



STAB MICRO M

SELECTIVE FINING AGENT FOR ANTIMICROBIAL CONTROL FROM JUICE TO MALOLACTIC FERMENTATION

COMPOSITION

Preparation of chitosan produced from *Aspergillus niger*, purified yeast hulls, E300 L-ascorbic acid, E270 L(+) lactic acid.

GENERAL FEATURES

Aspect: brownish granules with a slight yeasty odor.

STAB MICRO M is a fining agent that controls the growth of a large number of unwanted non-*Saccharomyces* yeast and bacteria that are present in must and wine. It also facilitates the flocculation and removal of these microbes. It has a synergic antimicrobial effect with SO₂.

STAB MICRO M was specifically designed for use in turbid juices and musts. Purified yeast hulls, rich in β -glucans, form a protective net that improves chitosan antimicrobial effect and availability to react with micro-organisms.

STAB MICRO M inhibits a wide spectrum of microorganism growth, acting by contact while in suspension. CO₂ produced during fermentation helps this product activity and effectiveness. Good initial homogenization in the juice or must also increases its antimicrobial effect. At the recommended dosage, the effect of Stab Micro M on *Saccharomyces cerevisiae* yeast is insignificant and does not affect alcoholic fermentation.

STAB MICRO M can also remove ochratoxin A and residual copper which can affect yeast fermentation metabolism and cause wine oxidation respectively;

STAB MICRO M does not contain allergenic ingredients and is not required to be listed on wine labels.

APPLICATIONS

- *White, red and rosé must*: reduction of spoilage microorganism populations.
- *MLF control*: non-allergenic alternative to lysozyme. It can be used to reduce MLF bacteria growth to delay or inhibit MLF. This inhibitory effect is dosage dependent, so MLF may still occur post fermentation if lower dosages are used.
- *Pied de cuve*: reduce non-*Saccharomyces* and bacteria contamination.
- *Secondary fermentation*: control of microbial contamination during secondary fermentation of sparkling wine.
- *Natural fermentation*: helps *Saccharomyces cerevisiae* dominate over non-*Saccharomyces* populations.
- *Reduction of SO₂ addition*: works in synergy with SO₂ as antimicrobial agent during maceration.
- *End of alcoholic fermentation*: reduces spoilage microorganism population, improves wine clarification.
- *Prevention of off-flavors*: prevents the growth of microorganisms that produce VA or other compounds that can affect wine aromas.

DOSAGE

White, red and rosé must, for reducing spoilage microorganism populations, for removing residual copper from the vineyard treatments, as an alternative to lysozyme, for reducing ochratoxin A: 10-40 g/hL

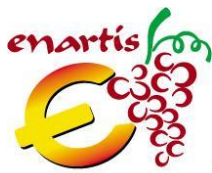
Stuck and sluggish fermentation, for controlling spoilage microorganism populations and for removing residual copper that can affect yeast metabolism: 25 – 40 g/hL

Dosage varies depending on must or wine clarity, micro-organism species, micro-organism content, and available treatment time.

Maximum legal dosage in EU:

100 g/hL for reduction in the heavy metal content.

500 g/hL for reduction of possible contaminants, especially ochratoxin A.



STAB MICRO M

10 g/hL for reduction in the populations of undesirable micro-organisms.

INSTRUCTIONS FOR USE

Product preparation: dissolve one part **STAB MICRO M** in 20 - 30 parts must, wine or water. Stir continuously to avoid clumps. Add uniformly to juice or wine during pump-over, preferably using a Venturi tube. Keep product in suspension for at least 30 minutes.

White and rosé juice: add 10-30 g/hL during settling or, more recommended, before yeast inoculation. Enartis Stab Micro M will also help accelerate and improve clarification.

Red must: add 15-25 g/hL at the beginning of maceration (recommended in case of cold soak) or 8-12 hours after yeast inoculation and pump-over to well-homogenize. Product will remain effective during fermentation. It will be removed together with gross lees at the end of alcoholic fermentation.

As alternative to lysozyme:

WHITE WINE:

End of alcoholic fermentation: eliminate gross lees by racking-off, then add 15 g/hL of **STAB MICRO M** when the objective is to delay MLF or 25 g/hL when the objective is to avoid MLF. Pump-over for at least 30 minutes. Daily pump-overs will increase product effectiveness. Its antimicrobial effect starts in the first hours of treatment. Product can be removed 2 - 3 days after its addition. Contact time depends on dosage, wine turbidity and contamination level. Product acts by contact while in suspension. Once the product is removed, wine is no longer protected and MLF is possible by inoculation.

When the objective is to avoid MLF, **ENARTIS STAB MICRO M** can remain in contact with wine for months. Periodical re-suspension can help prolong its effectiveness. Periodically, run chemical or microbiological analysis to prevent MLF onset and adjust molecular SO₂ content to about 0.5 mg/L.

RED WINE

End of alcoholic fermentation: rack wine and add 15 g/hL of **STAB MICRO M**. After 48-72 hours, rack again and add 10 g/hL of **STAB MICRO M** when the objective is to delay MLF or 25 g/hL when the objective is to avoid MLF. Pump-over for at least 30 minutes. Daily pump-overs will increase product effectiveness. Its antimicrobial effect starts in the first hours of treatment. Product can be removed 2 - 3 days after its addition. Contact time depends on dosage, wine turbidity and contamination level. Product acts by contact while in suspension. Once the product is removed, the wine is no longer protected and MLF is possible by inoculation.

When the objective is to avoid MLF, **STAB MICRO M** can remain in contact with wine for months. Periodical re-suspension can help prolong its effectiveness. Periodically, run chemical or microbiological analysis to prevent MLF onset and adjust molecular SO₂ content to about 0.5 mg/L.

Bulk wine and juice storage: for preventing MLB growth, add 10-20 g/hL of **STAB MICRO M**. Periodical re-suspension of product helps to prolong its effectiveness.

Pied de cuve: use 15-30 g/hL of *pied de cuve*.

Stuck or sluggish fermentation: add 25 g/hL to stuck or sluggish wine. Rack-off lees and restart the fermentation by inoculation.

PACKAGING AND STORAGE

1 kg - 10 kg

Sealed package: store in a cool, dry and well-ventilated area.

Opened package: carefully reseal and store as indicated above. Once opened, use quickly. Hygroscopic product.

Product made by raw material that is in compliance with the following specifications:
Codex Oenologique International

The indications supplied are based on our current knowledge and experience, but do not relieve the user from adopting the necessary safety precautions or from the responsibility of using the product properly.



Stabilization

Fiche Code: EnartisStabMicroM/US

Revision: n. 2 October 2018

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STAB MICRO M

Product approved for winemaking by the TTB.

27 CFR 24.250.

Legal Limit: Amount used must not exceed 10 grams of chitosan per 100 liters of wine. GRAS

Notice No. GRN 000397

Maximum legal dosage of Stab Micro M in US: 20g/hL

Product approved for winemaking, in accordance with:

Regulation (EC) N. 606/2009.

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