

# PV - 3120

## Portable Viscometer



PV-3120  
Portable Field Viscometer



Carring Case  
with Parts

EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited**

An ISO 9001 Certified Company

[www.analyticalgroup.net](http://www.analyticalgroup.net)

A New instrument for Rapid and Accurate Determination of the Viscous Properties of Newtonian and Non-Newtonian Fluids Including De-/Anti-icing Fluids

## De-/Anti-icing Fluids

- Inexpensive Non-Newtonian Viscosity Measurement
- Shear Thinning and Thickening Effect Measurement
- Specified Shear Rate Measurement
- Multiple Measurements with Single Sample
- Field Viscosity Test
- Extremely Simple and Easy Operation
- Quick Measurement with Immediate Result
- Easy Cleaning and Maintenance (Reusable Syringe and Large Needle)
- Accurate and Reproducible Result
- Absolute Viscosity Measurement without Instrument Calibration
- Conforms to SAE AIR 5704 and ASTM D 5478

## Operating Procedure

### ►► PV-3120

The new PV-3120 Portable Field Viscometer consists of a viscometer main body with a reusable syringe (tube) and a falling needle attached to an extension bar with two markings.

The viscosity of the sample is determined by measuring the falling time of a needle through a predetermined distance (between two markings on the extension bar attached to the needle) within the fluids held in the reusable syringe. The falling time can be measured manually by a stopwatch.

The viscometer includes a viscometer main body with two reusable syringes, a falling needle, a stopwatch, a digital thermometer, an instruction manual and a carrying case.



Fig.1 Slide the syringe into the viscometer main body.

## ►► SPECIFICATIONS

- Viscosity Range: 2 to 10<sup>6</sup> mPa·s (cP)  
-outside this range consult SBS.
- Temperature Range: Ambient temperature
- Accuracy and Repeatability: Better than 2%
- Multiple Measurements with Single Sample
- Test Sample Volume: Approx. 25 cm<sup>3</sup>  
-outside this range consult SBS.
- Needle: Metal
- Needle Densities: 2.916 g/cm<sup>3</sup>
- Total Instrument Weight: 0.38kg (0.83 lbs)



Fig.2 Pour the sample into the syringe up to the top of the viscometer main body.

## ►► SPECIAL FEATURES

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



Fig.3 Insert the needle into the syringe until the top of the needle reaches the top of the syringe and then drop the needle.

## ►► APPLICATIONS

Adhesives, Aerosols, Automobile Fluids (Coolant, Engine Oil), Biomaterials, Coatings, Colloids, Cosmetics, Creams, Dairy Products, De-/Anti-icing Fluids, 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.



Fig.4 Measure the falling time between two markings on the extension bar attached to the needle.

## Regulatory compliances



## Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



**Analytical**  
**Foundation**

1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at [Info@analyticalfoundation.org](mailto:Info@analyticalfoundation.org)

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

## Reach us @



 **Analytical**®  
Technologies Limited

HPLC Solutions   MultipleLabs   Analytical Bio-Med   Analytical Distributors   Analytical Foundation (Trust)

**Corporate & Regd. Office:**  
Analytical House, # E67 & E68,  
Ravi Park, Vasna Road, Baroda,  
Gujarat 390 015. INDIA

T: +91 265 2253620  
+91 265 2252839  
+91 265 2252370  
F: +91 265 2254395

E: [info@hplctechnologies.com](mailto:info@hplctechnologies.com)  
[info@multiplelabs.com](mailto:info@multiplelabs.com)  
[info@analyticalgroup.net](mailto:info@analyticalgroup.net)  
[info@analyticalbiomed.com](mailto:info@analyticalbiomed.com)

W. [www.analyticalgroup.net](http://www.analyticalgroup.net)  
[www.hplctechnologies.com](http://www.hplctechnologies.com)  
[www.multiplelabs.com](http://www.multiplelabs.com)  
[www.ais-india.com](http://www.ais-india.com)

Sales & Support Offices:  
across the country :  
Distributors & Channel  
partners World Wide