

## Biological Acidity Reduction VINIFLORA® CH16

### *Oenococcus Oeni* – Direct Inoculation Culture for High Alcohol Content Red Wines

VINIFLORA CH16 malolactic bacteria from Eaton's Begerow Product Line are a highly active strain of *oenococcus oeni* bacteria for direct inoculation of red wines with a particularly high alcohol content. This *oenococcus oeni* strain was selected from the grape variety Petit Shiraz (16% by vol.) from the Russian River region (California, USA).

The specific advantages of VINIFLORA CH16 malolactic bacteria:

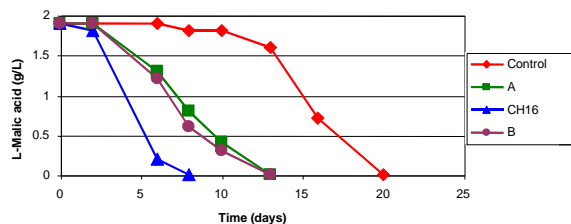
- Maximum vitality and activity development in high alcohol content red wines
- Biological acidity reduction in wines up 16% by vol.
- Produces harmonious wines with maximum biological stability

#### Product Characteristics

VINIFLORA CH16 malolactic bacteria are a high-purity concentrate made of freeze-dried *oenococcus oeni* cells.

VINIFLORA CH16 malolactic bacteria were selected from 19 cultures (isolates) of various high alcohol content red wines.

Test conditions, Merlot grape variety, Bordeaux region, alcohol content 12.4% by vol., pH 3.41, total SO<sub>2</sub>: < 0.03 oz/gal (< 20 mg/l); L-malic acid: 0.25 oz/gal (1.9 g/l); temperature: 68 °F (20 °C)



#### Application and Dosage

VINIFLORA CH16 malolactic bacteria are packaged in bags sufficient for 264 gal (10 hl) or 660 gal (25 hl) of wine. Do not dose less than the recommended quantity. A lower dosage promotes spontaneous bacterial growth and jeopardizes controlled degradation of malic acid.

Sprinkle the dry VINIFLORA CH16 malolactic bacteria product directly into the wine immediately after completion of alcoholic fermentation. Stir in without oxygen pickup or circulate by means of anaerobic pumping.

The packaging should be kept sealed as far as possible during BAR.

#### Important Information

Open VINIFLORA CH16 malolactic bacteria packaging immediately before use. Do not store any leftover product in the open package since air and moisture will render the product inactive within only a short period of time. For this reason, the contents of the package should never be broken down into smaller container units since exposure to the air would damage the bacteria cells unnecessarily.

The ideal young wine temperature is 64.4 – 71.6 °F (18 – 22 °C). Young wines should not be sulfurized (max. 2.67 oz of free SO<sub>2</sub> per 100 gal (20 mg/l), maximum 6.01 oz per 100 gal (45 mg/l) of total SO<sub>2</sub>). Therefore, check the wine for SO<sub>2</sub> before treating with VINIFLORA CH16 malolactic bacteria. The pH value should not be less than 3.3.

It is particularly important that the factors indicated above work in synergy. If the wine nearly reaches the limits of two or more factors, biological acid reduction is delayed or even rendered impossible. On the other hand, the culture can tolerate extreme inhibitor values if the wine is otherwise suitable for biological acid reduction.

Biological acidity reduction normally begins 1 to 2 days after inoculating with VINIFLORA CH16 malolactic bacteria and is complete after 1 to 2 weeks depending upon peripheral conditions.

#### Safety

There are no known detrimental effects if VINIFLORA CH16 malolactic bacteria are used as directed and processed properly. Since VINIFLORA CH16 malolactic bacteria mix in easily, using this product poses no hazard to health.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.

## Storage

VINIFLORA CH16 malolactic bacteria are packaged in gas and watertight laminated aluminum foil. Deep freeze at -0.4 °F (-18 °C) when storing for extended periods. Under these conditions, Eaton guarantees that the product will remain fully active for at least 24 months. The activity will remain for a minimum of 6 months when stored at 68 °F (20 °C). Store VINIFLORA CH16 malolactic bacteria under the conditions indicated above until immediately before use. It is not necessary to adapt the temperature of the wine. Temperatures in excess of 86 °F (30 °C) will damage the bacteria and should be avoided under all circumstances.

## Delivery Information

VINIFLORA CH16 malolactic bacteria are available in the following package sizes:

For

264 gal (10 hl) of wine: 4 laminated aluminum bags in carton  
article no. 93.447.901

660 gal (25 hl) of wine: laminated aluminum pack  
article no. 93.447.905

HS Customs Tariff: 3002 90 50

## Certified Quality

VINIFLORA CH16 malolactic bacteria comply with all applicable legal directives governing the production of wine and is inspected regularly during the production process to ensure consistent high product quality. These inspections include wide-ranging technical functional criteria as well as safeness in accordance with relevant laws governing production of foods. Strict controls are carried out immediately before and during final packaging.

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Not all products in Eaton's Begerow Product Line are available in all regions. Please contact your local Eaton office to determine availability.

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