

## Biological Acidity Reduction VINIFLORA® OENOS

### *Oenococcus Oeni* DSM 7008

VINIFLORA OENOS malolactic bacteria from Eaton's Begerow Product Line are a new type of highly active *oenococcus oeni* compound for use in the preparation of wines to biologically reduce acidity. A unique technological standard makes it possible to quickly and reliably reduce acidity biologically through direct inoculation and thus provide the ideal conditions for complete and dependable control. Application of this product produces a rounder tasting, more harmonious wine of maximum stability and avoids the uncalculated risk of spontaneous acidity reduction.

The specific advantages of VINIFLORA OENOS malolactic bacteria:

- Maximum vitality and activity development in wine and can therefore be used directly as a dry product (without reactivation)
- All-purpose application to red and white varieties of grape
- Reliably prevents spontaneous, improper acidity reduction
- Produces more harmonious wines with maximum biological stability

#### Application

VINIFLORA OENOS malolactic bacteria are packaged in bags sufficient for 660 gal (25 hl) and 6,600 gal (250 hl) of wine respectively. Do not dose less than the recommended quantity. A lower dosage promotes spontaneous bacterial growth and jeopardizes degradation of malic acid.

Sprinkle the dry VINIFLORA OENOS 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 drum should be kept sealed as far as possible during BAR.

#### Product Characteristics

VINIFLORA OENOS malolactic bacteria are a high-purity concentrate made of freeze-dried *oenococcus oeni* cells (DSM 7008 strain).

VINIFLORA OENOS malolactic bacteria have been selected from over 850 lactic acid bacteria strains in accordance with all relevant oenological criteria (organoleptic purity of wine, high tolerance towards alcohol and SO<sub>2</sub> and low pH values, no development of undesired metabolism products). Of particular significance is its ability in its dry state to quickly develop metabolism soon after inoculation. With these excellent properties and its unsurpassed economic viability, VINIFLORA OENOS malolactic bacteria meet all aspects of technical wine cellar requirements.

#### Important Notes

Open VINIFLORA OENOS 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 working temperature is 62.6 – 77 °F (17 – 25 °C). Young wines should not be sulfurized (max. 0.46 gr (10 mg/l) of free SO<sub>2</sub> per 100 fl oz, maximum 1.37 gr per 100 fl oz (30 mg/l) of total SO<sub>2</sub>). Therefore, check the wine for SO<sub>2</sub> before treating with VINIFLORA OENOS malolactic bacteria. The alcohol content may not exceed 14% by volume; the pH value must not be less than 3.1.

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 values of an inhibitor if the wine is otherwise suitable for biological acid reduction.

Biological acidity reduction normally begins 2 to 3 days after inoculating with VINIFLORA OENOS malolactic bacteria and is complete after 1 to 4 weeks depending upon peripheral conditions.

Since VINIFLORA OENOS malolactic bacteria use diacetyl to break down citrate to imperceptible end products, the product can also be used to specifically contribute to harmonization. This degradation is also carried out by living yeast. If a diacetyl note is not desired, add VINIFLORA OENOS malolactic bacteria before the initial tapping and do not sulfurize the young wine before the required diacetyl level is reached.

## Safety

There are no known detrimental effects if VINIFLORA OENOS malolactic bacteria used as directed and processed properly. Since VINIFLORA OENOS 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 OENOS 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 two years. The activity will remain for a minimum of six months when stored at 68 °F (20 °C). Store VINIFLORA OENOS 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 in all instances.

## Delivery Information

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

For

264 gal (10 hl) of wine: 4 laminated aluminum bags in carton article no. 93.410.901

660 gal (25 hl) of wine: laminated aluminum pack article no. 93.410.905

6,600 gal (250 hl) of wine: laminated aluminum pack article no. 93.410.910

HS Customs Tariff: 3002 90 50

## Certified Quality

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

*VINIFLORA® is a registered trademark of Chr. Hansen A/S.*

### North America - HQ

44 Apple Street,  
Tinton Falls, NJ 07724  
Toll Free: 800 656-3344  
(North America Only)  
Voice: +1 732 212-4700

### Europe/Africa/Middle East

Auf der Heide 2  
53947 Nettersheim, Germany  
Voice: +49 2486 809-0

### Internormen Product Line

Friedensstraße 41  
68804 Altlussheim, Germany  
Voice: +49 6205 2094-0

### Begerow Product Line

An den Nahewiesen 24  
55450 Langenlonsheim, Germany  
Voice: +49 6704 204-0

### Brazil

Av. Julia Gaioli, 474 - Bonsucesso  
07251-500 - Guarulhos  
Brazil  
Voice: +55 11 2465 8822

### China

No. 7, Lane 280, Linhong Road  
Changning District, 200335  
Shanghai, P.R. China  
Voice: +86 21 5200 0099

### Singapore

4 Loyang Lane #04-01/02  
Singapore 508914  
Voice: +65 6825 1668

For more information, please e-mail us at [filtration@eaton.com](mailto:filtration@eaton.com) or visit us online at [eaton.com/filtration](http://eaton.com/filtration) for a complete list of Eaton's filtration products.

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

© 2013 Eaton Corporation. All Rights Reserved. All trademarks and registered trademarks are the property of their respective owners.

All information and recommendations appearing in this brochure concerning the use of products described herein are based on tests believed to be reliable. However, it is the user's responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Eaton as to the effects of such use or the results to be obtained. Eaton assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.



Powering Business Worldwide