

II.1.18 Treatment by discontinuous high pressure processes

Definition:

Process that consists in the reduction of indigenous organisms in grapes by the use of discontinuous high pressure processes, with pressures higher than 150 MPa (1500 bar).

Objective

- a) To reduce the microbial loads of indigenous microorganisms, especially yeasts,
- b) To reduce SO₂ levels used in winemaking,
- c) To accelerate maceration in red winemaking.

Prescriptions

- a) The high hydrostatic pressure (HHP) technique relates to the use of pressure levels of higher than 150 MPa (1500 bar) during a discontinuous process.
- b) The elimination of yeasts in grapes and musts requires pressure levels of 200-400 MPa.
- c) The elimination of bacterial cells needs pressure levels of 500-600 MPa.
- d) The treatment time range is 2-10 minutes.
- e) If necessary, the increase in temperature may be controlled by supplementary refrigeration.
- f) The increase in temperature and the techniques used should not entail any alteration in the appearance, colour, flavour or taste of the wine.

Recommendation of OIV

Admitted