

## **Product Information**

Version: 3 PI GLOB EN 05-26-2017

#### Description

Viniflora® LS CH11 is a frozen concentrated pure culture of *Oenococcus oeni*lt is a heterofermentative malolactic bacteria which has been selected to ensure a fast and safe malolactic fermentation when inoculated directly into wine. The culture has an excellent allround tolerance towards pH, alcohol, temperature and SO<sub>2</sub>.

#### Culture composition:

Oenococcus oeni.

Material No: 696279 Color: Off-white to slightly brown

Size 15X10000 L Format: F-DVS

Type Bag(s) in box Form: Frozen pellets

#### Storage

< -45 °C / < -49 °F

## Transport condition

The frozen cultures should be transported using dry ice, with a maximum transit time of 72 hours.

#### Shelf life

When stored according to recommendation the product has a shelf life of 24 months.

## **Application**

This culture has been selected for its outstanding performance and capability to perform malolactic fermentation in difficult white wines. This strain performs very well in rosé and white wines but has also been used successfully in red 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
- $\bullet$  Outstanding tolerance to low pH and elevated levels of  $SO_2$
- Strong fermenter under harsh white wine conditions
- Low production of volatile acidity
- Does not produce biogenic amines\*

\*During malolactic fermentation, indigenous bacteria often produce biogenic amines from amino acids. This strain of malolactic bacteria has been selected 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 to avoid them please consult the OIV code of good vitivinicultural practices to minimize biogenic amines: http://www.oiv.int/oiv/info/enguidesoiv#biogenic

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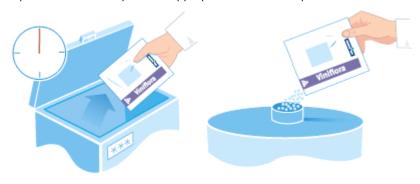
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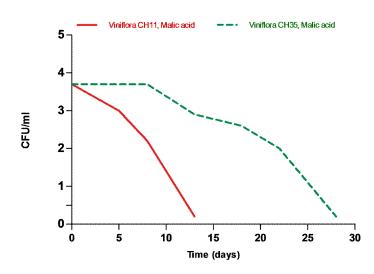
#### Directions for use

This frozen culture should always be inoculated directly into the wine. No rehydration, reactivation or acclimatization is required.

Remove cultures from the freezer just prior to use to ensure optimal performance. Prolonged exposure to temperatures above -45°C before inoculation will damage the quality of the cultures. Do not thaw. Open the package and pour the frozen pellets directly into the wine. Make sure the culture is added to the liquid phase of the wine, and that the culture is completely dissolved in the wine. For more information on inoculation, please contact your local Chr. Hansen Representative to acquire the appropriate inoculation protocol.



#### **Technical Data**



Muscadet (France) Ethanol 12.5 vol%, pH 3.18

## Physiological data

Inoculation temperature	
range	14-25°C (57-77°F)
pH minimum*	3.0
Total SO <sub>2</sub> , max. at	
inoculation*	35 ppm
Alcohol maximum *	15 % vol

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\* note that these inhibitory factors are antagonistic towards each other.

The individual tolerances are valid only if other conditions are favourable.

Check level of SO<sub>2</sub> produced by the yeast used for primary fermentation and be aware of level of free SO<sub>2</sub>.

## 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/food-cultures-and-enzymes/wine

## Technical support

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

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#### **GMO** Information

In accordance with the legislation in the European Union\* Viniflora® LS CH11 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® LS CH11 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.

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

Affectger information	
List of common allergens in accordance with the US Food Allergen Labeling and	Present as an
Consumer Protection Act of 2004 (FALCPA) and EU Regulation 1169/2011/EC with later	ingredient in
amendments	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 (added) at concentrations of more than	
10 mg/kg or 10 mg/litre expressed as SO <sub>2</sub>	No

<sup>\*</sup> 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

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<sup>\*</sup> 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.

<sup>\*\*</sup> 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.