# Mash Liquefaction Panzym<sup>®</sup> Pro SP-L

## **Highly Active Pectinase for Maximal Mash Liquefaction**

Panzym Pro SP-L enzyme is a highly effective enzyme preparation for the optimization of mash liquefaction.

This enzyme is specifically for the processing and maceration of fruit and vegetable mashes. Soluble and insoluble pectins, as well as turbidity-causing polysaccharides are efficiently degraded.

The application of Panzym Pro SP-L enzyme in mash/pomace drastically improves the solid-liquid separation (e.g. using a press or decanter) and thus leads to a higher juice yield.

Specific advantages of using Panzym Pro SP-L enzyme in the production of fruit juice:

- High-performance product with optimum enzyme activity
- Wide spectrum of side activities (including hemicellulase)
- High juice yield and pressing capacity of fresh and storable fruit
- Easy-to-clean press and equipment

Specific advantages of using Panzym Pro SP-L enzyme for distilling mashes:

- Fruit mashes which are easier to pump and ferment
- Rapid fermentation start and reliable thorough fermentation
- Pure fermentation with high final attenuation for high quality distillates
- Enhanced flavor release and reduced level of natural methanol

#### **Application and Effect**

Panzym Pro SP-L enzyme must come into close contact with the mash which is to be broken down. As a result of this, it is advisable to continuously add the enzyme during mashing. The full distribution in the fermentation vessel guarantees the maximum amount of mash degradation. In addition, pumping and stirring is advantageous.

#### **Dosage**

Application	Fermentation temperature °F (°C)	Dosage fl oz/long ton (ml/to)
Apple mash	53 – 86 (12 – 30)	2.1 – 2,7 (60 – 80)
Pear mash	53 – 86 (12 – 30)	1.4 – 1.7 (40 – 50)
Plum mash	53 – 86 (12 – 30)	0.7 – 1.0 (20 – 30)
Jerusalem artichoke mash	53 – 86 (12 – 30)	5.2 – 6.9 (150 – 200)

The most effective temperature range for enzyme application is between 59 - 104 °F (15 - 40 °C). If the mash temperature is below 59 °F (15 °C), the enzyme quantities should be increased by about 50%.

#### Safety and Purity

Panzym Pro SP-L enzyme complies with the FAO/WHO (JECFA and FCC) specifications for enzymes in the food industry.

Panzym Pro SP-L enzyme is filled aseptically following sterile filtration and is therefore virtually germ-free. Panzym Pro SP-L enzyme is a brownish, liquid enzyme preparation that has the typical odor of fermented products.

Panzym Pro SP-L enzyme is characterized as follows:

- Production organism: Aspergillus aculeatus
- Specified activity: 3300 PGNU/g (Polygalacturonase)

When used as directed and handled correctly, there are no known unfavorable effects associated with this product.

Further information on safety can be found in the Material Safety Data Sheet, which is available for download from our website.



#### **Storage**

The product should be stored with the packaging intact away from sunlight at a temperature of 32 to 50 °F (0 to 10°C).

Unfavorable storage conditions (exposure to direct sunlight, higher storage temperatures) may require a higher dosage.

Once opened, the product should be used up as soon as possible.

### **Delivery Information**

Panzym Pro SP-L enzyme has the article number 95.259 and is available in the following packaging sizes:

2.2 lb (1 kg) PE bottle44 lb (20 kg) PE canister

#### **Certified Quality**

Panzym Pro SP-L enzyme is inspected regularly during the production process to ensure consistently high product quality.

Strict controls also take place immediately before and during final packaging.

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