

# GLUTAROM EXTRA

## SPECIFIC INACTIVATED YEAST



**Rich in reduced glutathione to anticipate the preservation of wines with low sulphite.**

### ↓ OENOLOGICAL APPLICATIONS

Reduced glutathione (GSH) is a tripeptide that indirectly shows itself to be a powerful antioxidant agent. It effectively reacts with quinones, avoiding agglomeration (which is responsible for the browning of musts and oxidized wines) and the oxidation of aromatic compounds. Even though it is naturally found in grapes, its concentration is often too low to efficiently protect the wine.

**GLUTAROM EXTRA** is a nutrient resulting from the latest techniques in the selection and production of inactive yeasts with a very high GSH content. If it is added at the beginning of fermentation, in the end it enables you to obtain a wine with a greater concentration of GSH, if the yeast is also correctly fed with organic nitrogen.

If the sulphite concentration is low, the positive effect of this richness in GSH is clear in the aroma, even in red wine.

It has likewise been shown that an addition of inactive yeast rich in GSH can be more efficient for the aromatic content than an addition of pure glutathione, presumably because of the synergies with the nutritional effect of the other yeast compounds.

### ↓ DOSE RATE AND INSTRUCTIONS FOR USE

Dosage: 15 to 30 g/hl depending on the must, the grape variety and the sulphite concentration.

When to add: we recommend adding **GLUTAROM EXTRA** early, before alcoholic fermentation, for greater efficiency.

Add **GLUTAROM EXTRA** in suspension in 10 times its volume of water or must. Once added, stir well by pumping over or batonnage.

### ↓ OENOLOGICAL CHARACTERISTICS

- Composition: inactive yeast (*Saccharomyces cerevisiae*): content in organic nitrogen <9.5% of dry material.
- Solid preparation containing insoluble material.

### ↓ PACKAGING AND STORAGE

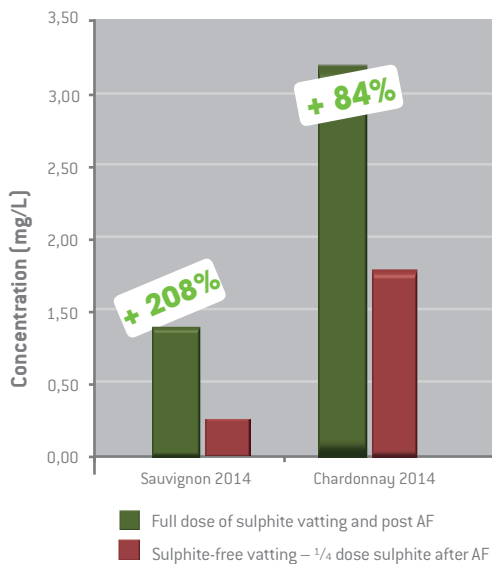
- 1 kg sachet.

Store in a dry and odour-free place, at a temperature of 5 to 25°C. Once the sachet is open, the product should be used quickly and cannot be preserved. Once prepared, the mixture should be used within the day.

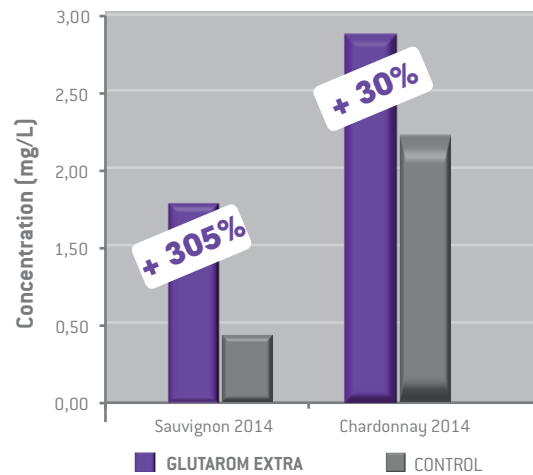


## GLUTATHIONE, A SHIELD AGAINST THE OXIDATION OF LOW-SULPHITE WINES

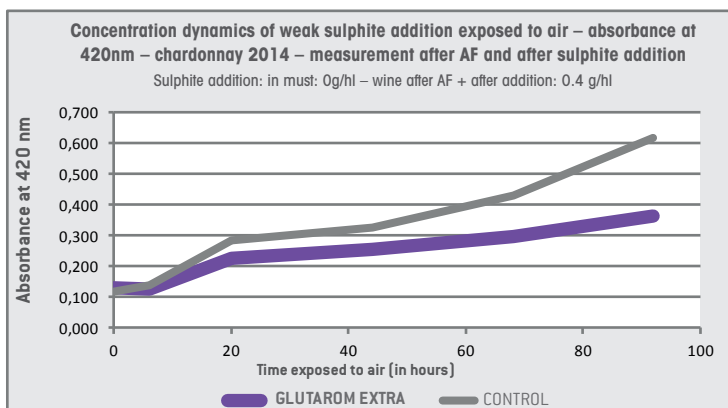
The impact of sulphite on the reduced glutathione tenure in wines



The impact of adding GLUTAROM EXTRA at the beginning of alcoholic fermentation on reduced glutathione concentration in low-sulphite wines (4-15 mg/l)



Preserving the glutathione concentration of wine is one of the roles of sulphite addition, thereby guaranteeing a better subsequent protection of the wine against oxygen while it is aging and in conservation. At the same time, the bouquet and character of the wine are respected and conserved.



In our experiments, we were able to confirm the positive effect of **GLUTAROM EXTRA** used at the start of fermentation on the active glutathione concentration of low-sulphite wines (0.4 to 1.5 g/hl of SO<sub>2</sub> added at post-fermentation stages). These concentrations are much higher than those of the same wines without the addition of **GLUTAROM EXTRA**. They are likewise similar or better than those of wine with a full dose of sulphite (5 to 10 g/hl of SO<sub>2</sub> added). Low-sulphite wines in which **GLUTAROM EXTRA** was added to the must also showed a better concentration exposed to air, even when **GLUTAROM EXTRA** is no longer in contact with the wine.

Linked to the strategies and tools developed by the IOC to control oxidation and microbiological contamination, whether during prefermentation, fermentation or stirring, **GLUTAROM EXTRA** is a powerful lever for reducing concentrations in SO<sub>2</sub>.

