

## ANCHOR ALCHEMY IV

**A *Saccharomyces cerevisiae* yeast blend for intense fruity red wines.**

### ORIGIN

Alchemy IV is a scientifically formulated blend of wine yeast strains. It has been developed in collaboration with the Australian Wine Research Institute (AWRI). These yeast blends have been formulated to provide optimum aroma profiles.

### APPLICATION

Alchemy IV is for the production of intense red fruit characters (cherry, raspberry, red currant and pomegranate) in wines. This blend is a very high producer of ethyl esters, especially of ethyl hexanoate (fruity), which contributes to the longevity of fruit aromas. This makes it very suitable in ageing wines that keep their intense red fruit characters. This blend also has significant production of total esters and terpenes (fruity and violet). Common to both Alchemy red blends is their very high fruit contribution due to higher total esters and ethyl hexanoate production. This is further enhanced by  $\beta$ -damascenone (violets) and a decrease in methoxy-pyrazines (which can mask fruit characters). Alchemy IV produces wines with significant aroma intensity that are rounded and smooth and is suitable for all red varieties.

### FERMENTATION KINETICS

- Good fermenter
- Conversion factor: 0.57 - 0.62

### TECHNICAL CHARACTERISTICS

- Cold tolerance: 16 °C (61 °F)
- Optimum temperature range: 16 - 28 °C (61 - 82 °F)
- Osmotolerance: 26 °Brix / 14 Baume
- Alcohol tolerance at 15 °C (59 °F): 15.5%
- Foam production: no

### METABOLIC CHARACTERISTICS

- Glycerol production: 8 - 11 g/L
- Volatile acidity production: < 0.5 g/L
- SO<sub>2</sub> production: none to very low
- Nitrogen requirement: medium

### PHENOTYPE

- Killer: positive and negative (propagation instead of direct inoculation will distort the ratio of the blend)
- HCDC: promotes the formulation of pyranoanthocyanins

### DOSAGE

30 g/hL (2.5 lb/1000 gal): no propagation

### PACKAGING

Alchemy IV is vacuum-packed in 1 kg packets. It must be stored in a cool (5 - 15 °C / 41 - 59 °F), dry place, sealed in its original packaging.

