

Viniflora® Oenos

Product Information

Version: 1 PI GLOB EN 04-04-2016

Description

Viniflora® Oenos is a freeze-dried pure culture of *Oenococcus oeni*. It is a heterofermentative malolactic bacteria which has been selected to ensure a fast and safe malolactic fermentation when inoculated directly into wine. It has an excellent allround tolerance towards pH, alcohol, temperature and SO₂.

The culture can be used both in red and white wines.

Culture composition:

Oenococcus oeni.

Material No:	688719	Color:	Off-white to slightly brown
Size	5X25000 L	Format:	FD-DVS
Type	Pouch(es) in box	Form:	Granulate

Storage

< -18 °C / < 0 °F

Shelf life

When stored according to recommendation the product has a shelf life of 37 months.

At +5°C (41°F) the shelf life is at least 6 months.

Application

This culture has been selected for its overall outstanding performance and capability to perform a fast and safe malolactic fermentation in most red and white wines. Among the features are:

- Direct inoculation into wine
- High numbers of active cells which ensure a quick start of fermentation
- High level of microbiological purity
- Low production of volatile acidity
- Excellent all round tolerance towards pH, alcohol, temperature and SO₂
- Does not produce biogenic amines*

* During malolactic fermentation indigenous bacteria produce biogenic amines from amino acids. Viniflora® strains have been selected by Chr. Hansen using state-of-the-art techniques in screening, analyses or production to deliver malolactic cultures unable to produce the following biogenic amines: histamine, tyramine, putrescine, phenylethylamine, isoamylamine, cadaverine.

For further information about biogenic amines in wines and how Viniflora® products can help to reduce this food safety concern, please visit the following site: www.chr-hansen.com/wine.

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Directions for use

Viniflora® freeze-dried cultures are adapted for direct inoculation into wine. No rehydration or reactivation is required.

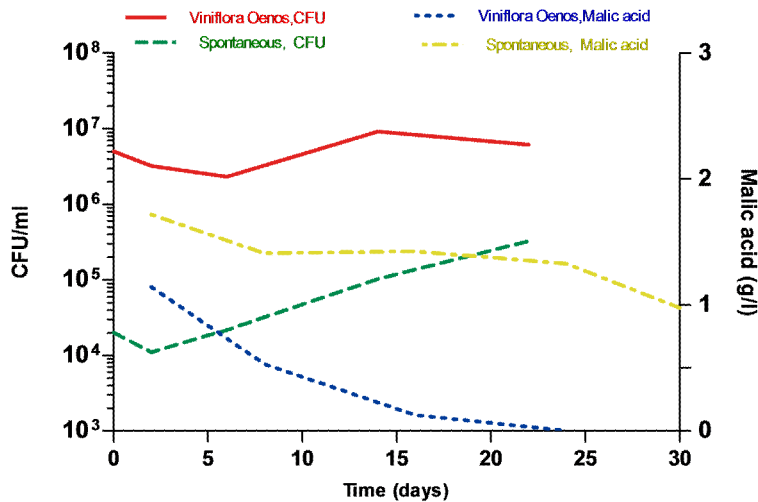
1. Remove the pouch from the freezer 15 min. before use and place at room temperature. Make sure that the dosage complies with the amount of wine to be inoculated.
2. Open the pouch and add the granulated culture directly to wine. The culture can be dissolved in a smaller volume first and added to the total volume right after, if required. Make sure that the culture is completely dissolved in the wine.



Technical Data

Performance

Viniflora® Oenos degraded the malic acid before 14 days of fermentation, compared to the spontaneous tank, where only a small amount of malic acid was degraded after 30 days.



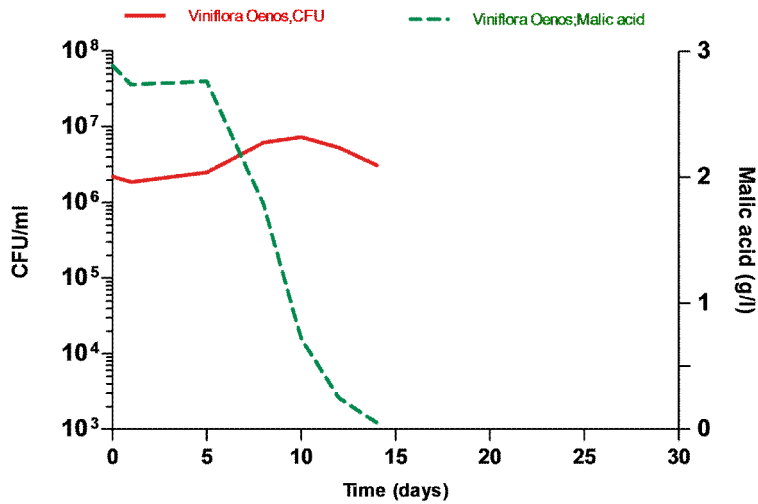
Shiraz Sonoma valley winery
Ethanol 13.6 vol%, pH 3.3, SO₂ 18 ppm

Viniflora® Oenos degraded the malic acid in 14 days of fermentation.

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Pinot noir Carneros (US) winery
Ethanol 14.5 vol%, pH 3.83, SO₂ 5,5 ppm

Physiological data

Inoculation temperature range	17-25°C (62-77°F)
pH minimum*	3.2
Total SO₂, max. at inoculation*	40 ppm
Alcohol maximum *	14 % vol

** note that these inhibitory factors are antagonistic towards each other.
The individual tolerances are valid only if other conditions are favourable.
Check level of SO₂ produced by the yeast used for primary fermentation and be aware of level of free SO₂.*

Legislation

Chr. Hansen's cultures comply with the general requirements on food safety laid down in Regulation 178/2002/EC. Malolactic bacteria are generally recognized as safe and can be used in food, however, for specific applications we recommend to consult national legislation.

Food Safety

No guarantee of food safety is implied or inferred should this product be used in applications other than those stated above. Should you wish to use this product in another application, please contact your Chr. Hansen representative for assistance.

Labeling

No labeling required, however please consult local legislation if in doubt.

Trademarks

Product names, names of concepts, logos, brands and other trademarks referred to in this document, whether or not appearing in large print, bold or with the ® or TM symbol are the property of Chr. Hansen A/S or used under license. Trademarks appearing in this document may not be registered in your country, even if they are marked with an ®.

Additional Information

Check the latest news on www.chr-hansen.com/wine

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Technical support

Chr. Hansen's Application and Product Development Laboratories and personnel are available if you need further information.

GMO Information

In accordance with the legislation in the European Union* Viniflora® Oenos does not contain GMOs and does not contain GM labeled raw materials**. In accordance with European legislation on labeling of final food products** we can inform that the use of Viniflora® Oenos does not trigger a GM labeling of the final food product. Chr. Hansen's position on GMO can be found on: www.chr-hansen.com/About us/Policies and positions/Quality and product safety.

* Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms with later amendments, and repealing Council Directive 90/220/EEC.

** Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed with later amendments.

Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labeling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms amending Directive 2001/18/EC, and with later amendments.

Allergen Information

List of common allergens in accordance with the US Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) and EU Regulation 1169/2011/EC with later amendments	Present as an ingredient in the product
Cereals containing gluten* and products thereof	No
Crustaceans and products thereof	No
Eggs and products thereof	No
Fish and products thereof	No
Peanuts and products thereof	No
Soybeans and products thereof	No
Milk and products thereof (including lactose)	No
Nuts* and products thereof	No
List of allergens in accordance with EU Regulation 1169/2011/EC only	
Celery and products thereof	No
Mustard and products thereof	No
Sesame seeds and products thereof	No
Lupine and products thereof	No
Mollusks and products thereof	No
Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO ₂	No

* Please consult the EU Regulation 1169/2011 Annex II for a legal definition of common allergens, see European Union law at: www.eur-lex.europa.eu