

We send more than just product...  
we send you people too!

*Martrex supports your plant trial or start-up with  
our personnel and our FerMax Yeast.*

Martrex, Inc. has been successful for over 40 years by providing immediate response and experienced, dependable follow through to our customers. We provide FerMax yeast, HydroMax yeast hydration supplement, anhydrous ammonia and custom size supersacks of urea to the ethanol industry. We are full-service and can package our products to meet your requirements.

*If you want to achieve maximum ethanol yields,  
and do what the best do...then give us a call.*

**Visit us at: [www.martrexinc.com](http://www.martrexinc.com)**

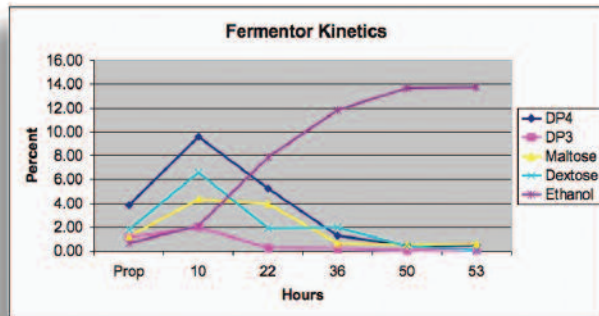
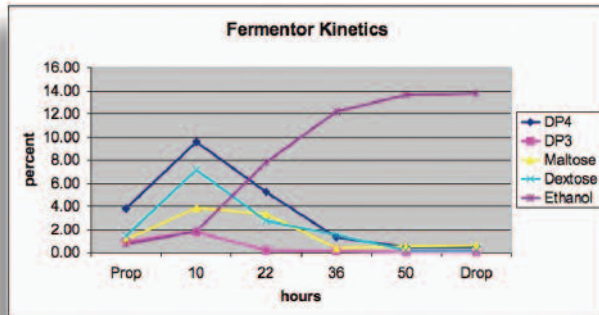
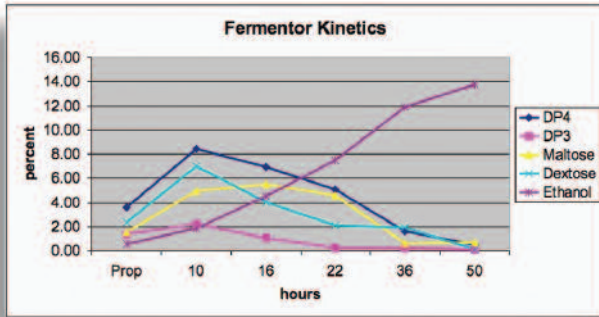


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### Typical Results Using Martrex, Inc. Products



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**FerMax**<sup>TM</sup>  
**YEAST**

Achieving a  
Maximum  
Ethanol  
Yield





# FerMax™ YEAST

## Re-hydration and Activation Processes:

The process of dry yeast recovery to normal cell activity from dormancy is divided into three steps:

- 1 Dry cells absorb water in a process called re-hydration.
- 2 The cells recover to normal function (activation)
- 3 Activated cells grow and reproduce.

## Effects of re-hydrating temperature:

Re-hydrating temperature greatly affects the infiltration and loss of substances in the cell. Compared with re-hydrating at 50°F, re-hydrating at 104°F will reduce by more than 10% the total substances leaking out of the cell.

Re-hydrating the yeast at a less than optimum temperature will result in a very large loss of yeast cells.

Martrex recommends re-hydrating FerMax Yeast at an optimum temperature of 100°-104°F.

## Re-hydration and Activation Liquid:

The ideal ratio of water to yeast during hydration is between 1:10 and 1:20. To ensure complete re-hydration of FerMax yeast, we recommend this volume of water.

Martrex HydroMax™ provides optimum yeast hydration and activation. This careful blend of nutrients provides the perfect osmotic balance and energy to give FerMax yeast an immediate “breakfast” upon hydration. HydroMax will fully activate all available cells and reduce cell mortality to a minimum.

## Martrex Method of Hydration:

1. Fill a hydration tank with 26 gallons of water per box of FerMax Yeast used.
2. Heat water to 104°F.
3. Add 2 water soluble bags of HydroMax yeast hydration/activation product per box of FerMax Yeast used.
4. Add yeast and allow it to hydrate and activate for 10-15 minutes, then allow temperature to cool naturally.
5. Add activated FerMax Yeast to the filling propagator. Optimum propagator temperature is 95-98° F, and ideal pH is 4.6-5.3.
6. Propagate for 4-6 hours before pitching to a filling fermentor.



# FerMax™ YEAST

## Technical Specifications:

FerMax yeast is of the highest purity. Developed specifically for alcohol production.

- 35-45 billion cells per gram of pre-hydrated yeast
  - Viability upon re-hydration is greater than 85%
  - Temperature rating of 95-107°F
  - High ethanol tolerance: 18+ (v/v)
  - High osmotic tolerance: up to 60% sugar solution
  - Packaged FerMax Yeast retains high viability for 2 years under normal room-temperature storage conditions
  - FerMax Yeast will ferment corn, sorgum, wheat, barley, molasses, and rye
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