

BM400 - BALTEC

Laboratory Binocular Microscope Melting Point Apparatus

The melting point of a substance is the temperature at which the material changes from a solid to a liquid state. In organic chemistry, melting point determination is not only the basic approach to determine the nature of material, but also an important method to obtain the purity of a substance. Therefore, melting point apparatus is widely used in the chemical industry and the medical research, and it's a must-have instrument in the manufacturing of medicine, spices, dyes and other organic crystal substances.



Microscopy melting point apparatus is used to determine the property of substance under the microscope, namely TOA analysis (THERMO-OPTICAL ANALYSIS).

In addition to measuring the melting point of conventional transparent crystal, it can also be used to measure dark color samples, low purity samples, amorphous samples, thermal-decomposition samples, heavily carbonized samples, samples (like polyester) which needs to be sliced up, filamentous samples, and the sample whose quantity is too small to fill in the glass capillary tube. It makes up for the deficiency of automatic melting point apparatus and the application fields are more extensive.

BINOCULAR MICROSCOPE TEST/1.0 GRADE

CHARATERISTICS :

- LCD display is intuitive.
- Membrane keypad simplify the operation.
- Unique digital temperature control technology with high accuracy.
- Magnification of 40X-100X is adjustable, ensuring to observe tiny samples.
- Dual methods : Capillary and cover-glass method.
- Up to 3 points temperature correction.
- USB/RS232 can communicate with computer and printer.

MAIN SPECIFICATIONS

MODEL	BM400
Observation method	Observe melting process via binocular microscope
Sample loading way	Capillary + cover-glass method
Temperature range	Ambient -400°C
Min. Temp. Resolution	0.1°C
Ramp rate	1.0, 3.0, 5.0, 10.0°C/min, full speed
Ramp rate error	≤10%
Accuracy	±0.8°C (<200°C) ±1°C (≥200°C)
Reproducibility	0.4°C (ramp rate 1.0°C/min)
Heating/Cooling time	≈10mins/9mins (50°C to 400°C)
Number of capillaries	1
Capillary dimensions	Φ1.4 mm out diameter Φ1.0 mm in diameter 90 mm lengths.
Fill height	3mm - 5mm
Display	4.3inch LCD
Size of cover-glass	18x18x0.17 mm
Microscope type	Binocular
Optics magnification	40X - 100X
Communication interface	USB for PC+RS232 for printing
Print function	Included
Measurement report	Print or store in PC via APP
Power supply	220VAC, 50Hz
Dimensions (L ×W×H)	400x245X550 mm (adjustable)
Weight	8 kg