

# Pure Fermentation

## SIHA CRYAROME®

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### (Cold fermenting and aroma yeast, *Saccharomyces cerevisiae*)

SIHA CRYAROME® is a special yeast with excellent cold fermenting properties and high aroma yield. It tolerates temperatures up to at least 15 °C (59 °F) and also ferments sufficiently at lower temperatures. It is suitable for the preparation of white or red wines. It produces particularly aromatic, fresh wines and enhances the elegance and complexity especially of sweet wines. It ferments quite slowly but completely even with difficult musts. Therefore it is equally suitable for fermenting musts and mashes, for refermenting applications and for completing the fermentation of wines that have stopped fermenting.

The specific advantages of SIHA CRYAROME®:

- ▶ Very rapid fermentation start, reliable thorough fermentation in a wide temperature range; excellent cold fermenting properties even under 15 °C (59 °F)
- ▶ High release of aroma components from the grapes and fermentation aromas
- ▶ Quickly suppresses wild yeasts and bacteria, prevents unwanted fermentation side products
- ▶ Tolerates up to 16 Vol.-% alcohol

#### Application

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

Use	Quantity required g/hl (lb/1000gal) under	
	normal fermentation	difficult conditions
Red grape must	15 – 20 (1.2 – 1.7)	20 – 30 (1.7 – 2.5)
White grape must	15 – 20 (1.2 – 1.7)	20 – 30 (1.7 – 2.5)
Apple must	15 – 20 (1.2 – 1.7)	20 – 30 (1.7 – 2.5)
Fruit must	15 – 20 (1.2 – 1.7)	20 – 30 (1.7 – 2.5)
Mashes	20 – 25 (1.7 – 2)	20 – 30 (1.7 – 2.5)
Completing the fermentation of „stopped“ wines		30 – 60 (2.5 – 5)

At temperatures under 15 °C (59 °F) the dosage should be increased by 5 - 10 g/hl (0.4 – 0.8 lb/1000gal).

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

The fermentation temperature range is between 12 °C (53.6 °F) and 20 °C (68 °F). The higher the alcohol content, the lower the fermentation temperature should be. The optimum fermentation temperature is 15 – 20 °C (59 – 68 °F). When using large containers, adequate cooling has to be provided.

SIHA CRYAROME® is best stirred into the tenfold quantity of must-water mixture at 30 – 35 °C (86 – 95 °F), left for about 10 minutes, then stirred thoroughly again and added to the must. Mixing is unnecessary if the must is pumped onto the yeast preparation.

SIHA CRYAROME® can also be added directly to the must without suspension. In this case the period until fermentation begins is extended by only 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 l = 2 tablets of SIHA Vitamin B1 creates even better reproduction, fermentation and metabolic conditions. To complete the fermentation of wines that have stopped fermenting, the addition of 20 g/hl (1.7 lb/1000 gal) SIHA Fermentation Salt is recommended.

To complete the 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. The simplest way of doing this is by adding the yeast quantity required for the total amount of wine to about 10 % of this wine and allowing 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 show 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 CRYAROME® 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<sub>2</sub>, H<sub>2</sub>S, acetaldehyde, pyruvic acid (pyruvate), α-ketoglutaric acid, volatile acid and esters. The character of the wine is therefore not impaired by off-tastes due to fermentation.

Further selection objectives were high fermentation activity and vitality. SIHA CRYAROME® exhibits a favourable course of fermentation with a high degree of final fermentation. Wild yeasts and unwanted bacteria are suppressed.

SO<sub>2</sub> quantities up to 80 mg/l (0.7 lb/1000 gal) are tolerated by the yeast without difficulty.

SO<sub>2</sub> contents in the must are generally reduced during fermentation. Wines which have been fermented with SIHA CRYAROME® have a very low SO<sub>2</sub> requirement after fermentation.

The yeast can produce up to 16 Vol.-% alcohol. The practical alcohol yield is about 47 % of the sugar to be fermented. For each kg of sugar transformation about 546 kJ (130 kcal) of heat is released. Microorganisms which spoil the beverage are not present.

### Safety

No technical safety data are given for SIHA CRYAROME® as this product goes directly into the production of foodstuffs. There is no danger for personnel and the environment during storage, handling and transportation.

### Storage

SIHA CRYAROME® is packed in gastight aluminium foil using inert gas. The package is vacuum-sealed and can be easily checked for intactness.

SIHA CRYAROME® can be stored in an undamaged package at 4 – 10 °C (39.2 – 50 °F) for 3 years. It can be stored for a short time in an undamaged package at temperatures up to 20 °C (68 °F). Opened packages should be used up immediately.

### Delivery Information

SIHA CRYAROME® is sold under article no. 93.150 and is available in the following package sizes:

500 g (1.1 lb)	aluminium sandwich foil bloc package
20 x 500 g (1.1 lb)	aluminium sandwich foil bloc package in carton

H.S. Customs Tariff No.: 2102 10 90

### Certified Quality

SIHA CRYAROME® is monitored regularly during the production process to ensure consistently high quality. These inspections cover technical function criteria as well as compliance with the law governing the production and sale of foodstuffs. Strict controls are also carried out immediately before and during final packing.



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