CHITOCEL

Adsorbing adjuvant based on chitosan

TECHNICAL DESCRIPTION

Chitocel is a product based on chitosan, a natural polysaccharide of fungal origin (*Aspergillus niger*) allowing to reduce and, in some cases, to eliminate the unwanted microbial load in wine; it is active against acetic and lactic bacteria, yeasts in general and *Brettanomyces*.
Chitosan acts by degrading the cell wall of yeasts and bacteria present in the medium, causing their death. It thus plays an important role in the prevention and treatment of contamination caused by lactic bacteria, facilitating the work in the cellar; it has an inhibiting action towards acetic bacteria, helping to obtain wines with low levels of volatile acidity.
The wines obtained after the addition of **Chitocel** are therefore clean to the nose and free from olfactory deviations of bacterial origin.
Chitocel is widely used in wines to be aged in wood; the porosity of this material represents an ideal place for the development and growth of microorganisms, in particular of *Brettanomyces*, which, although present in small quantities, can cause volatile acidity and often the appearance of unpleasant odours in the medium-long term.
Chitocel, thanks to its antimicrobial action, turns out to be an excellent alternative to SO_2 and allows obtaining stable wines from a microbiological point of view and in line with the needs of the market, which in recent years wants products with increasingly lower sulphite values. In wines with a residual sugar, where SO_2 tends to combine more quickly than in dry wines, it acts in synergy with this additive.
Chitocel has the great advantage of not belonging to the allergen family, such as other similar products carrying out an antimicrobial activity only on some families of bacteria that can contribute to increase protein instability.
The utilization of **Chitocel** also allows reducing the content of heavy metals such as iron, lead, cadmium, copper, thus preventing the ferric and copper casse and reducing any contaminants such as ochratoxin A thanks to the synergy with yeast hulls.

Practical tests for using Chitocel

Analytical path
A wine strongly contaminated by *Brettanomyces* is used to evaluate the effectiveness of chitosan.
Chitocel dosage: 5 g/hL.
Contact time: ten days at 25°C, with daily mixing.
Method of analysis: sterile filtration on cellulose acetate membrane with 0,2 µm porosity. Incubation at 30°C for 3 days on specific medium for the *Brettanomyces* count.

Results:

	UFC/L
Wine as it is	$>3x10^3$
Chitocel 5 g/hL	No development

Reference: CHITOCEL_TDS_EN_0191217_OENO_USA

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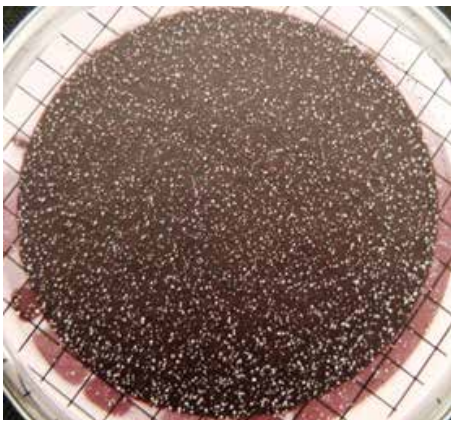
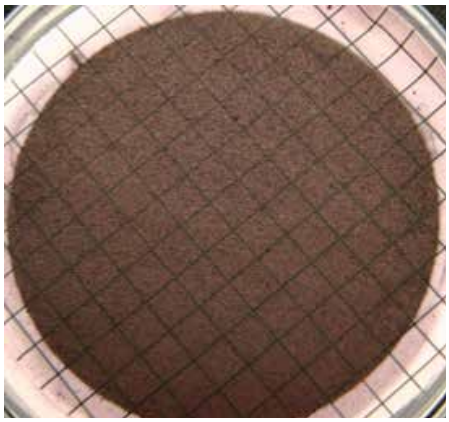
CHITOCEL



Sample as it is



Sample with 5 g/hL of **Chitocel**

⇢ COMPOSITION AND TECHNICAL CHARACTERISTICS

Chitosan derived from Aspergillus niger, yeast hulls.

⇢ DOSAGE

In musts or wines before or after alcoholic or malolactic fermentation, depending on the needs.
From 3 to 30 g/hL depending on the case.

⇢ INSTRUCTIONS FOR USE

Dissolve the dose in must or wine and add to the mass by pumping over.

⇢ STORAGE AND PACKAGING

Store in a cool and dry place, away from direct light and heat.

250 g net packs in boxes containing 500 g.

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