IOC
Révélons votre différence

LOW SO_2 SOLUTIONS

IOC Calypso™

Let nature bring out and protect the freshness of your wines

ACTIVE DRY YEASTS — TECHNICAL SHEET

Bringing out and protecting aromas in cold juice stabulation on grape lees

ŒNOLOGICAL APPLICATIONS

IOC CALYPSO ™ is a *Metschnikowia pulcherrima* yeast, selected for its specific enzymatic activities. Used during prefermentative juice stabulation with grape lees, **IOC CALYPSO ™** is an innovative bioprotection tool specially developed for limiting the use of SO_2. Its produces significant enzymatic activity for bringing out aromatic precursors in juice stabulation. It also helps protect released aromas and the colour of wines from oxidation or fermentation processes that are triggered too early, to which juices are particularly exposes during cold stabulation.

ŒNOLOGICAL CHARACTERISTICS

- Specie: *Metschnikowia pulcherrima*.
- Tolerance to ethanol: very low (2-3% vol).
- Resistance to low pH levels.
- Resistance to SO_2: < 40 mg/L of total SO, <15 mg/L of free SO_2.
- Optimum temperature: 4° to 12°C (tolerated range: 2° to 20°C).
- Ability to consume oxygen quickly.
- Its power to compete with grape oxidases is all the more efficient at low temperature (< 12°C).
- Nitrogen needs: very low.
- Fermentation power: not significant.
- Its power to establish itself and compete: high.
- Production of SO_2 / H_2S / acetaldehyde / volatile acidity: very low.
- Need for sequential use of a selected *Saccharomyces cerevisiae* yeast to produce alcoholic fermentation.

MICROBIOLOGICAL CHARACTERISTICS

- Viable yeasts: > 10 billion cells/g.
- Microbiological purity: less than 10 wild-type yeasts per million cells.

DOSAGE AND IMPLEMENTATION

- Classic recommendation for cold juice stabulation: 10 g/hL (usual dosages: 7 to 20 g/hL)
- To be used in sequential inoculation as indicated.
- Important: prior to inoculation, check that the level of free SO_2 is low (< 40 mg/L). It is recommended to add **IOC CALYPSO ™** as early in the process as possible - in the press, coming out of the press or when filling the stabulation tank. Fractioned use is also possible.
- 1st inoculation (in pre-fermentation phases): **IOC CALYPSO ™**
  - Rehydrate in 10 times its weight of water at 20°C (temperatures up to 30°C accepted).
  - Shake gently then leave to settle for 20 minutes.
  - It is preferable to acclimatise the yeast to must temperature by incorporating gradually. The difference in temperature between the must to be pitched and the rehydration liquor should never be more than 10°C.
  - If needs be, the yeast suspension may be kept in the water for 6 hours. If it is to be used later, add must to the suspension after 45 minutes of rehydration.
- 2nd inoculation (after settling): : *Saccharomyces cerevisiae.*
  - Inoculate at 20 g/hL, following the conventionally recommended protocol.

PACKAGING AND STORAGE

- 500 g vacuum packed aluminium polyethylene sachet.
- Store in a cold (4°C) dry place. Once open the product should be used quickly.

IOC
ZI de Mardeuil - Allée de Cumières
BP 25 - 51201 EPERNAY Cedex France

Tél. +33 (0)3 26 51 96 00
Fax +33 (0)3 26 51 02 20
www.ioc.eu.com

VERSION 28.06.2022

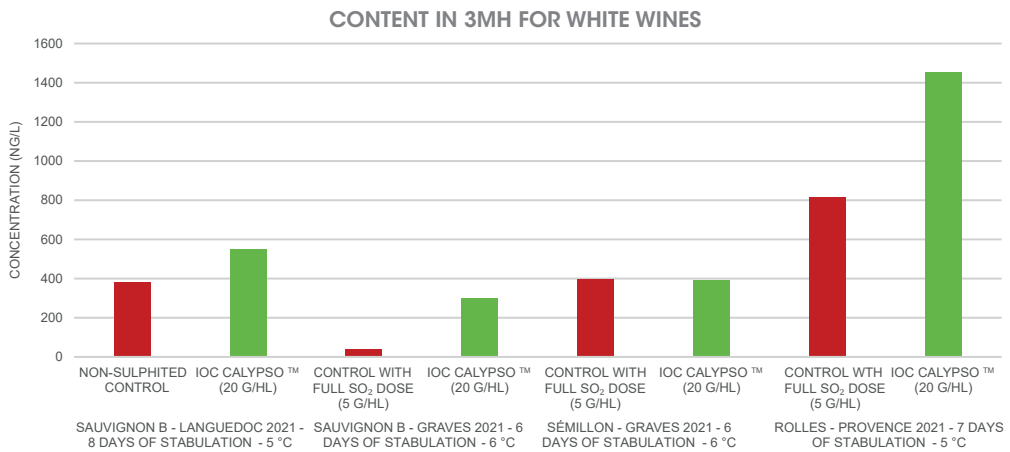
IOC

Révélons votre différence

IOC Calypso™

LOW SO_2 SOLUTIONS

REVEALING VARIETAL FRUITY THIOLS DURING COLD STABULATION OF WHITE OR ROSÉ JUICES



Experiments carried out on different wineries – results obtained for 3MH acetate (passion fruit) and 4MMP (boxwood) are similar to those noted here for 3MH (citrus).

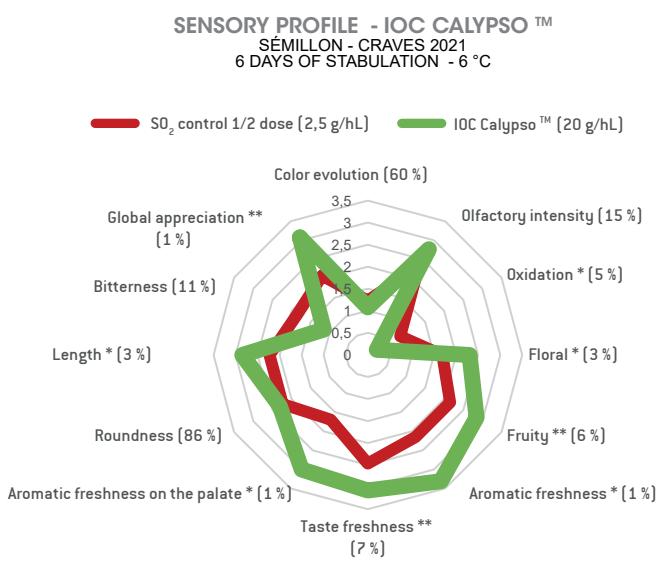
IOC CALYPSO ™ has very significant activity for bringing out varietal thiols (3MH, A3MH and 4MMP) from their precursors coming from the grape. This action is compatible with the parameters for cold juice stabulation. **IOC CALYPSO ™** thus makes it possible to optimize this pre-fermentation technique and complement the action of a high-activity fermentation yeast for bringing out thiols, such as IOC BE THIOLS ™.

PROTECTING JUICES AND THEIR QUALITIES DURING COLD STABULATION

The cold juice stabulation phase which can last from a few days to a few weeks is a stage during which grape juice is particularly prone to various dangers, especially if reducing the use of sulphites is envisaged:

- risk of triggering spontaneous fermentation as a result of unwanted development of *S. cerevisiae* **yeasts**,
- oxidative risks on account of dissolution of oxygen which is higher at low temperatures.

Having **IOC CALYPSO ™** present in the juice when pressing begins limits the availability of dissolved oxygen for oxidases in the grape. It helps reduce the formation of oxidative strains from polyphenols of must and preserve both colour and aromas brought out in white or rosé wines.



One of the strategies and tools developed by the IOC for the control of oxidation and microbiological contamination, whether during pre-fermentation, fermentation or ageing, **IOC CALYPSO ™** is a powerful tool for reducing the overall use and concentration of SO_2 in your wine.

LOW SO_2 SOLUTIONS

IOC
ZI de Mardeuil - Allée de Cumières
BP 25 - 51201 EPERNAY Cedex France

Tél. +33 (0)3 26 51 96 00
Fax +33 (0)3 26 51 02 20
www.ioc.eu.com

VERSION 28.06.2022