# Viscosity

## AUTOMATIC PORTABLE/DISPOSABLE VISCOMETER

#### **PDVa-100**

A New Instrument for the Rapid and Accurate Determination of the Viscous Properties of Newtonian and Non-Newtonian Fluids

- Disposable Sample Tube
- No Instrument Cleaning
- Absolute Viscosity Measurements without Instrument Calibration
- Field Viscosity Test
- Quick and Easy Viscosity Measurements
- Automatic Falling Time
   Measurements to 0.001 Sec.
- Inexpensive Non-Newtonian Viscosity Measurments
- Better than One Percent Accuracy and Repeatability





654 Petrolia Road, Toronto, ON M3J 2W3 Tel: (416) 736-6166 Toll-Free: (800) 387 3570 Fax: (416) 736-9346

#### **PDVa-100**

Stony Brook Scientific is proud to announce a breakthrough in viscometer technology. Viscosity measurement has never been so easy! The PDVa-100 portable/disposable viscometer with disposable tube greatly reduces testing time because instrument cleaning is not required.

The PDVa-100 is simple-to-use, accurate, low-cost, compact and lightweight field viscometer that can be taken anywhere.

The PDVa-100 consists of a main system and a disposable (or reusable) sample insert tube filled with the liquid of which the viscosity is to be determined. Viscosity of the sample can be determined by measuring the time of fall of a needle through a predetermined distance of the fluid held in the sample insert tube. The falling time is measured automatically by means of laser sensors.

#### **SPECIFICATIONS**

- Viscosity Range: 0.7 to 10<sup>6</sup> mPa·s (cP)
   -outside this range consult SBS.
- Temperature Range: -40 to 100°C
   -with an optional heating block
- Accuracy and Repeatability: better than 1%
- Test Sample Volume: Approx.4.0 cm<sup>3</sup>
   -outside this range consult SBS.
- Needle: Metal
- Needle Densities: up to 130 g/cm<sup>3</sup>
  Total Instrument Weight: 2.3kg (5 lbs)

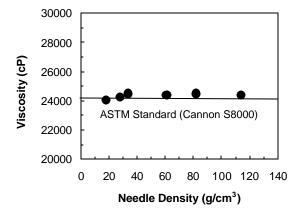
#### SPECIAL FEATURES

- Field Viscosity Test
- Disposable Sample Tube
- No Instrument Cleaning
- Minimal Disturbance of Sample's Mechanical Structure and Particle Size Distribution with Gentle Needle Passage

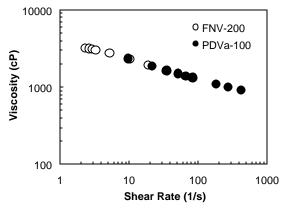
#### **APPLICATIONS**

Adhesives, Aerosols, Automobile Fluids, Biomaterials, Coal Slurries, Coatings, Colloids, Cosmetics, Creams, Dairy Products, Detergents, Dispersions, Emulsions, Fertilizers, Foams, Fuels, Gels, Grease, Honey, Inks, Ketchup, Latex, Lubricants, Mayonnaise, Milk, Oils, Ointments, Paints, Petroleum, Polymers, Proteins, Pulp, Resins, Shampoos, Slurries, Soaps, Solutions, Surfactants, Suspensions, Varnish and many more.

### Typical Portable/Disposable Viscometer Measurements



Viscosity measured by using the portable/ disposable viscometer compared to the data known of ASTM standard (Cannon S 8000) at 25°C



Viscosity measured by using the portable/ disposable viscometer (PDVa-100) compared to the data measured by the falling needle viscometer (FNV-200) for ointment at 25°C

#### Schematic of PDVa-100

