Technical Information

Enzyme Treatment Panzym[®] Extract G



Pectinolytic Enzyme Maceration Preparation for Winemaking - Free from Cinnamylesterase (Depsidase)

Panzym Extract G enzyme from Eaton's Begerow Product Line is a granulated enzyme preparation that is produced from a selected strain of *Aspergillus niger* by means of submerged fermentation. Undesired cinnamylesterase activity (CE) and colorants are removed in a special cleaning step to thus produce a nearly white finished enzyme preparation. Panzym Extract G enzyme is a highly concentrated pectinolytic preparation, activities that selectively degrade grape skin polysaccharides in the grape mash.

Application

Panzym Extract G enzyme was developed for treatment of white and red grape mashes for the purpose of quality improvement. The selective degradation of grape skins facilitates release of the juice during pressing and makes it possible to gently extract valuable aroma, aroma precursors, and desired phenols (tannins). Decreased quantities of aggressive tannin and stabilized colorants are extracted from the red mash. Depectinization and a decrease of viscosity is additionally achieved during the clarification process. The active enzyme components contained in Panzym Extract G enzyme are easily dissolved in must or water using concentrations occurring under normal working conditions. The product is added as a 10% solution directly into the mash wagon, crushing mill, press, or to the grape mash tank prior to filling. Even distribution of the enzyme in the mash is ensured by pumping.

Activity

Panzym Extract G enzyme has an activity of activity of 13,275 PGNU/dr (7,500 PGNU/g) at 68 $^{\circ}$ F (20 $^{\circ}$ C). It is clean and free of cinnamylesterase.

Dosage

Area of application	Dosage Ib/1,000gal (g/hl)	Period
		h
Maceration of white		
grapes (release of juice,	0.47 0.05	
aroma, and aroma	0.17 - 0.25	2 – 4
precursors)	(2 – 3)	2 = 4
Maceration of red		
grapes (extraction of		
colorants and tannin,		
polysaccharides, and	0.25 – 0.33	
aroma)	(3 – 4)	6 – 12

Special Notes

Enzymes are irreversibly destroyed when brought in contact with bentonite.

The enzymatization reaction must be completed prior to using bentonite or the bentonite must have been removed prior to enzymatization.

Any necessary bentonite treatment should be performed after the enzyme treatment, otherwise the enzyme will be absorbed by the bentonite and thus rendered ineffective.

The application of up to 0.42 lb/1,000 gal (50 mg/l) of SO_2 has no effect on the enzyme activity.

Safety and Purity

This product is a white, soluble micro-granulate without preservatives and virtually free of dust. It complies with FAO/WHO JEFCA and FCC guidelines for food enzymes.

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





Storage

Panzym Extract G enzyme is a micro-granulate and is thus exceptionally resistant. When stored at a temperature of max. 77 °F (25 °C) it will retain its indicated activity for many years.

The product should be stored in a dry place to avoid the formation of rust on the cans.

Delivery Information

Panzym Extract G enzyme is sold under article no. 95.122.001 and is available in the following package size:

0.22 lb (100 g) can

(A dosage spoon is available free of charge. One spoon equals 0.02 lb (10 g) of enzyme granulate.)

HS Customs Tariff: 3507 90 90

Certified Quality

Panzym Extract G enzyme is regularly tested for uniform high product quality during the production process. These tests include comprehensive technical function criteria as well as safeness according to food product laws. Furthermore, stringent inspections are performed immediately prior to and during final packaging.

Panzym Extract G enzyme complies with the purity criteria of the international code for wine treatment products and the provisions of German wine regulations.

Panzym[®] is a registered trademark of Novozymes A/S.

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

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