



WYEAST LABORATORIES, INC.

Premium Liquid Cultures for Home Enthusiast Malolactic Fermentation

WHY FERMENT WITH WYEAST MALOLACTIC CULTURES?

For over 35 years, Wyeast has provided the same Premium Malolactic cultures to home enthusiasts as are chosen by the professionals. Our malolactic cultures will provide rapid and complete malic acid reduction in high acid wines. Malic acid reduction will balance and soften wine while enhancing flavor and aroma characteristics including vanilla and buttery notes. 4114 Er1A is an excellent choice for red wines; it was isolated for its tolerance to low pH conditions. 4221 Ey2d is suggested for white wines; it has been selected for its tolerance to low cellar temperatures. 4007 Malolactic Blend will cover a broad range of temperatures and pH conditions.

PRODUCT

Premium Liquid Malolactic Bacteria (*Oenococcus oeni*) and Malolactic Bacteria blend

DESCRIPTION

A liquid suspension of malolactic bacteria grown in a sterile organic juice-based, nutrient enriched medium.

- Sterile Packaged
- UV Light Barrier
- Keep Refrigerated
- Do Not Freeze



PITCH RATE

One malolactic bacteria package is designed for direct inoculation of 6 gallons (22 L) of must or wine. Malolactic conversion is generally completed within 1-3 months.

INSTRUCTIONS FOR USE

1. Remove from refrigeration (34-40 °F, 1-4 °C) and allow to come to room temperature just prior to use.
2. Shake well and sanitize package.
3. Open and pour into 6 gallons (22 L) of wine or must that has completed or nearly completed alcoholic fermentation, or add once primary fermentation has begun. Free SO₂ levels should be less than 15 ppm.
4. Maintain fermentation or cellaring temperature recommended for the malolactic culture. Malolactic fermentation is generally complete within 1-3 months.

FERMENTATION TEMPERATURE RECOMMENDED PER STRAIN

4007 55-90 °F 13-32 °C

4114 70-90 °F 21-32 °C

4221 55-75 °F 13-21 °C

BEST IF USED BY

This package performs best when used by the *Best if Used By* date when stored between 34-40 °F (1-4 °C). Older malolactic cultures or cultures that has been exposed to higher or lower temperatures may perform slowly.



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PRODUCT WARRANTY

Our Product Warranty states that we guarantee the viability and vitality of the product in our Malolactic culture packages for a minimum of 6 months assuming that they have been properly shipped, stored and handled. Our superior packaging material provides 100% oxygen barrier and UV light protection making this exceptional guarantee possible. During this guaranteed shelf life, some loss of viability is to be expected. This will vary from one strain to another.

Malolactic culture packages will sometimes swell slightly to moderately during shipping, or later while properly stored. This is not an indication of deterioration if the package is within the Best if Used By date and has been properly handled. This is result of trace amounts of nutrients still available at the time packaging, and causes a small amount of culture activity and CO₂ production. Some strains are more prone to this than others.

This product is designed and intended for home scale fermentations and is not warranted for the use in commercial application beyond pilot testing.