membrane's cut-off size. This step may be done by ultrafiltration.

d) The ultrafiltrate obtained during the first step of the treatment is then concentrated by nanofiltration or inverted osmosis. The water and the organic acids filtered out by the nanofiltration process can be reintroduced into the treated must

e) The treatment is to be conducted under the responsibility of an oenologist or of a qualified technician

f) The membranes used must comply with the prescriptions contained in the "International Oenological Codex"

Recommendation of the OIV:

Admitted