## **∃Fungilab**

Leading viscosimetry technology

# Viscoball

The Viscoball measures accurately the viscosity of transparent Newtonian liquids and gases (with a special glass ball).

#### **2 YEARS WARRANTY**

## Standard Delivery

Set of 6 balls / Control thermometer (-1° a 26°) / Cleaning tools / Calibration sheet / User manual

### Extra Accessories

Circulating temperature bath / Viscosity standard fluids for calibration / Special temperature probes

#### Fixed angle



FIXED ANGLE Complies with DIN 53015 / ISO 12058

KIT OF 6 BALLS ◀
Wide viscosity range covered

FAST AND HANDY TUBE ◀

SIMPLE THERMOSTATIC

Measuring with easy conection to our thermovisc series.

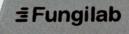
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➤ VISCOSITY READINGS
Dinamic (cP or mPa·s)
Kinematic (cSt)

REPRODUCIBILITY: 0.5% COMPARABILITY: 1%

VISCOSITY RANGE 0.5 - 10⁵ mPa·s (cP) (Fixed Angle Unit)

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#### **Main Features**

- > High accuracy through improved visibility of falling ball.
- > Minimized test time due to accurate return run of the ball.
- > Reduced cost of ownership through increased life time of falling tube.
- > Extended re-calibration periods through improved bearing support.

The VISCO BALL viscometer is mainly used for low viscosity substances such as used in:

- > Mineral oil industry (oils, liquid hydrocarbons, ...).
- > Food industry (sugar solution, honey, beer, milk, gelatine, fruit juice, ...).
- > Chemical industry (polymer solutions, solvents, resin solutions, latex dispersions, adhesive solutions, ...).
- > Cosmetic/Pharmaceutical industry (raw materials, glycerine, emulsions, suspensions, solutions, extracts, ...).
- > Petroleum industry (light crude, machine oil, crude petroleum,...).
- > Fuels (petrol, diesel oil, paraffin, ...).
- > Paper industry (emulsions, pigment dispersion, paper additives, ...).
- > Paints and varnishes (printing inks, varnishes, water lacquers, inks,...).
- > Detergents (liquid washing agents, washing-up liquids, tenside solutions,...).

#### **Measuring principle**

The rolling and sliding movements of a ball through the sample liquid are timed in an inclined cylindrical measuring tube. The sample viscosity is correlated to the time a ball requires to traverse a definite distance. By turning the measuring tube upside down again the return of the ball may also be used for an additional measurement applying the return constant. The test results are given as dynamic viscosity in the internationally standardized, absolute units of mPa·s.

#### Technical data

- > Viscosity range
- > Temperature range
- > Reproducibility
- > Comparability

0.5-105 mPas·s (cP) -20°C up to +120°C Better than 0.5% Better than 1% > Materials Balls 1,2 and G, Borosilicate glass

Balls 3 and 4, Nickel iron alloy Balls 5 and 6, stainless steel

The instrument is supplied with 6 balls, control thermometer (-1 to +26°C) cleaning tools, calibration sheet and instruction manual.

#### > On request:

Glass thermometer for different temperature ranges
V91002 Glass thermometer +24 to +51 °C, div. 0.1 °C
V91003 Glass thermometer +49 to +76 °C, div. 0.1 °C
V91004 Glass thermometer +74 to +101 °C, div. 0.1 °C
V91005 Glass thermometer +99 to +126 °C, div. 0.1 °C
V91107 Ball G for gas measurements

Standard oils of differents viscosities are avaible for calibration.

Complies with DIN 53015 / ISO 12058

#### **Measuring Range**

Ball	nº Viscosity range (mPa·s)
1	0.6 to 10
2	7 to 130
3	30 to 700
4	200 to 4,800
5	1,500 to 45,000
6	> 7,500



Kit of 6 balls supplied in the case.



Glass Thermometer detail included in the standard delivery.



Cleaning tool detail is also added in the standard delivery.



Pincers to grab up the balls after the set is used.



Products for Research, Analysis and Quality Control

#### Headquarters

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