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Getränkeanalytik

Detection of starch in early harvested pomes, mashes and stillages of cereal grains and potatoes

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page 1/1

Principle:

Starch results with diluted iodine solution in a deep violet-blue colouration.

Application ranges:

1. With this test, starch can rapidly and reliably be detected in apples and pears. Starch occurs above all quite often in immature fruits. If it is not removed during mashing by adding starch-decomposing enzymes (e. g. **amylase AG 300**), it can during the distillation of the mashes result in a sticking of the same in the still-head.
2. Also in fermented mashes of cereal grains and potatoes, still existing unsaccharified starch can be detected by this test. The existence of starch is in this case an indication for an incomplete enzymatic starch decomposition (mashing temperature, malt, enzymes), leading to a loss of yield.
3. The presence of starch in swills of cereal grains and potatoes is also an indication for an insufficient enzymatic starch decomposition, but also for a poor mechanic size reduction of the raw material (change sieve hole size of the mill).

Reagents:

„Iodine starch test for burners“, Art.-Nr.: 0529

Procedure:

Pomes:

- Cut apple through,
- Drip two drops of the iodine solution onto the cut surface and assess the arising colouration: Intensive violet to black colouring indicates starch.

Fermented mashes of cereals and potatoes:

- Put 1-2 ml of fermented mash into a test tube.
- Add 1-2 drops of iodine solution and assess the colouration (see below).

Stillages of cereal and potato mashes:

- Crush 1-2 g of the solid stillage in a white porcelain bowl.
- Add 1 ml of water and two drops of iodine solution and assess the colouration:

Assessment:

Deep-blue to violet colouration:	Iodine starch reaction positive, starch available
Reddish to brown colouration:	No starch, but dextrin available
No or light grey colouration:	Iodine starch reaction negative