

Enzyme Treatment

Panzym® Flux



Special Pectinase for Improving Filterability during Cross Flow Filtration

Panzym Flux enzyme of Eaton's Begerow Product Line is a special pectinase for improving filter capacity during ultrafiltration of fruit juice. Because of its broad spectrum of specific, highly active side activities (cellulase, hemicellulase and in particular rhamnogalacturonase and galactomannanase) the amount of polysaccharides blocking the membrane is considerably reduced, thus increasing the yield of a cross flow plant. The extensive colloid break-down also allows fruit juice manufacturers to fulfill critical specifications of the alcohol test, especially when it comes to berry juices.

Panzym Flux enzyme is obtained from a selected strain of *Aspergillus niger* and is available as a clear, brown liquid with a slight smell, typical of fermented products.

Application and Mode of Action

Panzym Flux enzyme is used in fruit juice production together with pectolytic and amylolytic enzymes. As a rule the enzyme is added to the first juice portions in the enzymation tank. The combination of pectolytic and amylolytic activities with colloid-degrading activities ensures quick, reliable degradation of cloud-stable colloids and colloids which can inhibit cross flow filtration.

Dosage

Berry juice:	3.84 – 5.12 fl oz/1,000 gal (3 – 4 ml/hl) 1 – 2 h at 122 °F (50 °C)
Apple/pear juice:	2.56 – 3.84 fl oz/1,000 gal (2 – 3 ml/hl) 1 – 2 h at 122 °F (50 °C)
Fruit wine	1.28 – 2.56 fl oz/1,000 gal (1 – 2 ml/hl) during fermentation

The effectiveness of the enzyme is temperature-dependent. The activity optimum occurs at 113 – 131 °F (45 – 55 °C). As the temperature falls, the rate of reaction falls. Although the activity remains unchanged, in principle, the effect is greatly delayed. At temperatures lower than 59 °F (15 °C), therefore, an increased dosage should invariably be used. Panzym Flux enzyme inactivated at temperatures exceeding 140 °F (60 °C) and by contact with bentonite.

Safety and Purity

Panzym Flux enzyme complies with the specifications of FAO/WHO (JECFA and FCC) for food-grade enzymes. If used according to the instructions and processed correctly, the use of this enzyme does not entail any health hazards.

Panzym Flux enzyme is bottled aseptically after sterile filtration and is therefore practically germ-free. The product does not contain any preservatives.

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

Storage

Panzym Flux enzyme must be stored in a cool (41 – 50 °F (5 – 10 °C)) and dry place.

At storage temperatures of 68 °F (20 °C), Panzym Flux enzyme will maintain the declared activity for at least 3 months, after which a loss of activity of 1 – 2% per month must be expected.

Once opened, packages should be used up immediately.

Delivery Information

Panzym Flux enzyme is sold under article no. 95.121 and is available in the following package size:

6.6 gal (25 l) PE jerrycan

HS Customs Tariff: 3507 90 90

Certified Quality

Panzym Flux enzyme is regularly monitored throughout the manufacturing process to ensure consistently high product quality. These tests cover both technical functional criteria and absolute safety under foodstuff legislation. Additional strict controls are carried out immediately before and during the final packing stage.

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

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For more information, please e-mail us
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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
Filtration office to determine availability.

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