

SKZ1013B Full Automatic Surface Tension Meter



Automatic measurement, automatic accuracy calibration, automatic temperature compensation, data processing software, etc

Specifics:

- ① International advanced sensor technology leads to higher accuracy and better repeatability and stability;
- ② Additional automatic peak value holding in test method of platinum ring facilitates the use;
- ③ Successful development of unique automatic accuracy calibration by adopting distilled water and ethanol for instrument whole measurement accuracy can ensure the long-term accuracy of instrument;
- ④ Successful development of unique automatic temperature compensation enables the test data in different temperatures uniformly amended to that in 20°C;
- ⑤ The instrument performance is more preferable through enhancement and optimization of control and processing program;
- ⑥ Successful development of data processing software of full automatic surface/interface tensiometer: automatic test data collection, real-time display of test curve that can be automatically magnified, accessed and printed; contrast of several curves; conversion of original data to Excel file; automatic

calculation of surface tension in test method of platinum ring;

⑦ International advanced lift platform drive technology without vibration and noise.

Main features:

1. Combination of both test methods of platinum plate and ring;
2. The display value is that of surface tension in test method of platinum plate;
3. The maximum tension of sample is self-locked in test method of platinum ring, and then the surface tension is converted by attached calculation software or automatically calculated by purchased data processing software;
4. Platinum ring size: wire radius: 0.185mm; ring radius: 9.55mm, ring circumference: 60mm;
5. It is in full compliance with the following domestic and international standards in test method of platinum ring:

GB/T22237-2008 Determination of surface tension of surface active agent

JB/T9388-2002 Technical specifications of interface tensiometer

JB/T18396-2001 Determination of surface tension of natural latex in ring method

SH/T1156-95 Determination of surface tension of synthetic latex

GB/T6541-86 Petroleum products- Determination of interfacial tension of oil against water (ring method)

ISO1409-1995 Determination of surface tension of plastics, rubber, polymer dispersion and latex

ISO6295-1983 Petroleum products- Mineral oils- Determination of interfacial tension of oil against water (ring method)

And ISO14090-82, ASTM D1417, EN14370, ZB2025-93, GB2960-82, GB6541-86 standards, etc.

6. Fully automatic measurement can avoid the manual operation error;
7. Automatic calibration in whole range ensures accurate and reliable data and good repeatability;
8. One-key minimum clearing in a flash; stable and non-drifting zero position;

9. International advanced lift platform drive technology without vibration and noise;
10. The instrument is reasonable in structure and independent in operation, without any attached equipment (such as external computer, etc); the computer is also optional for data processing;
11. Real time measurement of liquid surface or interfacial tension can be achieved when using the platinum plate, which is very practical for measurement of samples containing surface active agent or volatile substance varies at different time (data processing software can be optional for real time display of test curve with details of tension variation);
12. Automatic measurement of surface tension of medium and high viscosity liquid samples can be achieved when using the platinum plate;
13. The two test methods can measure the interfacial tension of non-mixed liquid such as oil/water interface;
14. Many temperature control options can meet different test requirements;

Main technical parameters

Test method: platinum plate (or platinum ring) method;

Operation mode: automatic measurement on automatic raising of sample stage;

Data value: The display value is that of surface tension in test method of platinum plate;

The peak value is automatic reserved while the display value is that of sample tension in test method of platinum ring, and then the surface tension needs to be calculated through attached calculation software (or data processing software);

Measurement range: 0-600 mN/m

Scope of zero clearing: 0-600 mN/m

Range calibration: 600 mN/m

Sensitivity: 0.1mN/m

Accuracy: ± 0.1 mN/m (error test on literature value of double distilled water and pure alcohol at 20°C)

Repeatability: ± 0.1 mN/m (error test on literature value of double distilled water and alcohol at 20°C)

Display mode: wide-viewing angle backlighting LTD

Range of temperature: 0-110°C (sample and constant temperature bath and external thermostatic bath are required)

Measurement time: 3-5 seconds for measurement of low concentration sample liquid

Container constant: min.15ml

Voltage: commercial power AC220V, 1A