

Pure Fermentation SIHA Active Yeast 3

1 B 2.2.2 · CPr 05/2009

(Saccharomyces cerevisiae, Stamm WET 136)

SIHA Active Yeast 3 is a pure, highly active dry yeast concentrate of natural wine yeasts from top German locations. This dry pure culture yeast brings about a rapid start and reliable thorough fermentation, even under unfavourable conditions. It is therefore equally suitable for fermenting musts, mashes and re-diluted fruit-juice concentrates and completing the fermentation of wines for which fermentation was interrupted.

The specific advantages of SIHA Active Yeast 3:

- Very rapid fermentation start, reliable thorough fermentation over a wide range of temperature; very good cold fermentation characteristics
- Quickly suppresses wild yeasts and bacteria, prevents unwanted fermentation side products
- Produces clear wins with a prominent character (clear bouquet according to the variety and vineyard location)
- ▶ Easy suspension by stirring in = simple application
- Negligible frothing

Application

Basically speaking, musts and mashes should be treated with SIHA Active Yeast 3 as soon as possible. Longer periods of standing favour the uncontrolled reprodution of wild yeasts and unwanted bacteria. Fermentation problems can be reliably prevented by the following dosages:

Use	Quantity required g/hl (lb/1000 gal) under	
	normal	difficult
	fermentation conditions	
Grape must red	10 – 15	10 – 20
	(0.8 - 1.3)	(0.8 - 1.7)
Grape must white	10 – 15	10 – 20
	(0.8 - 1.3)	(0.8 - 1.7)
Apple must	10 – 15	10 – 20
	(0.8 - 1.3)	(0.8 - 1.7)
Fruit must	10 – 15	15 – 20
	(0.8 - 1.3)	(1.3 - 1.7)
Mashes	10 – 20	15 – 25
	(0.8 - 1.7)	(1.3 - 2)
Completing the		30 – 60
fermentation of		(2.5 - 5)
stopped wines		•

These quantities are guidelines and should be adjusted to suit the individual conditions (health of the material harvested, temperature and presence of fungicide residue, container size, etc.)

The fermentation temperature range is between 10 $^{\circ}$ C (50 $^{\circ}$ F) and 35 $^{\circ}$ C (95 $^{\circ}$ F). The optimum fermentation temperature is 15 – 22 $^{\circ}$ C (59 – 71.6 $^{\circ}$ F). When usin g large containers, care should be taken to provide for adequate cooling.

SIHA Active Yeast 3 is best stirred into the 10 fold quantity of must-water mixture at $20-30~\rm C$ (68 – 86 $\rm F$), left for about 10 minutes, then stirr ed thoroughly again and added to the must. Mixing in is unnecessary if the must is pumped onto the yeast preparation.

SIHA Active Yeast 3 can also be added directly to the must without suspension. In this case the period until fermentation begins is extended by a few hours. However, to ensure reliable fermentation, the yeast quantity should be increased by about 20 %.

In the case of mashes, the yeast should be put directly into the container before filling so that it will be evenly distributed during pumping in.

The addition of 600 mg/1000 I = 2 tablets SIHA Vitamin B1 creates even better reproduction, fermentation and metabolic conditions. To complete the fermentation of stopped wines, the addition of 15 g/l (12.5 lb/100 gal) SIHA Fermentation Salt is recommended.

To complete fermentation of stopped wines and for reliable fermentation under the most difficult conditions, it is advantageous to let the yeast become accustomed to the fermentation conditions. This is done most simply by adding the yeast quantity required for the total amount of wine to be fermented to about 10 % of this wine permitting fermentation to start until about half of the sugar still present has been used up. This mixture is then added to the remaining 90 % of the wine to be fermented. Yeasts adjusted in this manner ferment as a rule more quickly and have less tendency to die off than yeasts added directly to the total quantity of wine to be fermented.

Product Characteristics

The yeast strain selected for SIHA Active Yeast 3 produces particularly fruity and full wines. It is distinguished by its clean metabolism and produces hardly any unwanted side products during fermentation, such as $SO_2,\,H_2S$ acetaldehyde, pyruvic acid (pyruvate), α -ketoglutaric acid, volatile acid and ester. This prevents any taste influence caused by foreign material during fermentation. The wines' character emerges with a clear bouqet according to the variety and vineyard location.

Further selection objectives were high fermentation activity and vitality. SIHA Active Yeast 3 displays a favourable course of fermentation with high degree of final fermentation. Wild yeasts and unwanted bacteria are suppressed. The negligible tendency to froth ensures better utilisation of the recommended yeast quantities added

 SO_2 quantities of up to 80 mg/l (0.7 lb/1000 gal) are tolerated without difficulty. SO_2 contents in must are generally reduced during fermentation. Wines which have been fermented with SIHA Active Yeast 3 have a very low SO_2 requirement after fermentation.

The yeast can produce up to 16 Vol.-% alcohol. The alcohol yield is about 47 % of the sugar to be fermented. For each kg of sugar transformation about 546 kJ (130 kcal) of heat are released.

The ratio of foreign bacteria is extraordinarily low. Microorganisms injurious to beverages are not present.

SIHA Active Yeast 3 is checked constantly in all important winegrowing countries in the world to see that it maintains the culture parameters. Its positive characteristics are constantly being improved and safeguarded by further selection.

Safety

No safety data are required for SIHA Active Yeast 3 as this product is used directly in food manufacture. Storage, handling and transport involve no risk to people or the environment.

Storage

SIHA Active Yeast 3 is packed under inert gas in a leak proof aluminium sandwich foil. The packing is under vacuum. It is easy to check that the packing is undamaged. The packing date is embossed the seam.

SIHA Active Yeast 3 can be stored in an undamaged packing at $4-10~\rm C$ (39.2 $-50~\rm F$) for 3 years. SI HA Active Yeast can be stored for a short time in an undamaged packing at temperatures of up to 20 $\rm C$ (68 $\rm F$).

Delivery Information

SIHA Active Yeast 3 has the article number 93.030 and is supplied in the following packing sizes:

40 g (0.08 lb) aluminium sandwich foil aluminium sandwich foil aluminium sandwich foil aluminium sandwich foil in carton

500 g (1.1 lb) aluminium sandwich foil block

packages

20 x 500 g (1.1 lb) aluminium sandwich foil block

packages in cardboard box aluminium sandwich foil in

cardboard box

HS Customs-Tariff No. 2102 10 90

Certified Quality

1 x 10 kg (22.05 lb)

SIHA Active Yeast 3 is monitored constantly during the production process to ensure consistently high quality. This covers technical function criteria as well as approval in accordance with the law governing the production and sale of foodstuffs. Strict controls are carried out immediately before and during final packing.

All information is given to the best of our knowledge. However, the validity of the information cannot be guaranteed for every application, working practice and operating condition. Misuse of the product will result in all warranties being voided. Reproduction, even in part, is permitted only with reference to the source. Subject to change in the interest of technical progress.

