RESOLUTION OIV-OENO 498-2013

MODIFICATION OF THE FILES ON OENOLOGICAL PRACTICES REGARDING ENZYMES

THE GENERAL ASSEMBLY,

With regard to Article 2 paragraph 2 ii of the Agreement of 3 April 2001 establishing the International Organisation of Vine and Wine,

CONSIDERING the work of the "Technology" and "Specifications of oenological products" expert groups,

CONSIDERING resolutions AG 3/85-OEN, OENO 13/2004, OENO 11/2004, OENO 12/2004, OENO 14/2004, OENO 15/2004, OENO 16/2004, OENO 17/2004 and OENO 18/2004 adopted by the OIV,

DECIDES, at the proposal of Commission II "Oenology", to make the following changes in the various sheets on oenological practices regarding enzymes appearing in the International Code of Oenological Practices.

CURRENT TITLE	NEW TITLE	PROPOSED MODIFICATIONS
Chapter: Grapes Sheets 1.13 Use of enzymes for the maceration	Chapter: Grapes Sheets 1.13 Use of enzymes to improve the grape maceration process, the extraction of juice and other grape compounds (Oeno 13/04)	**Definition**: Addition to grapes of enzymatic preparations containing activities catalysing the degradation of structural macromolecules of the cell wall of the grape, such as cellulose, pectins with their side chains, hemicellulose, glycoproteins, and various protein fractions. Enzyme activities involved in the maceration of grapes notably include polygalacturonases, pectin lyases, pectinmethylesterases, arabinanases, galactanases, rhamnogalacturonases, cellulases and hemicellulases. **Objectives**: no modification (review numbering) **Prescription**: no modification

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Chapter: Musts Sheets 2.1.4 Use of enzymes for the clarification (OENO 11/2004)	Chapter: Musts Sheets 2.1.4 Title: no modification	**Definition**: Addition to must of enzymatic preparations containing activities catalysing the degradation of grape macromolecules which went into the must during the juice extraction operations, as well as beta-glucans produced by the fungus Botrytis cinerea. Enzyme activities involved in the clarification of musts notably include polygalacturonases, pectin lyases, pectinmethylesterases, and to a lesser extent arabinanases, galactanases, rhamnogalacturonases, cellulases and hemicellulases as well as □-glucanases if the musts come from botrytised grapes. **Objectives**: no modification **Prescription**: no modification
Chapter: Musts Sheets 2.1.18 Use of enzymes for improving the filterability (OENO 14/2004)	Chapter: Musts Sheets 2.1.18 Title: no modification	**Definition**: Addition to must of enzymatic preparations containing activities catalysing the degradation of plugging macromolecules of grapes which went into the must during the juice extraction operations. Enzyme activities involved in improving the filterability of musts notably include polygalacturonases, pectin lyases, pectinmethylesterases, and to a lesser extent arabinanases, galactanases, rhamnogalacturonases, cellulases, hemicellulases, as well as □-glucanases if the musts come from botrytised grapes. **Objectives**: no modification **Prescription**: no modification

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Chapter: Musts Sheets 2.1.19 Use of enzymes for the release of flavouring substances (OENO 16/2004)	Chapter: Musts Sheets 2.1.19 Title: no modification	**Definition**: Addition to must of enzymatic preparations containing activities catalysing the hydrolysis of the saccharide portion of the glycosylated aromatic substances (flavour precursors) of the grape, such as glycosylated terpenes. Enzyme activities involved in the release of flavouring substances are glycosidases and glucosidases. Depending on the degree of inhibition by glucose, these enzymes may become active only after the fermentation has concluded. **Objectives**: to enhance the aromatic potential of the must **Prescription**: no modification
Chapter: Wines Sheets 3.2.11 Use of enzymes for the clarification of wines (OENO 12/2004)	Chapter: Wines Sheets 3.2.11 Title: no modification	**Definition**: Addition to wine of enzymatic preparations containing activities catalysing the degradation of grape macromolecules which went into the must and wine, as well as macromolecules of bacterial or fungal origin. Enzyme activities involved in the clarification of wines notably include polygalacturonases, pectin lyases, pectinmethylesterases, and to a lesser extent arabinanases, galactanases, rhamnogalacturonases, cellulases and hemicellulases, as well as □- glucanases if wines come from botrytised grapes. **Objectives**: no modification **Prescription**: no modification

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Chapter: Wines Sheets 3.2.8 Use of enzymes for improving filterability (OENO 15/2004)	Chapter: Wines Sheets 3.2.8 Use of enzymes for improving the filterability of wines (OENO 15/2004)	**Definition**: Addition to wine of enzymatic preparations containing activities catalysing the degradation of plugging macromolecules of grapes which went into the must and in wine during the vinification process, as well as plugging macromolecules of bacterial or fungal origin. Enzyme activities involved in improving the filterability of wines notably include arabinanases, galactanases, rhamnogalacturonases, and hemicellulases, and to a lesser extent polygalacturonases, pectin lyases and pectinmethylesterases, as well as □-glucanases if wines come from botrytised grapes or have a high glucans content from yeast cell walls. **Objectives**: no modification **Prescription**: no modification
Chapter: Wines Sheets 3.2.9 Use of enzymes for the release of flavouring substances (OENO 17/2004)	Chapter: Wines Sheets 3.2.9 Use of enzymes for the release of flavouring compounds from glycosylated precursors (OENO 17/04)	**Definition**: Addition to wine of enzymatic preparations containing activities catalysing the hydrolysis of the saccharide portion of the glycosylated aromatic substances (flavour precursors) of grapes which went into the must and the wine during the vinification process. The enzymatic activities involved in the release of flavouring substances are glycosidases and glucosidases. **Objectives**: to enhance the aromatic potential of wine. **Prescription**: no modification

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Chapter: Wines Sheets 3.5.7 Treatment with glucanases (AG 3/85-OEN)	Chapter: Wines Sheets 3.5.7 Treatment with □-glucanases (AG 3/85-OEN)	**Definition**: Addition to wine of an enzyme preparation containing activities catalysing the degradation of beta-glucans produced in the grape berry by the fungus Botrytis cinerea (noble rot, grey rot). Enzyme activities involved in the degradation of □–glucans of botrytis cinerea are □-glucanases type □-1,3 and 1,6. The □-glucanases including □–1.3-glucanases are also able to degrade □-glucans released by saccharomyces type yeasts during alcoholic fermentation and during wine aging on lees. **Objectives**: To improve the clarification and filterability of wines. **Prescription**: no modification
Chapter Wines Sheets 3.2.10 Use of enzymes for improving the solubilisation of yeast compounds during winemaking on lees (OENO 18/2004)	Chapter Wines Sheets 3.2.10 Title: no modification	**Definition**: no modification **Objectives**: no modification **Prescription**: no modification

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