Brabender®

Micro Visco-Amylo-Graph®

The "small" Viscograph for measuring the gelatinization properties of starch and flour

… where quality is measured.

For measuring the gelatinization properties of starches and flours

Micro Visco-Amylo-Graph®

The **Micro Visco-Amylo-Graph®** is used in particular for measuring the gelatinization properties of starch and starch containing products, but also for testing the viscosity of liquids, suspensions, and pasty products and, with flours, for determining the enzyme activity (α-amylase).

Consequently, the application fields of this new instrument range from the food industry over paper and textile industries up to the chemical industry.

Special Software

- **Data correlation program:** Up to 15 curves can be shown and evaluated simultaneously within one chart
- **Universal evaluation profiles:** Beside the standard evaluation with peak viscosity, own evaluation profiles can easily be programmed and used. These profiles can include for example areas, peaks, fixed points, drops, etc.

The evaluation is done in BU, mPar, cP or cmg.

As compared to the **Viscograph**, the **Micro Visco-Amylo-Graph®** stands out for reduced sample weights and increased heating/cooling rates. Although test times are considerably shortened, results are comparable to those of the **Viscograph**.

The instrument is equipped with an integrated, self-optimizing temperature control unit which, together with the comfortable software, permits easy programming and running of any temperature profile. Heating/cooling rates from 1.5°C/min up to 10°C/min are possible.

Just like the **Viscograph**, the **Micro Visco-Amylo-Graph®** has a rotating bowl. The stirrer, which completely immerges into the sample, is connected to a high-resolution torque sensor for precise viscosity determination. The special geometry of the paddle ensures good mixing of the sample – there is no sedimentation of starch particles.

Temperature measurement is done directly in the sample. This makes it easy to always precisely assign the temperature to the current viscosity.

Advantages

- Heating/cooling rates up to 10°C/min (optimized for 7.5°C)
- Quick measurement
- Small sample weights
- Integrated, self-optimizing temperature control unit
- Temperature measurement inside the sample
- Speed profiles programmable
- Reference curves can be stored
- Easy handling and cleaning
- Results comparable to those of the standard Viscograph
- Stainless steel bowls and paddel; therefore no follow-up costs

Specification

- Measuring system with rotating bowl
- Measurement with torque sensor
- Temperature control through RTD within the sample
- Electric resistance radiant heating system
- Immersion-type heat exchanger for cooling the sample with tap water, triggered by solenoid valve
- Electronic temperature program controller

Applications

Profit from the versatility and reliability of the **Micro Visco-Amylo-Graph®** – in the food industry, in the paper and textile industries, or in the chemical industry:

- Measure the gelatinization properties of flour, and native or modified starch
- Measure the enzyme activity in flour (e. g. sprout)
- Adjust the diastatic activity by adding enzymes (e. g. malt flour)
- Measure the influence of extrusion conditions onto the extruded product

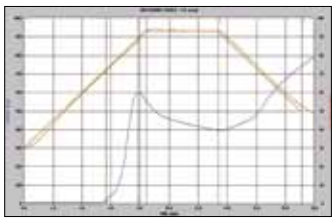

Diagram Micro Visco-Amylo-Graph®

The small sample bowl allows you to reduce your sample weights to as little as 2 to 15 g for 100 - 110 ml of water, depending on your material. An integrated automatic return-type steam trap prevents loss of vaporized water.

The extensive software running under Windows allows programming of test cycles for manifold samples and applications.

Test conditions and temperature profiles can be stored and recalled at any time for a new test.

Micro Visco-Amylo-Graph®	
Sample volume	110 ml
Speed	0 - 300 min^{-1}
PC port	USB
Mains connection	1x 230 V; 50/60 Hz + N + PE; 2.8 A 115 V; 50/60 Hz + PE; 5.6 A
Dimensions (W x H x D)	450 x 750 x 380 mm
Weight	approx. 30 kg net

Made in Germany since 1923

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Brabender® agencies all over the world.

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