



## RESOLUTION OIV-OENO 532-2017

### TREATMENT OF MUSTS USING INACTIVATED YEASTS WITH GUARANTEED GLUTATHIONE LEVELS

The General Assembly,

CONSIDERING Article 2, paragraph 2 b) ii of the Agreement of 3 April 2001 establishing the International Organisation of Vine and Wine,

CONSIDERING the work of the “Technology” Expert Group during its sessions held in March 2012 and March 2013 on the application of inactivated yeasts rich in glutathione during fermentation,

CONSIDERING the work of the “Technology” and “Specifications of Oenological Products” Expert Groups during the sessions held in March and April 2016 on the fact that the levels of glutathione in these inactivated yeasts are too low to justify the qualifying indication ‘rich in glutathione’,

CONSIDERING the opinion given by the “Food Safety” Expert Group during its 2013 session and the confirmation of this opinion during the 2017 session,

CONSIDERING that the proposed dosage (20 mg/L) poses no health risk, yet some toxicological effects of glutathione may occur at doses greater than 1 g/L,

CONSIDERING the importance, on a technical level, of reduced glutathione derived from the use of certain inactivated yeasts,

TAKING INTO ACCOUNT that inactivated yeasts with guaranteed reduced-glutathione levels, used in the described conditions, are considered as processing aid,

CONSIDERING the work of the “Technology” Expert Group, which showed that the addition of inactivated yeasts with guaranteed reduced glutathione levels significantly limits changes in the colour of the must towards yellow-brown shades, confirming glutathione’s ability to limit oxidation phenomena,

CONSIDERING that the presence of inactivated yeasts with guaranteed reduced-glutathione levels that are higher than those of standard inactivated yeasts in musts makes it possible to maintain the potential for certain varietal aromatic compounds (particularly those of the thiol family),

DECIDES, following a proposal made by Commission II “Oenology”, to introduce the following oenological practices and treatments into part II, chapter 2 of the *International Code of Oenological Practices*,

*Certified in conformity*  
*Sofia, 2<sup>nd</sup> June 2017*  
*The General Director of the OIV*  
*Secretary of the General Assembly*

*Jean-Marie AURAND*

DECIDES to replace prescription b) of Resolutions OIV-OENO 445-2015 and OIV-OENO 446-2015 with the formulation given in prescription b) of this draft resolution.

## **Part II**

### **Chapter 2: MUSTS**

#### **Treatment of musts using inactivated yeasts with guaranteed glutathione levels**

*Definition:*

Addition of inactivated yeasts whose cells have guaranteed reduced-glutathione levels.

*Objectives:*

- a) To limit the oxidation of certain varietal aromatic compounds revealed by the metabolism of yeasts (particularly thiols);
- b) to promote yeast metabolism through the provision of naturally-occurring nutritional compounds.

*Prescriptions:*

- a) The addition of inactivated yeasts with guaranteed glutathione levels at the start or during the alcoholic fermentation is recommended, ensuring that the assimilable nitrogen level is sufficient to avoid the use of glutathione by the fermentative yeasts;
- b) the dose used of glutathione, supplied directly or via yeasts with guaranteed glutathione levels, should not exceed 20 mg/L, in order to avoid any risk of reduction and the emergence of a yeast taste;
- c) the inactivated yeasts with guaranteed glutathione levels should contain a reduced form of glutathione; this may be accompanied by the presence of its precursors (cysteine and particularly gamma-glutamylcysteine);
- d) the inactivated yeasts with guaranteed glutathione levels should comply with the prescriptions of the *International Oenological Codex*.

*Recommendation of the OIV:*

*Accepted subject to adoption of the elated monograph*

*Certified in conformity  
Sofia, 2<sup>nd</sup> June 2017  
The General Director of the OIV  
Secretary of the General Assembly*

*Jean-Marie AURAND*