PRESQUE ISLE WINE CELLARS

"Serving the Winemaker Since 1964" (814) 725-1314 www.piwine.com

Instructions for Chris Hansen's Malo-Lactic Cultures:

Viniflora Oenos from Chris Hansen's Lab is a new generation malo-lactic culture which doesn't require preparation like other strains. It is added directly to your wine with no hassle in preparation. It is a freeze dried pure culture of *Oenococcus oeni*.

Each culture comes in two sizes, except the CH11 which is just the 15 gram packet. First is a 1.5 gram packet designed to innoculate up to 250 liters (66 gallons) and the second is a 15 gram packet which is enough for 2500 liters (660 gallons).

When you receive this culture be sure to put it in your **refrigerator** if you will be using it in the next couple of weeks; if it will be longer, put the culture in your freezer. Before opening a packet to use, warm it up to room temperature to avoid absorption.

Many think the optimum time to innoculate your wine is shortly after fermentation has finished because of actively growing yeast produce substances which will inhibit the bacteria. Inspite of that many do co-inoculation which means at the same time as yeast fermentation or just a couple days into it. Don't wait too long after fermentation is over to avoid wine sitting with no sulfur dioxide . The temperature of the wine should be between $62^{\circ}F$ and $77^{\circ}F$ being optimum.

There is no problem with adding excess bacteria to a wine, but don't try to stretch the culture beyond its rated gallonage.

Instructions for use:

- 1. Before adding the culture stir the wine very well.
- 2. Remove the pouch from the refrigerator or freezer 15 minutes or more before use and place at room temperature.
- 3. Add the culture to the wine immediately upon opening the packet. To make inoculation easier, the culture can be dissolved in a smaller volume of wine and added to the total volume right after. Give it as little air contact as possible and <u>don't</u> hydrate it in water first. Stir the wine off and on for at least 20 minutes after adding the culture, making sure that the culture is completely dissolved.

	<u>35ML2 & 35ML15)</u>
 Clean and classic flavor profile Low production of volatile acidity Outstanding all round tolerance towards pH, temperature and SO₂ <u>IDEAL conditions:</u> Free SO₂ level below 30 ppm Alcohol below 14% pH above 3.3 Temperature between 63° - 77°F (17 -25° C) Optimum inoculation time at or very near end of yeast fermentation, co-inoculation possible. <u>DIFFICULT conditions for this culture</u> Free SO₂ levels above 30 ppm, Alcohol above 14% pH below 3.3 1. Free SO₂ levels above 30 ppm, 2. Alcohol above 14% 3. pH below 3.3 Temperature between 62°E (1000)	olatile acidity d tolerance towards pH, temperature and below 30 ppm 14% etween 63° - 77°F (17 -25° C) oculation <u>for this culture</u> s above 30 ppm, 14%

<u>Viniflora CH16</u> (CHML16 & CHML16-15)	<u>Viniflora CH11</u> (11ML15 – Only available in 15 gram package)
 Very high fermentation speed Low production of volatile acidity <u>Outstanding tolerance to high alcohol levels in red wine</u> Excellent all round tolerance towards pH, temperature and SO₂ 	 Very high fermentation speed Low production of volatile acidity Excellent all round tolerance towards lower pH, temperature and for higher alcohol levels
IDEAL conditions:1. Free SO2 level below 30 ppm2. Alcohol below 14%3. pH above 3.34. Temperature between 63° - 77°F (17 -25° C)5. Optimum inoculation time at or near end of yeast fermentation.	 <u>IDEAL conditions:</u> Free SO₂ level below 30 ppm Alcohol below 14% Effective in co-inoculation with yeast with difficult white wines with a low pH Temperature between 59° - 77°F (15 -25° C) <u>DIFFICULT conditions for this culture</u>
 <u>DIFFICULT conditions for this culture</u> 1. Free SO₂ levels above 30 ppm, 2. Alcohol above 16% 3. pH below 3.3 4. Temperatures below 63°F (19°C) 	 Free SO₂ levels above 30 ppm, Alcohol above 16% pH below 2.9 Temperatures below 59°F (15°C)