# Overview of enzymation: Coloured fruits and grapes

| Enzymation of mash<br>and pectin depectinisation | Product             | Description  | Application  | Dosage mL/1000 kg<br>or mL/1000 L |
|--|---------------------|--|--|-----------------------------------|
|  | Fructozym® COLOR    | Acid-resistant special pectinase, colour-protecting for sensitive pigments                                 | Strawberry, raspberry, elderberry                      | 10 – 300                          |
|  | Fructozym® BE       | Pectinase with special glucanase   | Raspberry, blackberry, strawberry                      | 30 – 200                          |
|  | Fructozym® EC COLOR | Concentrated acid-tolerant pectinase   | Black currant, elderberry, sour cherry                 | 5 – 200                           |
|  | Fructozym® Flash-C  | Special pectinase for processing fruits with hard peels and coloured fruits with complex pectin structures | Concord and muscat grapes, chokeberry and sweet cherry | 30 – 350                          |
| Degradation<br>of colloids<br>and proteins       | Fructozym® FLUX     | Broad spectrum pectinase, rich in glucanase  | Optimized filtering of fruit juices                    | 30 – 60                           |
|  | Fructozym® UF       | Pectinase and acidic protease  | Improved stability for sour cherries and elderberries  | 50 – 150                          |

### **Alcohol-test**

- Pour 5 mL juice sample in a test tube (in juice containing mix-beverages, accordingly more)
- Add 5 mL ethanol (96 %)
- Mix sample carefully; do not shake!
- Look out for quick rising bubbles/ wait for a few minutes



## **Pectin-proof**

- A floating gel indicates higher amounts of pectin
- <u>Slowly</u> rising bubbles are an indicator of residual pectin



# Overview of clarification and stabilization: Coloured fruits and grapes

| Product           | Description                                   | Application  | Dosage<br>(g or mL/1000 L) |
|-------------------|---|--|----------------------------|
| PuroBent®         | Highly purified special bentonite             | Production of fruit juice with highest purity specifications     | 450 – 1500                 |
| Aktivit           | Granulated bentonite for beverage treatment   | Protein-fining and clarification                                 | 500 – 2500                 |
| Blancobent UF     | Special bentonite, free from coarse particles | In-line stabilization in crossflow-filter systems                | 500 – 2500                 |
| ErbiGel®          | Fining-gelatin                                | Tannin adsorption  | 100 – 400                  |
| FloraClair®       | Vegetable fining-protein                      | Tannin adsorption, suitable for Halal, Kosher and vegan products | 100 – 600                  |
| Klar-Sol 30       | Alkaline silica sol for beverage treatment    | Complexation of protein and excess gelatin                       | 1500 – 3500                |
| Klar-Sol Super    | Acidic silica sol for beverage treatment      | Complexation of protein and excess gelatin at pH < 3.2           | 1500 – 3500                |
| Tannivin® Galléol | Fully hydrolyzable tannin from oak apples     | Beverage-fining  | 20 – 50                    |

### Glucan-test

Clarification and stabilization

- Pour 10 mL juice sample in a test tube (in juice containing mix-beverages, accordingly more)
- Add 5 mL ethanol (96 %)
- Mix sample carefully; do not shake!
- Interpretation after 60 minutes



## Glucan-proof

The formation of <u>thick-walled bubbles</u> is an indicator for glucan

