FermControl™

SPECIAL NUTRITION SUPPLEMENT

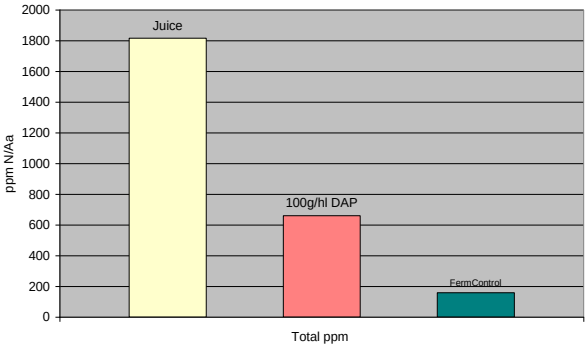
FOR THE SUPPORT OF THE YEAST METABOLISM

General fermentation objectives

The alcoholic fermentation in wine puts all yeast to a lot of challenges. Low pH, high osmotic pressure influences the yeasts metabolism sustainably. To achieve the main objectives for winemaking the yeast requires optimal conditions to ferment reliably and giving best sensorial results.

The addition of only nitrogen to fermentations is insufficient to ensure a reliable, "clean" fermentation with optimal flavours. It's the same essential to provide all co-factors that regulates the yeasts metabolism. These supplements other than nitrogen ensure an efficient utilization of the indigenous nitrogen in the juice to conduct a secure, clean and flavourful fermentation. They enable the yeast to have an optimal condition to produce high quality wines.

Amonia and amino acid utilisation rate



Study on amino acid utilisation improvement

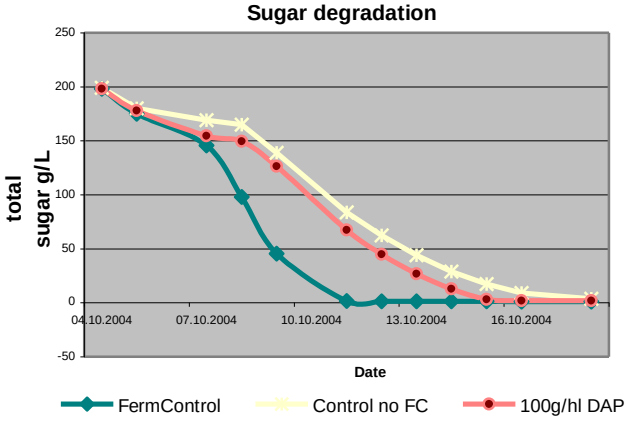
Properties

FermControl™ provides all specific co-factors to the fermentation by adding a balanced combination of yeast nutrition compounds and co-factors that compensate natural deficits in the grapes for winemaking requirements All metabolic functions of the yeast will be improved. FermControl™ will provide the following advantages :

FermControl™ ...

- stimulates an efficient utilization of free ammonia and amino acid in all juices.
- therefore, eliminates the requirements to add DAP in most juices.
- ensures a reliable fermentation under various hard conditions for yeast, such as high alcohol or botrytis conditions.
- can be used in all kinds of juices and musts.

Fermentation example in practice
Sugar degradation



Fermentation study 2004 BWK

Flavour management

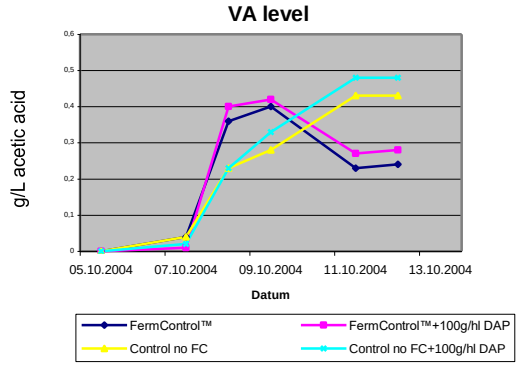
FermControl™ improves the aromatic quality and ageing potential in all wines. The effect will become visible once the wines are sulphured and clarified. The application of FermControl™ in poor juices will show already an instant effect on the sensorial profile during the fermentation.
With the addition of FermControl™ to the alcoholic fermentation the formation of undesired sulphur compounds of yeast will be avoided. This results in clean wines with enhanced varietal character and without reduced off-flavours.

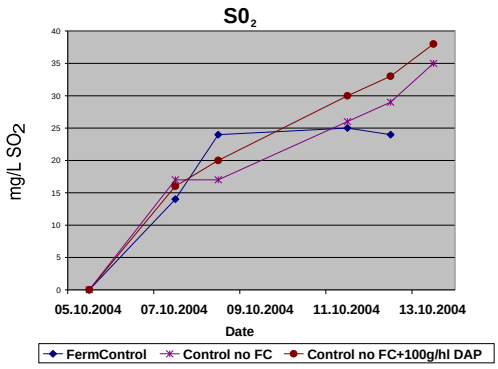
FermControl™ ...

- ..improves the ability of the yeast to produce fruity esters.
- ..controls the formation of any sulphide components deriving from the fermentation.
- ..uses and reduces the need for copper sulphate fining.
- ..stimulates the glutathione production of al yeasts.
- ..increases the ageing potential and the wines serve for longer period fresh

Reduction of the production of acetic acid

The left graph shows the effect of FermControl™ on the VA formation capacity. The FermControl™ treated wines have a significantly lower level of VA. The addition of only DAP has a limited effect.





Wine data: 12.2 vol % alc.; pH 3.3; TA 5,8 g/L;

Practical Use

Dissolve the recommended dose of FermControl™ in water or wine at approximately 20°C. Stir until you get a homogenous suspension without any solids. The addition of FermControl™ is to be carried out at two stages during the fermentation:

Addition 1

Add the first half of the recommended dose (15 or 20 g/hL) to the juice or must two days after yeast inoculation. Or in the case of wild ferments once yeast activity has reached the main fermentation phase

Addition 2

Add the second half of the recommended dose (15 or 20 g/hL) to the must two-thirds the way through fermentation (~8 brix / 4.5 Baume).

Dosage

Application	Dosage
Juice or must < 23° Brix/12.5 Baume	2 x 15 g /hL
Juice or must > 23° Brix/12.5 Baume	2 x 20 g /hL

YAN Requirement

To ensure optimum performance of FermControl min. YAN requirement is 130 ppm. If YAN is insufficient, please adjust with max. 20-30g/hL of DAP, please add simultaneously with **Addition 1**.

Ingredients

FermControl™ is a blend of natural derived vitamins, trace elements and a special purified yeast preparation. The special purification process ensures a microbial integrity. The product is packed under CO_2 atmosphere. All components are GMO-free and are compliant with the Food Grade Standard.

Shelf life

FermControl™ will be delivered in 1 or 5 kg vacuum-packed aluminium pouches as a one-component solution. While storage dry and at 15°C product can be stocked for 24 months. Storage at high temperatures may damage the product. Once packet is opened use all contents within one week.

Additional information

It's recommended not to use any other vitamin or nitrogen fermentation aids for rehydration or fermentation in conjunction with FermControl™ unless you have low YAN situations. A special application chart for different YAN situation is available on demand.