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Product Data Sheet

Product Name: OENO™
Product Code: 5Y02132 (170 g)
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GENERAL DESCRIPTION

A Kerry Bio-Science Frozen Concentrated Culture for Inducing Malolactic Fermentation in Wine.

OENO™ is a frozen, highly concentrated culture of *Oenococcus oeni* (ex-*Leuconostoc oeno*) which is capable of inducing malolactic fermentation in red, rosé and white wines. OENO™ culture has been selected to tolerate up to 13% of ethanol and pH 3.2 value.

USE RATE

One 170 gram container per 3,000 - 5,000 gallons (9463 L) of red wine.
One 170 gram container per 500 - 1,500 gallons (1893 L) of white wine or rosé wine.

APPLICATION

Bioactivation (Forty-eight hours prior to adding to wine.)

1. In a clean sealable container (20 liter carboy) add 3 liters unsulfited grape juice (same varietal as was used to make wine to be inoculated), 3 liters non-chorinated water and 30 grams yeast extract. or Leucofood™
2. Adjust to pH 4.0 with potassium carbonate/bicarbonate, CaCO₃, or other permitted buffer, and mix thoroughly.
3. Add one 170 g container of thawed OENO™, seal carboy with cork or stopper and mix thoroughly. *To thaw frozen culture, immerse container in room temperature water (Optional: Can add at least 100 ppm available chlorine). After fully thawed, remove container from water, open carefully and empty contents into carboy.
4. Hold inoculated wine mixture at 22°-25°C for 48 hours.

Wine Addition

1. After 48 hours, add above 6 liters of bioactivated OENO™ to 2,500 gallons (9463 L) of red wine (or must), or to 500 gallons (1893L) of white or rosé wine. If conditions are optimal, increase the volume of wine inoculated up to the maximum use rate. If fermentation temperature is 17°C or below, follow white wine inoculation rate. Note: addition before alcoholic fermentation may result in a more rapid malolactic fermentation.
2. Maintain wine temperature at 18-22°C as malolactic conversion is difficult to induce below these temperatures. Depending upon type of wine, pH of wine, ethanol content, total sulfur dioxide (SO₂) and fermentation temperature, the malolactic fermentation should be completed in 11-31 days.

Fermentation Parameters

- i) Do not exceed 50 ppm total SO₂. 30 ppm SO₂ or below is ideal and will enable **OENO™** to do its job effectively. It is also very important not to add **OENO™** to wine or grape must which has been sulfured in the past 24 hours.
- ii) The pH of the wine or must should be at least pH 3.2 or 3.3 before adding bioactivated **OENO™**. Malolactic fermentation will be delayed if the pH is below pH 3.2.
- iii) A concentration of greater than 13% (v/v) ethanol will delay malolactic fermentation.
- iv) Avoid frequent racking of wine until malolactic fermentation is completed. Frequent racking has been shown to delay malolactic fermentation.
 - v) High residual levels of fungicides and pesticides may inhibit the **OENO™** culture and delay malolactic fermentation. In addition residual fungicides and pesticides can adversely affect the sensory qualities of wine.

Follow pesticide manufacturer's usage instructions carefully.

REGULATORY INFORMATION

Label statement: Lactic acid bacteria concentrate.

Local food regulations should always be consulted with respect to specific applications and necessary declarations. Legislation may vary from country to country.

SHELF LIFE AND STORAGE

Shelf life of **OENO™** frozen concentrates is 1 year from date of manufacture. **OENO™** frozen concentrates are shipped on dry ice in styrofoam shipping box. Do not use culture if dry ice is not present. Transfer **OENO™** frozen concentrates immediately upon arrival to a freezer maintained at -20°F (-29°C) or colder. Do not refreeze.

PACKAGING

OENO™ frozen concentrates are packaged in sealed plastic polypropylene containers of 170 gram net weight.

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