



Fructamyl[®] HT-300

Product Description

Fructamyl[®] HT-300 is a liquid, highly concentrated amylolytic enzyme preparation for starch degradation in pome fruit juices.

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

Aim of Treatment

Degradation of starch and dextrans at temperatures between 20-55 °C.

**Special enzyme for
starch degradation
in pome fruit juices**

Product and Effect

Fructamyl[®] HT-300 hydrolyses the α -1,4-glycosidic bonds of starch. Only by complete degradation of starch the clarification of the juices becomes possible and secondary haze is prevented. On principle amylases are only able to decompose dissolved starch. By thermal treatment, e.g. high-temperature storage, flash pasteurization, concentration (temp. >70 °C), the starch contained in the fresh juice is gelatinized and dissolved. In stored, starch-containing juices and concentrates part of the dissolved starch crystallizes again during storage time (retrogradation). The retrograded starch which is not degradable by enzymatic treatment is usually fined out during clarification. The degradation of dissolved starch is effected by adding Fructamyl[®] HT-300 either during cold clarification (15-20 °C) or during hot clarification (45-55 °C).

Dosage

Enzyme dosages depend on raw material, degree of ripeness, temperature and contact time. The necessary dosage should be determined by dosage variations with the iodine test. The iodine test included in the "Erbslöh-SümoTEST" indicates the required dosage of Fructamyl[®] HT-300.

Standard guide values at 40-55 °C and a contact time of 1-2hours:	
Fruit/starch detection with iodine	mL/1000 L juice
Premature to ripe fruits - intensive blue colouring	20-40
Overmature fruits, stored fruits, red-brown to blue colouring	3-20

When Fructamyl[®] HT-300 is applied for cold clarification then the low temperature requires longer contact times than specified in the table. A general principle is: contact time doubles with a decrease of temperature of every 10 °C.

When, as a result of extreme starch contents, higher dosages are required than specified above, then we recommend the application of the special amylases Fructamyl[®] FCT for cold clarification to prevent filamentous cloudiness.

Application

Fructamyl[®] HT-300 can be applied in connection and at the same time with the pectolytic enzyme Fructozym[®] P. Fructamyl[®] HT-300 is diluted in cold tap water to a 5-10% solution. The dosage is added directly to the juice line after the aroma recovery unit or is added to the enzyming tanks as first component.

Storage

Store in a cool place. Reseal opened packagings tightly and immediately and use up soon.