Tensiometer TC1 – Precise quality measurements of surface and interfacial tension

Ease-of-use, precision and robustness

- Precise and reproducible for research and quality testing
- User-friendly with predefined standard methods
- Intuitive graphic user interface
- Optional temperature control, no additional space required

ASTM D971, EN 14210, EN 14370, IEC 62961, EN 14059 compliant
TC1 – robust and precise for the measurement of surface and interfacial tension

For quality control and product development

The ring/plate method for the measurement of surface and interfacial tension of liquids is an established method for transformer oils, cleaning processes, in the beverage industry and in many other applications. The increasing need of testing and documentation requires easy-to-handle instruments with a high precision. The manual TC1 tensiometer with its precise balance system offers exactly this, together with an acoustic assistant and its robust design.

Simplified selection of measuring method

- Software with standard-compliant methods for insulating oils, lamp oils, surfactants etc.
- Ergonomic, intuitive operation with simple user guidance
- Reliable device for routine measurements in the chemical industry, pharmacy and quality control
- Integrated user management with different user levels in accordance with GLP

Reliable measurements thanks to the precise balance system

- Simple and fast test procedure due to manual operation
- Precise Du Noüy ring tests due to acoustic assistance for extra reproducibility
- Density measurement using an immersion body included with the delivery

Accurate temperature control with PTT+

- Low space requirement with convenient controls
- Temperature-controlled measurements between 5 and 80 °C without external cooling
- Temperature control integrated into test procedure

Technical data

- Surface tension resolution: 0.01 mN/m
- Weighing system resolution: 0.1 mg
- Measuring range: 0 mN/m to 300 mN/m (999 mN/m with plate)
- Dimensions W x D x H: 230 x 230 x 391 mm
- PTT+ temperature range: 5...80 °C
- Density: up to 0.002 g/cm³
- Ring correction: automatic in accordance with Zuidema and Waters
- Integrated methods: in accordance with ASTM D971, EN 14210, IEC 62961, EN 14370, EN 14059 and other standards
- Ambient temperature range: 10...40 °C
- Power consumption: 10 W
- Weight: 5 kg