

## Enzyme Treatment

### SIHAZYM™ Claro

## Granulated Wine Enzyme Compound for Must Pre-Clarification

SIHAZYM Claro enzyme from Eaton's Begerow Product Line is a pectolytic enzyme compound developed for fast and effective must pre-clarification. The high pectolytic activity based on polygalacturonase, pectinesterase, and pectinlyase promotes selective breakdown of pectins. High pectin content leads to poor mashing of grapes and poor must clarification.

In addition to traditional must pre-clarification/ sedimentation SIHAZYM Claro enzyme can also be used as a flotation enzyme.

The specific benefits of SIHAZYM Claro enzyme:

- Fast and effective must pre-clarification
- Higher quantity of free running must in grape varieties with high pectin content
- Reduction of juice viscosity

### Application

SIHAZYM Claro enzyme is particularly suitable for a fast and effective depectinization of grape must. An alcohol test can be used to check the breakdown of pectin.

Based on the dosage recommendation the product is added directly into the must clarification tank as a 10% solution in water. Add SIHAZYM Claro enzyme to the enzyme solution in the reaction tank in order to ensure pectin breakdown before the actual flotation. For problematic mash from grapes with high pectin content, it is beneficial to add a combination of SIHAZYM Extro enzyme and SIHAZYM Claro enzyme into the press.

It is important to ensure optimum distribution of the enzyme solution in the must.

### Activity

SIHAZYM Claro enzyme has an activity of 18,600 lb/dr (10,500 PGNU/g, polygalacturonase). The product is cleaned of cinnamyl esterase activity.

### Dosage

Application	Dosage lb/1,000 gal (g/hl) must/mash	Duration
Sedimentation		
Must clarification (approx. 59 °F (15 °C))	0.08 – 0.17 (1 – 2)	2 – 4 h
Must clarification (approx. 46.4 – 50 °F (8 – 10 °C))	0.17 (2)	2 – 4 h
Red wine mash (flash pasteurization)	0.08 – 0.25 (1 – 3)	4 – 6 h
Must reserve preparation	0.17 – 0.25 (2 – 3)	6 – 12 h
Flotation	0.17 – 0.25 (2 – 3)	2 – 4 h

The optimum temperature is 68 °F (20 °C). For lower temperatures, higher SIHAZYM Claro enzyme dosages are required in order to ensure consistent activity.

### Special Notes

Contact with bentonite causes irreversible damage to enzymes through adsorption.

The enzymatisation reaction must be completed prior to using bentonite, or the bentonite must be removed before the enzyme is added.

Any bentonite treatment that may be required should therefore be carried out before the enzyme treatment, because otherwise the enzyme would be adsorbed and deactivated by the bentonite. The application of up to 2.14 dr/gal (1,000 mg/l) SO<sub>2</sub> has no influence on enzyme activity.

Each packaging unit includes a dosing spoon:

0.22 lb (100 g) can – 0.01 lb (5 g) dosing spoon

1.1 lb (500 g) can – 0.02 lb (10 g) dosing spoon

## Safety and Purity

The product is a white, virtually dust-free, and soluble micro-granulate without preservatives. It meets the requirements of the FAO/WHO JEFCA and FCC recommendations for food enzymes.

Further safety information can be found in the relevant Material Safety Data Sheet, which can be downloaded from our website.

## Storage

SIHAZYM Claro enzyme is a micro-granulate that can be stored for up to three years at 39.2 – 42.8 °F (4 – 6 °C, ~ refrigerator temperature) without losing its designated activity.

The product should be stored dry and well-sealed once opened.

## Delivery Information

SIHAZYM Claro enzyme is sold under article no. 95.229 and is available in the following package sizes:

0.22 lb (100 g)      can

1.1 lb (500 g)      can

HS Customs Tariff: 3507 90 90

## Certified Quality

During the production process, SIHAZYM Claro enzyme is regularly monitored to ensure consistently high quality.

These inspections include technical functional criteria as well as safeness in accordance with relevant laws governing production of foods. Strict controls are additionally carried out immediately prior to and during final packaging.

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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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