

## Product Description

Distizym® FM-TOP is a liquid, highly concentrated pectolytic enzyme preparation with an increased macerating effect for the optimal digestion of distilling mash from fruits with hard fruit pulp as for instance apples and quinces, or tubers as for instance topinambour.

Permitted according to the laws and regulations currently in force. Purity and quality are proved by specialized laboratories.

## Aim of Treatment

- Disintegration and breaking up of the cellular fabric by maceration of the fruit tissue with a simultaneous rapid degradation of pectic substances and thus a quick liquefaction of mash
- Easier pumping and stirring of mash
- Easier fermentation onset and improved fermenting out of mash, thus optimal yield of alcohol
- Release of valuable components of fruits and intensification of fruit aroma

## Product and Effect

Distizym® FM-TOP is a pectinase preparation with a strong macerating activity, having an especially liquefying effect on fruits with hard fruit pulp or dry fruits.

Distizym® FM-TOP loosens the fruit cell fabric to the point of a complete disintegration of the fruit tissue and rapidly degrades all pectic substances, thus leading to a drastic decrease of viscosity and a rapid liquefaction of mash. The addition of water, which is necessary when enzymes are not employed, is significantly reduced or is not necessary at all. The mash can be stirred easier and has improved pumpability. Due to the intensive mash digestion valuable components are released and the content of bouquet and aroma substances is increased.

Liquefaction and digestion of mash facilitate the onset of fermentation, improve the fermenting out of mash and thus lead to an optimal yield of alcohol. At the same time this reduces the risk of burning-on during distilling.

For the application of the enzyme an acidification of the mash is not necessary. But in case of mashes with high pH-values, an acid correction adjusting the pH-value to pH 3.0 – 3.2 is recommended for microbiological reasons (so-called acid protection), by an addition of Erbslöh-pH-Senker (pH-reducer).

## Dosage

The dosage of enzyme depends on the respective raw material, its degree of ripeness, temperature and contact time. The dosages mentioned below refer to a treatment temperature of 15 °C.

fruits	mL/100 kg mash
topinambour	20 - 30
other tuberous plants/roots	10 - 20
apple/quince	6 - 15
pear/stone fruit	3 - 6

## Application

Distizym® FM-TOP is diluted with cold tap water to a 5-10% solution and directly added into the mill when mashing-in. Whether the enzyme solution is added into the mash vessel as first component or afterwards, in both cases the enzyme has to be mixed thoroughly by stirring intensely. Brief stirring in intervals during the first hours promotes mash digestion.

## Storage

Store in a cool place. Reseal opened packagings immediately.

**Special enzyme for the decomposition of distilling mash from fruits with hard fruit pulp and tubers as for instance topinambour**