

Viscosity

Digital Krebs Viscometer

The Digital Krebs Viscometer is used for measuring the viscosity of Newtonian and non-Newtonian fluids. The viscosity of a non-Newtonian material varies depending on the rate of shear, but the Krebs viscometer measures the viscosity at a set speed shear rate which provides a consistent standard. The dimensions of the paddle conform to the precise specification of ASTM D562.

Key Features

- Displays in Krebs Units, Grams or Centipoise
- Easy to use, lower handle and press read button to activate
- Constant speed motor ensures accuracy and repeatability
- Quick release chuck allows rapid cleaning and changeover of paddle
- Magnetic base for positive sample location
- Multipoint calibration across torque range for optimum accuracy
- Stores up to 9 measurements RS 232 output to printer
- Complies with relevant standards
- Dual Voltage operation

Description

A paddle is immersed in a vessel which contains a fixed volume of the sample material. A constant speed motor drives a paddle at 200 r.p.m. and the torque induced is proportional to the viscosity of the sample and may be converted into viscosity (cP) or weight units (gms).

Operation

Prepare the sample by stirring and straining into a 500mL (½ pint) container. Ensure that the sample is at the correct temperature. Locate the sample on the magnetic base and lower the unit to the level indicated on the paddle shaft. After pressing the read button the paddle starts to rotate at 200 r.p.m. and the viscosity is displayed in the unit of choice. The paddle will automatically stop rotating after ten seconds and the reading is held on the display. Holding the read button will keep the paddle rotating.

Once the reading has been taken, raise the measuring head clear from the sample and allow the sample to drain from the paddle. If a printed readout is required, each reading includes the store number, and the reading in cPoise, grams and Krebs units.



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Specification

Range	37 - 141 Krebs units, 200 - 5000 Cp, 70 - 1100 gms
Resolution	0.1 Kreb unit, 10 cP, 1 gm
Accuracy	±2% of full scale
Repeatability	±1% of full scale
Operating temperature	15°C – 35°C (59°F – 95°F)
Motor speed	200 r.p.m. ±1%
Sample container	500mL (standard)
Dimensions	200mm x 360mm x 550mm (w x d x h) (7.9" x 14.2" x 21.7")
Weight	8kgs (17.6lbs)
Power consumption	30 watts (max)
Electrical supply	200/250V - 100/120VAC (switchable)

Calibration

The 480 Viscometer is calibrated across the measuring range to ensure optimum accuracy. The instrument can only be calibrated when a key (available separately) is inserted into the rear of the instrument. This prevents accidental corruption of the calibration data.

Ordering Information

Ref: **480** Digital Krebs Viscometer with RS 232 cable and rotor
 Ref: **407/116/P** Sample container 500mL
 Ref: **490/P** Battery powered rechargeable printer.
 Ref: **480/019/S** Calibration key, required for instrument calibration

Standards

The 480 complies with the following standards: ASTM D562, ASTM D856, ASTM D1131.

Note

Owing to continuous development, we reserve the right to introduce improvements and modify specifications without prior notice.

