## Technical Information

# Pure Fermentation SIHA<sup>®</sup> CRYAROME™



# Cold Fermenting and Aroma Yeast, Saccharomyces Cerevisiae

SIHA CRYAROME yeast from Eaton's Begerow Product Line is a special yeast with excellent cold fermenting properties and high aroma yield. It tolerates temperatures up to at least 59 °F (15 °C) and 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 re-fermenting applications and for completing the fermentation of wines that have stopped fermenting.

The specific advantages of SIHA CRYAROME yeast:

- Very rapid fermentation start, reliable thorough fermentation in a wide temperature range; excellent cold fermenting properties even under 59 °F (15 °C)
- 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% alcohol by vol.

## **Application**

Basically musts and mashes should be treated with SIHA CRYAROME yeast as soon as possible. Longer periods of standing favor the uncontrolled reproduction of wild yeasts and unwanted bacteria. Fermentation problems can be reliably prevented by the dosages in the table.

At temperatures under 59 °F (15 °C) the dosage should be increased by 0.4-0.8 lb/1,000 gal (5 - 10 g/hl).

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.).

Application	Quantity required lb/1,000 gal (g/hl) under		
_	normal	difficult	
	fermentation conditions		
Red grape must	1.2 – 1.7 (15 – 20)	1.7 – 2.5 (20 – 30)	
White grape must	1.2 – 1.7 (15 – 20)	1.7 – 2.5 (20 – 30)	
Apple must	1.2 – 1.7 (15 – 20)	1.7 – 2.5 (20 – 30)	
Fruit must	1.2 – 1.7 (15 – 20)	1.7 – 2.5 (20 – 30)	
Mashes	1.7 – 2.0 (20 – 25)	1.7 – 2.5 (20 – 30)	
Completing the fermentation of "stopped" wines		2.5 - 5.0 (30 - 60)	

The fermentation range is between 53.6 and 68 °F (17 – 25 °C). The higher the alcohol content, the lower the fermentation temperature should be. The optimum fermentation temperature is between 59 and 68 °F (15 – 20 °C). When using large containers, adequate cooling has to be provided.

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

SIHA CRYAROME yeast 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 0.005 lb SIHA® Vitamin B<sub>1</sub> yeast nutrient fermentation aid per 1,000 gal (600 mg per 1,000 l) creates even better reproduction, fermentation and metabolic conditions. To complete the fermentation of wines that have stopped fermenting, the addition of 1.7 lb/1,000 gal (20 g/hl) SIHA Fermentation Salt yeast nutrient fermentation aid 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 yeast 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 yeast exhibits a favorable course of fermentation with a high degree of final fermentation. Wild yeasts and unwanted bacteria are suppressed.

SO<sub>2</sub> quantities up to 0.7 lb/1,000 gal (80 mg/l) are tolerated by the yeast without difficulty.

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

The yeast can produce up to 16% alcohol by volume. The practical alcohol yield is approximately 47% of the sugar content. For each lb (kg) of sugar fermented, approx. 247 kJ (546 kJ)/59 kcal (130 kcal) of heat is released. Microorganisms that spoil the beverage are not present.

## Safety

No technical safety data are given for SIHA CRYAROME yeast 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 yeast is packed in gastight aluminum foil using inert gas. The package is vacuumsealed and can be easily checked for intactness.

SIHA CRYAROME yeast can be stored at a temperature of 39 – 50 °F (4 – 10 °C) for a period of four years as long as the packaging is intact. The product can also be stored at 68 °F (20 °C) for short periods.

Opened packages should be used up immediately.

## **Delivery Information**

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

aluminum sandwich foil block pack 20 x 1.1 lb (500 g) aluminum sandwich foil block pack in carton

HS Customs Tariff: 2102 10 90

#### **Certified Quality**

SIHA CRYAROME yeast 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

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For more information, please e-mail us at filtration@eaton.com or visit us online at eaton.com/filtration for a complete list of Eaton's filtration products.

Not all products in Eaton's Begerow Product Line are available in all regions. Please contact your local Eaton office to determine availability.

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