

BACTOZYM[®] SG

ENZYMATIC MIXTURE FOR CONTROLLING MALOLACTIC FERMENTATION

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COMPOSITION

Highly active purified lysozyme obtained from egg albumin. BACTOZYM SG is a microgranulated product that allows instant solubilization

CHARACTERISTICS

BACTOZYM[®] SG is a lysozyme mixture extracted from egg albumin using a chromatograph process without solvents, this makes it possible to obtain a highly active and stable mixture, and to ensure that the product is particularly pure as required for use in winemaking.

The lytic action works on Gram positive bacteria where the cell membrane is composed of glucosamine and muramic acid, the n-acetyl muramidase action intervenes breaking the glycoside bond between the acid of these two molecules, thus provoking lysis of the cell and consequent bacterial inactivation (bacteriolysis). Therefore BACTOZYM[®] SG is used to inhibit the growth of lactic bacteria such as *Cenococcus*, *Lactobacillus*, *Pediococcus*; however it is ineffective against acetic bacteria (Gram negative).

BACTOZYM[®] SG is a food additive classified as GRAS (Generally Recognized as Safe); and thus is completely harmless for humans (the lysosome is also found in tears and saliva); it also does not interfere with the multiplication and fermentation action of yeast.

APPLICATIONS

When making white and red wines, various situations may occur which require controlling the bacterial charge without using excessive doses of sulfur dioxide. Therefore BACTOZYM[®] SG is used in all situations where you want to avoid malolactic fermentation and the intervention of bacteria in general: which typically occurs in the fermentation, processing and storage of many white wines; but also in making red wines, it may be interesting to delay malolactic fermentation to lengthen the structuring phase, for example using microoxygenization at the same time.

BACTOZYM[®] SG is especially useful in all cases where lactic bacteria can act before alcoholic fermentation: hot climates, elevated must pH and winemaking by carbon maceration.

BACTOZYM[®] SG is also recommended for bacteria lysis after malolactic fermentation in order to give wine interesting sensory characteristics.

In bottling wines with structure with residual malic acid, you may consider a combination of BACTOZYM[®] SG with less severe microfiltering system to obtain microbiological stability also in terms of bacteria.

BACTOZYM[®] SG can be proposed when you want to work without lactic bacteria: for processing sparkling wines and for preparing a non-contaminating yeast starter.

BACTOZYM[®] SG is also of particular interest if fermentation stops, thus avoiding lactic acidness without having to intervene with filtering or heavy use of sulfur dioxide, an element that limits a subsequent resumption of the fermentation.

BACTOZYM[®] SG must be used in compliance with statutory laws.

USES

Dissolve BACTOZYM[®] SG in room temperature water in a 1:10 ratio and let it sit for 40-45 minutes, add it to the wine to be treated, mix accurately trying not to make foam; in the following 2-3 days do not effect any filtering or clarifying treatments, or use tannin or bentonite. Check the protein stability before bottling.

DOSES

25-50 g/hL to produce lactic bacteria inhibition for around 3-6 months (500 mg/L maximum legal quantity)

10-25 g/hL to delay or control the intensity of malolactic fermentation and avoid lactic acidness.

The possible surcollage action that high doses of BACTOZYM[®] SG may produce on the product must be considered when treating white wines: the lysozyme, like all enzymes is a protein.

Given its reactivity with polyphenols, it is advisable to increase the doses by 50% with red wines.

PACKAGING

0.5 Kg bags

STORAGE

Store in a cool dry place, protected from light.

Reseal opened packages carefully.

HAZARD

The product is classified: Xn-Harmful

TECHNICAL SHEET DATED 24/01/2011