

## 1. Appointment

Viscometer VZ - 246 is designed for determine the relative viscosity of paints and related products, in accordance with GOST 9070-75.

## 2. Specifications

Parameter	Value
Tankage, cm <sup>3</sup>	100 ±1.
The range of flow time, s	12 – 300.
The diameter of the nozzle, d, mm	- 2,000±0,012; - 4,000±0,015; - 6,000±0,015.
The height of the nozzle, h, mm	4,000±0,015
The range of liquid flow time, s	- for nozzle d 2 mm 70 – 300, - for nozzle d 4 mm 12 – 200, - for nozzle d 6 mm 20 – 200.
The limit values of relative error of measurement time of the expiration of the calibration liquid (industrial oil with a nominal value of the kinematic viscosity of from 200 to 500 mm / sec)	Not more ±3% the arithmetic value of flow time.
Overall dimensions of the viscometer (without mount), mm	- diameter 95 - height 75
Weight, kg	0,2
Mean time between failures, h	15000

## 3. Standard set:

- 1. Viscometer VZ-246 1 pc.
- 2. Legs 3 pc.
- 3. Nozzles 3 pc.
- 4. Manual 1 pc.

## 4. Preparation of VZ-246 for use and operation

- 4.1. Before using the viscometer install the feet and tighten nuts.
- 4.2. Funnel of the viscometer must be cleaned of dust and dirt.
- 4.3. Recommended hold test liquid and device in a laboratory or testing room for 24 hours before the testing.
- 4.4. Recommended to use thermometer with a scale of 1°C with an error not more than 0,2°C.
- 4.5. Recommended to use a stopwatch test, with a scale of 0.5 seconds and an error not more than 0,2 %.
- 4.6. Install and securely tighten the nozzle with the required diameter of the output opening (d2 mm. d4 mm. d6 mm.)
- 4.7 . Install viscometer horizontal (with level).

- 4.8. For measurement close the nozzle with finger to prevent liquid leakage from the reservoir. Slowly to avoid the formation of bubbles, pour the tested composition slightly above the edge of the funnel to form a convex meniscus.
- 4.9. Use glass plate to remove meniscus without any bubbles.
- 4.10. Quickly open the nozzle and at the same time start the stopwatch.
- 4.11. At the time of the first interruption of the jet, stop stopwatch and take readings.
- 4.12. Expiration time is determined with an error not more than 0.5 seconds.
- 4.13. The test is done at least 3 times to calculate the average viscosity estimates.
- 4.14. Repeated measurements made directly after the end of the previous (you can not clean the tank).
- 4.15. The result should be the arithmetic mean of the values of time-of expiration in seconds.
- 4.16. After use cleaned with solvent viscometer reservoir and nozzles, corresponding to the tested composition.

## 5. Potential problems and their solutions.

Problem	Cause	Solution
Leak tested liquid beside nozzle	Nut is loose	Tighten the nut

## 6. Operating conditions.

- 6.1. The range of ambient temperatures from +10 °C to +35 °C,
- 6.2. Atmospheric pressure 760 mm Hg. Art.
- 6.3. Relative humidity not higher 80%.

## 6. Warranty

The manufacturer guarantees that the parameters of the viscometer VZ-246 is correspond to GHOST 9070 subject to the conditions specified in the manual. The warranty period is 12 months from the date of shipment..

### 7. Certificate of Acceptance

The viscometer instrument for determining the relative viscosity paints VZ-246, serial number No \_\_\_\_\_, adopted in accordance with the design documentation and found fit for service.

Date of manufacture

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# **NOVOTEST**

## **VISCOMETER NOVOTEST VZ-246**



## **Operating Manual**

**2013**